Close friendships and the development of psychological resilience across the lifespan: A dual cohort study

Rebecca Graber

Submitted in accordance with the requirements for the degree of

Doctor of Philosophy

The University of Leeds

Institute of Psychological Sciences

July 2013
The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

© 2013 The University of Leeds and Rebecca Graber

The right of Rebecca Graber to be identified as Author of this work has been asserted by her in accordance with the Copyright, Designs and Patents Act 1988.


Acknowledgements

"Life is partly what we make it, and partly what it is made by the friends we choose."

Tennessee Williams

Foremost acknowledgements are due to the Institute of Psychological Sciences for the opportunity and support to undertake this work. As well as providing the scholarship that made this PhD possible, IPS and the Health & Social group has been a professional and intellectual home. The administrative staff, especially Kathryn Meaney, Alison Tindall and Jacky Hunt, were each unfailingly dedicated and helpful, and I thank Charity Brown for her postgraduate stewardship in the final stages. Chris Moulin was an enthusiastic and inspiring tutor, and granted a name to my alter ego. I appreciate how IPS made me, and other PhD students, feel a valued part of a shared intellectual endeavour.

Even the many words in this thesis fall deeply short of capturing my immense gratitude to Anna Madill and Rhiannon Turner. Undertaking this PhD was my dream (and possibly, folly), but your thoughtful mentorship is entirely responsible for turning those vague ideas into anything substantive. You have supervised and supported me through this professional and personal epic: from the inkling of an idea, through my unrealistic optimism (never tempered!), to the joy and challenge of a doctoral life’s work. Your intelligence, creativity, dedication and insight are continually inspiring. You’ve challenged me in the best possible way. I have striven to approach the vision that has been crafted through the examples you have set as researchers, mentors and friends, and through your belief in me. Thank you.

Thank you to each of my research participants for giving me your time and insight. The young people encountered during these studies are immensely inspirational: I hope I have done justice to your experiences. I am particularly grateful to the schools, colleges and organisations who granted me access, and the individual facilitators at each institution, particularly Mark R for your thoughtful reminder of what this is all about.

Generous financial support from the Psychology Postgraduate Affairs Group, the British Psychological Society Qualitative Methods in Psychology Section, the Experimental Psychology Society Grindley Grant, International Human Sciences Research Conference and European Health Psychology Society has made it possible to share my developing research
with, and learn from, colleagues at numerous conferences. I have particularly benefited from inspiring and challenging discussions with Paul Sullivan (Bakhtin, carnival, and qualitative methods over a pint in a cavernous pub), Peter Ashworth (voice, space and empirical phenomenology over conference coffee), Frederick Wertz (phenomenology and resilience over a New York brunch) and my friend Iris (Heidegger and textiles). I playfully dedicate this mixed-methods thesis to Kerry Chamberlain, who jokingly asked me years ago if I was going to do two PhD’s, or one half-assed one. I look forward to the verdict.

This last year has circuitously taken me from Brighton beach (NYC) to Brighton beach (UK), itself a saving grace. Thank you to friends and colleagues at the University of Sussex for welcoming me into your community. Dr Richard de Visser has demonstrated remarkable tolerance as I squirrelled away this past year. I’ve learned so much about resilience and interventions, yes – but mostly the whole whirlwind of challenges comprising this year has been immensely fun. Thank you for the opportunities and support. Professor Angie Hart has shown me the expanded horizons of resilience research in practice. Thank you to you both for providing the “space” and support to share my research, and for allowing me to learn from you and others similarly dedicated to searching for strengths. I am also grateful to the many teachers who have previously guided me, particularly Dr Alison Tweed, Professor Colin Harrison, and Vivian Lewin (I know it may not seem so, but I murdered many darlings en route). Thanks to the many amazing teachers at Stuyvesant for a combination of neuroticism, curiosity and perseverance now recognisable as ideal PhD material. Mr Gern, the words “hubris” and “rumination” have each found their uses. My lecturers at McGill introduced me to the joys of psychology and showed me the world. At NTU I discovered social psychology and haven’t looked back. Thanks especially to Dr Simon Watts for stewarding me into those possibilities.

In my social psychology journey, special thanks are due to Jenny Paterson: from tackling SEM on St Patrick’s Day to kayaking in Stockholm, it’s been all the more fabulous with you. I’m delighted that we’ve somehow come full circle to begin the next chapter of professional life together. Dr Keon West: your dedication, intelligence and charisma are intimidating to emulate but it’s inspiring to try. Marta Santillo: Thank you for the dual gifts of your poetry and friendship, and for your diligence in assisting transcription and data collection. Minu Mathews was my co-explorer in SEM. A special shout-out to Tim Gomersall: one day we’ll work out a Supertheory of Supereverything, but until then Bakhtin will do.
Some people are true friends: whether for a moment or a lifetime, they will always “be there.” My life has been blessed with a constellation of many such “shining stars” forming the foundations of my life. Your love has been the starting point for all I’ve done in these pages. Debbie, Tara, Cynthia, Matt and Avra: my constants. Julie, Sarah M, Sarah D, Stephen, Stacey and Adam, Sarah L, Holly, Kirk, Yvonna, Ros, Fuzzy, Camille, Serach, Suzanne C, Suzanne N, Amy, many more. The best MSc tutor group ever: Ellie, Lesley, Dulcie. Victoria, you have left many friends. Amongst my many comrades in arms at IPS, Senorita Claudia and Suzi (my heroes). Sarah S, Neil, George, Ian, Christine, Jelena and the Friday Fav crew: good times down in the foxhole. Rachel and Pia, sorry for the dishes. Clio and Ella, Martina and Cathy, I would have unravelled in these last few months without you. Thanks to Sinai Synagogue for opening a community and to Brighton’s Progressive and Reform synagogues for teaching the value of rest in the creative act – and crafting a space to find it. Thank you to the many and meaningful kindred spirits in wanderlust encountered on my travels.

I have the deepest appreciation for my parents, Larry and Sharon. Your love, support and encouragement taught me to never shy away from a challenge and to always have a (not necessarily funny) joke ready. Thank you for all of your sacrifices, which I can never repay. Belle, you’ve taught me the value of patience and the boundlessness of empathy. I am so proud of you. My extended family has always kept life interesting (and loud). Judy, Steve, Harvey, Bill, Larry, Jared and Amanda, Sabrina and Ro, Audra and Anthony, Samantha and the clan, Adele, Marlene and Barry, Lori, surprise (!) Josh, and more. Thank you to Grandpa Marty, and to those I wish I could share this with. Grandma Shirley, you taught me that work ethic and red lipstick go together beautifully. Grandpa Vic, your matzoh ball soup has never been equalled. I’ll always be your “babe”. Grandma Esther, you inspire me every day. Thank you for gifting me the knowledge that humour and “turbulence” are an essential part of life, even to the last. I miss you. L’chaim.

To all named here, and to those unnamed, unremembered or yet unmet: thank you. This has been the most challenging and fulfilling journey I have yet undertaken, and I humbly hope to find it is only the beginning.
ABSTRACT

In a novel contribution to the literature, this research employs a social psychological approach to the meaning, import and impact of a single, supportive close friendship upon experiences and processes underpinning resilience in socioeconomically vulnerable adolescents, using a conceptual comparison with adults. A critical literature review interrogating the concept of subjective psychological resilience demonstrates the need to investigate the potential protective role of a single close friendship. The thesis uses a pragmatic mixed methods approach employing the complementary strengths of quantitative and qualitative methodologies. First, a cross-sectional correlational study of 409 socioeconomically vulnerable adolescents aged 11-19 years uses structural equation modelling analyses to develop an Adolescent Friendship and Resilience Model. A supportive close friendship is revealed to contribute to psychological resilience processes in these boys and girls, particularly by facilitating constructive coping. A longitudinal correlational study of 121 of these adolescents shows effects did not persist over one year. Longitudinal analysis of variance with this sample shows differences between resilience-promotion and risk-reduction as distinct resources are developed or attenuated along adolescents’ trajectories of increasing or decreasing risk. Next, a longitudinal correlational design and analysis of variance within a community sample of 75 adults aged 35-55 explores developmental components to the relationship between friendship and resilience. A single close friendship is shown to facilitate resilience, although explanatory mechanisms are unclear. Finally, analysis of semi-structured interviews with 14 socioeconomically vulnerable adolescents using a novel combination of thematic analysis and empirical phenomenology reveals interlinked experiences of close friendship and resilience support as spatial. The distinct studies are interweaved into a coherent understanding of the relationship between close friendships and psychological resilience. The research extends and re-conceptualises understandings of psychological resilience amongst socioeconomically vulnerable adolescents and over the lifespan, showing the capacities of a single close friendship to nourish strength, meaning, and growth.
# TABLE OF CONTENTS

Conference Publications ........................................................................................................... iii  
Acknowledgements ................................................................................................................ iv  
Abstract .................................................................................................................................. vii  
Table of Contents ...................................................................................................................... viii  
List of Figures .......................................................................................................................... xiii  
List of Tables ............................................................................................................................ xiv  

## 1 PSYCHOLOGICAL RESILIENCE AND SUPPORTIVE CLOSE FRIENDSHIP ............ 1  
Introduction ............................................................................................................................. 1  
Introductory Definition of Psychological Resilience .............................................................. 2  
The Risks of Socioeconomic Vulnerability ........................................................................... 3  
A Lifespan Perspective on Resilience .................................................................................... 6  
Overview of Relevant Models and Theories of Resilience .................................................. 8  
A Critical Look at the Methodologies of Resilience Research ............................................ 14  
Close Friendships and Social Support .................................................................................. 17  
Protective Mechanisms: Promoting Resilience ................................................................. 25  
Introduction to the Present Research ................................................................................... 29  

## 2 A MIXED METHOD APPROACH TO THE STUDY OF RESILIENCE ........... 33  
Introduction ............................................................................................................................. 33  
Creative Use of Mixed Methods ............................................................................................ 33  
Using mixed methods to explore the relationship between friendship and resilience .......... 36  
Quantitative Methods Overview .......................................................................................... 37  
Regression analyses .............................................................................................................. 37  
Structural equation modelling ............................................................................................... 39  
Regression analyses and structural equation modeling in longitudinal designs ................ 41  
Qualitative Methods Overview ............................................................................................. 42  
Empirical phenomenological psychology .......................................................................... 42  
Thematic analysis ................................................................................................................... 49
Combining thematic analysis and empirical phenomenological psychology...54
Ethics of Conducting Resilience Research with Adolescents..........................56
Ethical approval..................................................................................................59
School Recruitment............................................................................................59

3 A STRUCTURAL MODEL OF ADOLESCENT FRIENDSHIP AND RESILIENCE.....60
Introduction.........................................................................................................60
  Supportive adolescent friendships: A protective mechanism?.........................60
  Mediating mechanisms facilitating psychological adaptation..........................60
  When might close friendship support resilience?..........................................65
  The common risk factor of socio-economic status........................................67
  Introducing the present study.........................................................................67
Method...............................................................................................................68
  Ethics...............................................................................................................68
  Design...........................................................................................................69
  Participants.....................................................................................................69
  Materials........................................................................................................70
  Procedure.......................................................................................................74
Analysis and Results..........................................................................................75
  Overview........................................................................................................75
  Descriptive statistics.......................................................................................75
  Creation of coping factor scores......................................................................77
  ANOVAs for group effects............................................................................78
  Correlations.....................................................................................................79
  Moderated regression analyses......................................................................81
  Mediation analyses.........................................................................................83
  Structural equation analyses.........................................................................84
  Confirmatory factor analyses of latent variables..........................................85
  Model development.........................................................................................87
  Multiple group analyses................................................................................92
Discussion..........................................................................................................96
  Summary of key findings...............................................................................96
  Close friendships and psychological resilience processes............................97
  An Adolescent Friendship and Resilience Model of socioeconomically vulnerable boys and girls............................................................98
4 DO ADOLESCENTS’ SUPPORTIVE FRIENDSHIPS PROMOTE RESILIENCE OVER
TIME?.................................................................105

Introduction........................................................................105

How and when might a close friendship promote resilience over time?.......105

Challenges in longitudinal resilience research....................................108

Might longitudinal processes differ for more or less resilient youth? .......109

Introducing the present study....................................................109

Method..................................................................................110

Ethics....................................................................................110

Design..................................................................................111

Recruitment............................................................................111

Participants............................................................................112

Materials...............................................................................113

Procedure.............................................................................116

Analysis and Results...............................................................116

Descriptive statistics................................................................116

Creation of coping factor scores.................................................119

Correlations..........................................................................119

Cross-lagged panel analysis.......................................................121

Longitudinal moderations.........................................................122

Analysis of Variance...............................................................123

Summary of key findings........................................................126

Discussion.............................................................................127

Does a close supportive friendship promote resilience over time? .......127

The changeability of resilience..................................................129

Limitations and implications....................................................130

Conclusions..........................................................................131

5 DO MIDDLE AGED ADULTS’ SUPPORTIVE FRIENDSHIPS PROMOTE RESILIENCE
OVER TIME?........................................................................133

Introduction..........................................................................133

Introducing the present study....................................................137

Method..................................................................................138
Ethics .......................................................................................................................... 138
Design ......................................................................................................................... 139
Recruitment .................................................................................................................. 139
Participants ...................................................................................................................... 140
Materials .......................................................................................................................... 141
Procedure .......................................................................................................................... 144
Analysis and Results ..................................................................................................... 144
Descriptive statistics .................................................................................................. 144
Creation of coping scores ......................................................................................... 146
Check for selective attrition ...................................................................................... 148
Correlations ...................................................................................................................... 149
Cross-sectional mediations ....................................................................................... 152
Cross-lagged panel analysis ....................................................................................... 153
Longitudinal mediations ............................................................................................. 154
Longitudinal moderation ............................................................................................. 156
Effect of baseline resilience ....................................................................................... 156
Resilience trajectories ................................................................................................... 157
Discussion .................................................................................................................... 159
Limitations ...................................................................................................................... 162

6 THE EXPERIENCE OF SUPPORTIVE CLOSE FRIENDSHIPS AND PSYCHOLOGICAL RESILIENCE ........................................................................................................... 164
Introduction ..................................................................................................................... 164
Method ............................................................................................................................. 166
Ethics ............................................................................................................................... 166
Participant selection and recruitment ........................................................................ 166
Materials ............................................................................................................................ 168
Data generation .............................................................................................................. 170
Participants ...................................................................................................................... 171
Analytical procedure .................................................................................................... 171
Analysis ............................................................................................................................. 175
Overview of the analysis .............................................................................................. 175
The places of the lifeworld ........................................................................................... 176
Summary of analytical findings .................................................................................. 197
Discussion ....................................................................................................................... 198
7 THE CONTOURS OF RESILIENCE AND CLOSE FRIENDSHIP: DISCUSSION AND CONCLUSIONS .......................................................... 211
Aims and Chapter Overview ........................................................................ 211
Summary of key findings ........................................................................... 213
The Protective Capacities of Supportive Close Friendships ...................... 215
Implications for Adolescent Resilience ...................................................... 222
A Lifespan Perspective on Resilience ......................................................... 228
Methodological Implications: Researching resilience ............................. 235
Impact on Developing Effective Interventions ......................................... 238
Limitations ................................................................................................. 241
Directions for Future Research ................................................................. 243
Conclusions ............................................................................................... 246

7 LIST OF REFERENCES ........................................................................... 247

8 LIST OF ABBREVIATIONS .................................................................... 265

9 APPENDICES ....................................................................................... 267
Appendix 1 Ethical approval ....................................................................... 267
Appendix 2 Adolescent questionnaire at time 1 ....................................... 268
Appendix 3 Brief emotional intelligence scale ........................................... 292
Appendix 4 Adolescent questionnaire information and debriefing sheets ....................................................................................... 293
Appendix 5 Adult questionnaire amendments ........................................... 296
Appendix 6 Adult questionnaire information and debriefing sheets .......... 300
Appendix 7 Semi-structured interview schedule ....................................... 303
Appendix 8 Interview recruitment and debriefing materials ..................... 305
Appendix 9 Transcription guidelines ........................................................ 316
Appendix 10 Confidentiality agreement .................................................... 317
Appendix 11 Sample transcript extract ..................................................... 318
LIST OF FIGURES

Figure 2.1. Interconnected thematic analysis decision point structure (adapted from Braun and Clarke, 2006) .................................................................51

Figure 3.1. IOS moderation of relationship between friendship and resilience ..............82

Figure 3.2. 6-Mediator Adolescent Friendship and Resilience Model .........................88

Figure 3.3. AFR.2 Adolescent Friendship and Resilience Model ................................ 90

Figure 4.1. Cross-lagged panel analysis of adolescent friendship quality upon resilience...122

Figure 5.1. Cross-lagged panel analysis of adult friendship quality upon resilience ..........154

Figure 6.1. Participant recruitment timeline ..................................................................167

Figure 6.2. An experiential topography of the self in lived experience .........................207

Fig.7.1. Patterns of significant differential psychological resource and support development in trajectories of increasingly- and decreasingly-resilient adolescents and middle aged adults ...................................................................................232
LIST OF TABLES

Table 3.1. Participant information by recruitment source.........................................................69
Table 3.2. Resilience, self-esteem, self-efficacy, RISC and perceived stress.........................76
Table 3.3. Means and standard deviations for coping behaviours by coping style............77
Table 3.4. Intercorrelations of measures in the friendship and resilience questionnaire at T1........................................................................................................................................80
Table 3.5. Moderated regression analyses..............................................................................82
Table 3.6. Bootstrapping results for mediators of predictive relationship of perceived close friendship quality upon resilience.................................................................83
Table 3.7. Confirmatory factor analyses of AFR model latent variables............................86
Table 3.8. T1 AFR single-group structural equation modeling analyses............................89
Table 3.9. Decompositions for effects of predictor and mediating variables on resilience in the Adolescent Friendship and Resilience Model.........................................................93
Table 4.1. Participant information by educational institution at T1 and T2.........................112
Table 4.2. Intercorrelations and internal reliabilities of measures across T1 and T2........115
Table 4.3. Means and standard deviations of assessed variables at T1 and T2.................117
Table 4.4. Intercorrelations between variables at T1 and T2.............................................120
Table 5.1. Intercorrelations and internal reliabilities of measures across T1 and T2........142
Table 5.2. Means and standard deviations of assessed variables at T1 and T2.................145
Table 5.3. Confirmatory factor analyses of longitudinal adult model latent variables......148
Table 5.4. Cross-sectional intercorrelations of measures in the Friendship and Resilience Questionnaire at T1..................................................................................................................150
Table 5.5. Cross-sectional intercorrelations of measures in the Friendship and Resilience Questionnaire at T2..................................................................................................................151
Table 5.6. Cross-sectional bootstrapping results for mediators of predictive relationship of
perceived close friendship quality upon resilience at T1 and T2..........................153

Table 5.7. Bootstrapping results for mediators of longitudinal predictive relationship of perceived close friendship quality upon resilience.............................................155

Table 6.1. Participant descriptions.........................................................................................172

Table 6.2. Identified lifeworld places and physical and relational experiences...............176
CHAPTER 1

PSYCHOLOGICAL RESILIENCE AND SUPPORTIVE CLOSE FRIENDSHIP

Introduction

Exploring how people survive and flourish through challenging circumstances is crucial if psychologists are to engage with the full breadth and depth of human experience. A salutogenic psychological framework emphasising the health-promoting strengths, qualities and capacities of people, social relationships and environments (Carr, 2003) appreciates the wide range of possible positive responses to encountered adversity (Rutter, 1990). Researchers and practitioners are increasingly seeking a thorough psychological understanding of processes through which people may experience meaningful growth and develop positive benefits from encounters with adversity and challenge. This thesis adopts a social psychology approach to resilience and protective processes in socioeconomically vulnerable adolescents and middle-aged adults, examining the impact and import of a single, supportive close friendship upon experiences and processes of resilience promotion.

I begin the chapter with a working definition of “psychological resilience” and show how a strengths-based approach is important for understanding psychological functioning in the face of the specific risk factor of socioeconomic vulnerability. I demonstrate the value of examining resilience processes across the lifespan, emphasising adolescence, when there is potential for cascades of protective mechanisms to take hold, and middle age, which is developmentally distinct from adolescence and has been largely overlooked in the resilience literature. I critically evaluate the construct of psychological resilience, underscoring the socially-embedded and subjective nature of positive psychological adaptation in the face of socioeconomic adversity. Major theoretical and methodological debates are highlighted. I focus on a key type of close social relationship hypothesized to promote resilience: supportive close friendships. I explicate qualities of close friendships over the lifespan, attending to significant developmental changes and methodological issues in operationalizing and assessing friendship. I explore the inconsistent representation of supportive close friendships in the resilience literature, demonstrating the need to systematically investigate the potential role of close friendships in resilience.
promotion. I suggest potential pathways through which friendship support might promote positive psychological adaptation, drawing upon existing knowledge of resilience, social support and friendship. I close the chapter by reiterating the aims and central research questions of the thesis, and provide an overview of the chapters contained therein.

**An Introductory Definition of Psychological Resilience**

One aim of this thesis is to enrich theoretical understanding of resilience and protective processes by prioritizing individuals’ subjective experiences and relational resources. Richer understandings of the human experience of what researchers call “resilience” will help to refine this construct in a meaningful empirical manner. I will at times, therefore, take a critical view on what resilience is. This view includes considering resilience as both an ongoing process and a subjective experience of that process, but not as a personality trait or static objective outcome. At the same time, a working definition of resilience is desirable. Resilience is conceptualised as a dynamic, developmental, and psychosocial process (Dyer & McGuinness, 1996; Rutter, 1990, 2006) through which individuals who have been exposed to sustained adversity or potentially traumatic events (Luthar, Cicchetti, & Becker, 2000) come to experience positive psychological adaptation. It involves aspects of personality, adaptive coping skills and relational factors (Campbell-Sills, Cohan, & Stein, 2006; Hauser, 1999) operating within a sociocultural and community context which itself exerts an effect (Rutter, 1999). Although risk severity and its assessment is subjective (Vanderbilt-Adriance & Shaw, 2008), exposure to risk (whether sustained adversity or acute potential trauma) is generally considered a pre-requisite to resilience. Promotion of resilience, especially amongst young people, is an important target for psychological intervention and social policy. Resilience has been linked to physical and mental health outcomes such as psychological distress (Campbell-Sills, Cohan & Stein, 2006), health-promoting lifestyles (Black & Ford-Gilboe, 2004) and educational attainment (Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006).

It is useful to define what resilience is by foregrounding what it is not. Resilience is conceptualised here not as a discrete outcome, but as a continual process, although this position is implicitly disputed by some other researchers. Resilience is distinctive from transient mood states such as subjective happiness or positive affect; indeed, resilient children from high-stress backgrounds tend to be more depressed and anxious than their peers from low-stress backgrounds (Luthar, 1991). Resilience is also distinct from coping: responses to external perceived stressors which aim to prevent, avoid or control emotional
distress (Pearlin & Schooler, 1978). Effective coping is, however, often part of resilience (Campbell-Sills, Cohan, & Stein, 2006). Bonanno and Mancini (2008) posit four prototypical trajectories following exposure to potential trauma: chronic dysfunction (i.e. post-traumatic stress disorder), delayed reactions (sub-threshold psychopathologies worsening over time), recovery and resilience. In both youth and adults, recovery is defined as elevated psychological problems following exposure to potential trauma or substantial adversity, which persists for at least several months before returning to baseline. Whilst resilient individuals may experience stress, these reactions tend not to be substantive or interfere with daily functioning. Although their theoretical approach implicitly frames resilience as a stable outcome, as opposed to an embedded process, this distinction between trajectories provides recognisable descriptions of multiple reactions to adversity, including several types of “positive” adaptation.

The Risks of Socioeconomic Vulnerability

Understanding how psychological resilience might be promoted is especially compelling given the poignancy of a particular risk factor upon psychological functioning: socioeconomic vulnerability. Socioeconomic vulnerability is frequently investigated in risk research (Luthar, 1991). As socioeconomic structures are slow to shift, with funding for social and educational programmes generally decreasing, the promotion of psychological resilience in the face of this form of adversity is important target for researchers and practitioners interested in improving the lives of young people (Harvey & Delfabbro, 2004). The term “socioeconomic vulnerability,” used within this thesis to describe the risk shared by adolescent participants, is deliberately selected from amongst alternatives such as “low socioeconomic status” or “low-income.” Employing the language of protection and vulnerability to risk commonly seen within resilience research (i.e., Rutter, 1999), vulnerability captures how exposure to socioeconomic adversity within an adolescent’s community (and, most likely, household) leaves them susceptible to increased risk for problematic experiences through a range of mechanisms. Unlike “status,” vulnerability retains a sense of process, with potential for negotiation and adaptation. It implicitly acknowledges that there are structures of adversity which the young person is vulnerable to, whereas “status” implies that risk is situated within the individuals in question.

In the present research, socioeconomic vulnerability is identified through attendance at secondary schools and colleges located in low socioeconomic catchment areas, or involvement in local authority schemes targeting pupils in disadvantaged areas. Although
individual households may vary in their financial resources, using catchment area as a rubric reasonably assumes exposure to community socioeconomic deprivation, to an embedded educational institution and to similarly vulnerable peers. Community socioeconomic deprivation presents a significant risk to young people across a range of domains (Zimmerman & Brenner, 2010). In the UK, young people growing up in low-income households face increased risks of poor health, worse educational outcomes, early pregnancy, future unemployment, and engagement in anti-social behaviour (Canvin, Marttila, Burstrom, & Whitehead, 2009). Perceived neighbourhood safety and lower income are negatively linked to physical health outcomes (Ziersch, Baum, MacDougall & Putland, 2005). Low socioeconomic status is linked to comparatively greater exposure to problematic experiences such as school dropout, risk-taking, substance use, and exposure to family- and community-violence, with consequent negative effects (Aisenberg & Herrenkohl, 2008; Serbin & Karp, 2004; Turner, Finkelhor & Ormrod, 2006; Zimmerman & Brenner, 2010). Adolescents are particularly vulnerable to exposure to community violence, impacting mental health, cognitive ability and risky externalising behaviours (Aisenberg & Herrenkohl, 2008). Low socioeconomic status is associated with numerous family factors that pose increased risk, such as low maternal education (Luthar, 1991), and negatively impacts disease prevalence, severity and mortality regardless of the provision of universal health care (Chen & Miller, 2012). Neighbourhood socioeconomic disadvantage is therefore a compelling risk factor for adolescents, even setting aside available family resources.

Although there are numerous risks stemming from socioeconomic vulnerability, a young person’s community may still offer protective opportunities. The availability of services and social connections is a complex form of social capital which reflects material and relational resources (Ziersch, Baum, MacDougall & Putland, 2005). A community may be a protective mechanism by, for example, enabling affiliations to faith-based or cultural organisations, schools and other group assets, and access to educators and other adults with protective competencies (Hauser & Allen, 2007). Young people exposed to community violence may develop mechanisms to cope with poor safety and loss of personal control (Aisenberg & Herrenkohl, 2008). Young people from low-income households who are exposed early to positive role models may be particularly adept at accepting and negotiating challenges whilst maintaining endurance, meaning and optimism (Chen & Miller, 2012).

Within a study employing socioeconomic vulnerability as a risk factor shared amongst participants, a methodological and theoretical focus on subjective experiences of resilience
and protective processes is likely to be more appropriate than a view emphasizing external indicators of achievement or psychiatric outcomes. Researchers who do not acknowledge socioeconomic vulnerability risk overlooking examples of resilient processes and trajectories when determining resilient outcomes (Canvin, Marttila, Burstrom & Whitehead, 2009). Much resilience research assumes culturally-defined views of normatively-successful outcomes or behaviours (Harvey & Delfabbro, 2004). Yet outcomes indicating “resilience” may be defined not by vulnerable people themselves, but by the majority culture (Canvin, Marttila, Burstrom & Whitehead, 2009). Not only does this disjunction perpetuate disempowerment of vulnerable people, but it risks overlooking processes – particularly relational, social and contextual – which may promote subjectively meaningful outcomes or which lie outside the scope defined by dominant research paradigms. A meaningful project looking at resilience in socioeconomically vulnerable young people is as much interested in subjective processes as in the demonstration of psychometrically-determined psychological resilience. It values the processes of these achievements more than the exhibition of “objective” measures such as educational attainment and employment status, which are not fully objective but are part of a normative cultural discourse.

Reflexively acknowledging the researcher’s role in shaping the inception of the research project and ongoing analytical engagement (Shaw, 2010), the interest within this thesis in how young people navigate this risk is also informed by personal experiences of sustained socioeconomic hardship as a youth growing up in a challenging urban environment. The focus upon strengths over pathology, and upon the salutogenic potential of friendship, is informed by desire to see increased representation and understanding within psychology of the value gained through living with circumstances labelled risky by policy-makers, theorists and practitioners (although not necessarily by “at-risk” people themselves). Objective views of successful adaptation dissatisfying imply a singular, static and unproblematic view of risk, resilience and trajectories. The thesis is informed by belief that the ability to make meaning of challenges is inherent to the human experience at individual and relational levels regardless of professional intervention (Jordan, 2013; Richardson, 2002). Such focus resonates with my own, and others’, everyday experiences of developing a sense of meaning and satisfaction from encounters with adversity.
A Lifespan Perspective on Resilience

There is a distinct need to explore how resilience may develop and vary across the lifespan (Bonanno, 2004; Rutter, 1999). The constellation of interrelated strengths supporting resilience promotion may vary between and within individuals over the course of life. Resilience is not a fixed attribute, but is nurtured over time in a continual process (Drapeau et al., 2007). Both cross-sectional and longitudinal studies are valuable here. Resilience may not persist with meaningful stability over time and domain, even within adolescence. Positive adjustment amongst at-risk youth may fluctuate as adolescents pass through developmental milestones and different life domains, such as home and school (Vanderbilt-Adriance & Shaw, 2008). Even amongst resilient individuals, adaptive strengths shown in one area of life may not transfer to another (Luthar, Cicchetti & Becker, 2000).

Looking at both adolescence and adulthood within the same programme of research may highlight interesting commonalities or distinctions. Protective processes underpinning resilience promotion may be subject to developmental influences; for example, gender might moderate certain protective processes (Rutter, 1990). Similarly, risk may manifest differently at different stages. Potential life stressors – and the mere fact of exposure to previous stressors – are likely to differ between young people and adults (Bonanno & Mancini, 2008). Yet, encountering multiple challenges simultaneously poses risk and opens opportunities to grow through adversity. Distinct developmental periods may be particularly potent for catalysing turning points along certain domains, such as adolescence with its concerns with social relationships and personal autonomy, and middle age with its concerns with career, romantic relationships and parenthood (Rutter, 1990).

A lifespan approach which critically examines resilience at various ages may also illuminate how resilience emerges in later life (Luthar, Cicchetti & Becker, 2000). Having some life history of adversity is associated with better mental health and well-being than having had no adversity at all (Seery, 2011), suggesting that earlier encounters with risk may have profound, prolonged impact on later resilience. Yet the relationship between adult resilience and particular developmental experiences is unclear, as is understanding of whether resilience processes are cumulative across the lifespan, such that a resilient adolescent would continue to show positive adaptation when faced with challenges in middle age or older adulthood (Bonanno, 2004).
The focus in the adult resilience literature has thus far largely been on responses to trauma. Interest in adults exposed to potentially traumatic events or bereavements, and who have furthermore sought clinical treatment or experienced significant impairment, may imply that resilience is extraordinary (Bonanno, 2004). Bonanno conceptualises adult resilience as the ability to maintain relatively stable, healthy psychological functioning following exposure to potential trauma, even with the presence of transient immediate stress. Whilst this definition invites a metaphor of *bouncing back*, it does not incorporate a sense of *stretching* and adapting through challenge. It perhaps implies that adult psychology reaches a fixed ceiling of growth and self-realisation. Yet even maintaining a distinction between recovery and resilience (Luthar, Cicchetti & Becker, 2000), a healthy trajectory following exposure to potentially traumatic events is relatively common (Bonanno, 2004). Less is known about how adult resilience develops in light of longer-term adversity such as social isolation, chronic illness or socioeconomic deprivation. Knowing how a non-clinical population of adults might develop resilience expands the existing research. There is less understanding about how such adults demonstrate resilience-building processes – a topic of interest to those working within a general salutogenic framework. Furthermore, given that some adults will have once been at-risk adolescents themselves, studying adults outside a clinical context may be useful in seeing resilience within the extended context of a life lived through adversity.

Complicating attempts to see how resilience develops over the lifespan, researchers looking at resilience in children and adults have generally employed conceptually different approaches. Researchers working with youth tend to frame resilience in terms of developmentally-appropriate behavioural competence, whereas the adult literature focuses on individuals’ subjective well-being and functioning. Adult resilience literature prioritizes self-report, while youth resilience research has heavily relied upon reports from teachers, peers and parents, and achievement indicators such as school results (Luthar, Sawyer & Brown, 2006). The use of external indicators or informant reports to assess resilience in young people is influenced by beliefs that accurate assessment of resilience in children may require more sensitive monitoring than in adults, and across more domains (Bonanno & Mancini, 2008). However, there is a possibly problematic implication that adults’ self-reports are more reliable and valid than young people’s assessments of their subjective experiences. Regardless, this differentiation effectively creates two streams of conversation about resilience, based on differing premises and examining different outcomes. Such a disjunction poses a challenge for researchers seeking to understand the
development of resilience across the lifespan, who must interweave these conversations into a coherent discourse. A holistic approach might relate findings in adolescent resilience research to burgeoning understandings of resilience in later life.

This thesis focuses primarily upon resilience in socioeconomically vulnerable adolescents of secondary school and college age (approximately 11 to 19 years), because of the pervasive impact of exposure to this risk at adolescence upon functioning both immediately and in later life. Further perspective is gleaned from exploring protective processes in a wider group of middle-aged adults (defined here as 35 – 55 years old). The life challenges of middle-aged adults are likely to differ from adolescents’. They include greater focus on employment, romantic relationships, family commitments (including child-rearing but also caring for aging parents), and physical decline (Bonanno & Mancini, 2008; Masten & Wright, 2010). Variations in the impact and efficacy of certain protective mechanisms promoting resilience, such as supportive social relationships, between adolescence and middle-age may also give insight as to the unique role of that mechanism.

**Overview of Relevant Models and Theories of Resilience**

There is a vibrant discussion in the literature about what resilience actually is. The variety of definitions offered underpins a lack of consensus about what resilience is, particularly with respect to adolescence (Ahern, 2006). It is evident that resilience is more than simply the absence of psychopathology where this might be reasonably expected (Almedon & Glandon, 2007). Despite attempts to bring together different perspectives on resilience into paradigmatic approaches (e.g., Richardson, 2002) and a number of integrative theoretical and conceptual frameworks, there is no accepted single overarching theory of resilience and resilience processes (Harvey & Delfabbro, 2004). The number of theories, models and conceptual frameworks reflect distinct waves of research concerned with, separately: identification of individual qualities, assets and protective factors promoting growth, concern with underlying disruptive and integrative processes connecting these factors to support mechanisms of adaptation, and multidisciplinary concerns with forces of motivation, strengthening and meaning-making that make resilience processes a feature in everyone’s lives (Richardson, 2002). A systematic review of theories and models of resilience in the literature, or the adolescent resilience literature in particular, is outside the scope of this thesis (although see Harvey and Delfabbro’s (2004) critical overview of psychological resilience in disadvantaged youth; Ahern’s (2006) evolutionary concept model of adolescent resilience; and Zimmerman and Brenner’s (2010) overview of
resilience processes in youth exposed to neighbourhood disadvantage). I will therefore briefly overview some approaches to resilience relevant to adolescent populations, with particular emphasis on the social and relational approaches underpinning the research presented in this thesis.

In the early stages of resilience research, resilience was generally conceptualised as a personality trait permitting extraordinarily positive outcomes under extreme hardship. For example, resilience could be an outcome of hardiness, a tripartite commitment to finding meaningful purpose in life, influencing one’s environment, and growing from both positive and negative life experiences (Bonanno, 2004). Research aimed to find personal qualities (e.g., self-esteem) differentiating children who had adapted positively to challenging circumstances such as socioeconomic disadvantage, parental maltreatment or neglect, catastrophic life events and chronic illness, from children showing comparatively poorer outcomes (Luthar, Cicchetti & Becker, 2000). Classic studies (e.g., Werner & Smith, 1982) focused attention upon children’s ability to withstand substantial adversity. However, these researchers’ expectations of disadvantaged children’s development, behaviour and educational outcomes may have been overly pessimistic. This laid a foundation for an overly individualistic view of resilience as a personality trait – resiliency – predicting extraordinary success against pathologising circumstances (Almedon & Glandon, 2007). The curious juxtaposition of underpinning a study of purported resilience with a risk-based approach persists into some recent research. For example, Tiet, Huizinga and Byrnes (2010) operationalised resilience amongst inner city youths as outcomes such as avoiding criminal delinquency and excessive drug use. However, this approach arguably implies that adaptive functioning is beyond the general capacity of at-risk youths. In adult research, early emphasis upon avoiding pathological responses to traumatic stress led to an overly simplistic view of disordered reactions as the norm and largely overlooked the fine granularity of adaptive capabilities (Bonanno & Mancini, 2008). Although this approach has been valuable, it is perhaps more suited to epidemiological concerns of discrete, objective outcomes, than to a psychological perspective (Hauser, 1999).

Later researchers expanded their theories of resilience to incorporate social context, key relationships, lifespan processes and even neurological and biological perspectives into a view of resilience as continual process (Wright & Masten, 2010). Resilience is seen as a dynamic, multidimensional process of adaptation in the face of substantial adversity, involving thriving as well as simply surviving (Luthar, Cicchetti & Becker, 2000). Throughout
life, protective factors are rooted in culture, community and social relationships (Wright & Masten, 2010). Ahern (2006) conceptualises adolescent resilience as a composite of attributes incorporating individual characteristics, social support, and available resources. Including sociocultural and relational processes in resilience framework enables a more expansive view than a trait-oriented approach allows. With this turn towards the social, the importance of interpersonal relationships to resilience becomes increasingly clear.

A wider approach to resilience attends to the web of interconnected protective processes which may facilitate positive adaptation. Overall, Altrows and Paulson (2006) adopt such a process-oriented view, arguing that resilient youth are those who have overcome adversity through an adaptive process of making use of internal and external resources. They identified four major domains of resilience processes: social (i.e., relationships with parents, peers and significant adults), emotional (i.e., awareness and expression of feelings), cognitive (i.e., shifting perspective and realising personal control), and purposeful, goal-oriented action (i.e., developing independent opportunities and optimistic futures). Similarly, Hart, Blincow and Thomas (2007) frame resilience promotion through interconnected processes of supporting young people to develop capacities in basic needs (i.e., adequate housing and transport), belonging (i.e., on-going healthy relationships and a sense of place in the world), learning (i.e., highlighting achievements and life skills), coping (i.e., understanding boundaries, self-soothing and seeking support), and core self (i.e., self-knowledge and understanding others’ feelings). Resilience becomes as much about adolescents’ social resources as their individual characteristics.

Other perspectives specifically focusing upon adolescence and young adulthood have adopted this multiple-resources approach. Haase, Heiney, Ruccione and Stutzer (1999) incorporated data from adolescents, family and healthcare providers to generate a model of adolescent resilience in the face of severe chronic illness. Resilient chronically ill adolescents experienced resilience as becoming courageous and achieving good quality of life, having drawn upon protective factors at the individual level (i.e., courageous coping, deriving meaning from events), family level (i.e., supportive family atmosphere), and social level (i.e., social integration and healthcare resources). The Youth Resilience Framework (Rew & Horner, 2003) similarly posits resilience as an interaction between individual risk factors (i.e., gender, poor school performance), individual protective resources (i.e., coping styles, connectedness, knowledge of health behaviours), and a sociocultural context which includes both family (i.e., socioeconomic status) and community factors (i.e., school
environment, peer relationships). These resources interact to promote more resilient health behaviours amongst adolescents. Such approaches see risk and resilience as emerging from multiple resources, perhaps varying in their significance to individuals but generally featuring to some extent in most adolescents’ lives: educational institutions, healthcare institutions, community, family, and peer and adult social networks.

Socioculturally sensitive definitions of resilience may attune researchers to how resilient outcomes may be defined with respect to the surrounding environment. Many measures of resilience forego sociocultural or relational factors, such that resulting theory necessarily attends less to cultural expressions of resilience whilst empirical studies systematically underplay community-specific strengths such as access to religious support (Clauss-Ehlers, 2008). Yet risk is often inseparable from immediate social context, especially when that risk is socioeconomic vulnerability. Resilience may similarly need to be considered in light of subjective environmental norms. A seemingly ordinary act, such as negotiating public services, may be considered highly skilled within communities of socioeconomic hardship. Expanding recognition of resilience-building processes is not to patronise disadvantaged persons, but to acknowledge that normative measures of resilience may overlook genuine capacities, achievements and transitions. It also acknowledges an interaction between context and people which drives a process-oriented view of resilience (Canvin, Marttila, Burstrom, & Whitehead, 2009).

Engagement with subjective views of resilience acknowledges self-report and experiential appraisals of resilience as theoretically meaningful, empirically informative complements to positivistic approaches. Drawing upon Rutter’s (1999) emphasis upon turning points to catalyse a series of changes promoting positive adaptation, Drapeau et al.’s (2007) qualitative study of youth in foster care suggested that participants experienced three types of turning points: action, relation and reflection. They identified four processes directly or indirectly linked to the turning point: increase in perceived self-efficacy, distancing oneself from risks, new opportunities, and the multiplication of benefits. Shepherd, Reynolds and Moran (2010) also identified the importance of turning points within retrospective accounts. Self-identified resilient young women reflected that their bittersweet experiences with adolescent adversity had made them stronger and more compassionate. Short-term resilience processes involved obtaining self-affirmation and self-validation, emotional support and respite from distress, and clarity about their experiences. In the longer term, resilience was experienced as gaining new perspectives
and recovering a positive self-image by engaging with the “normal” activities of adolescence, rebuilding key familial relationships and friendships, and achieving academic progress. Employing a narrative approach with resilient young adults, Hauser (1999) identified personal factors associated with resilience which were developed through recruiting and maintaining supportive relationships. These factors, which he largely situates within the self, include self-reflection, self-efficacy, self-complexity, persistence and ambition, self-esteem, and coherence of life narratives. However, these studies largely relied upon retrospective accounts of events dating from many years past.

Attending to young people’s subjective views of resilience may throw up surprising and even controversial findings: for example, some urban-dwelling young people experience resilience as a potentially unhealthy state of simply surviving defensively (Hunter & Chandler, 2000). Resilience was viewed as disconnection from others due to lack of trust, isolation from perceived support, and insulation from unbearable emotional distress. This contrasted with the view of resilience expected from established theory and with the survey measure employed, conceptualised as having a healthy sense of self, self-worth and connectedness. In general, resilience research struggles with the balance between achieving some recognisable consensus on what positive psychological adaptation is, and accommodating the wide possibilities of different but potentially successful ways in which different people might deal with adversity (Harvey & Delfabbro, 2004). The tensions which sometimes arise between individuals’ perspectives of resilience on the one hand, and psychological theories of resilience on the other, highlight the need for a more systematic exploration of adolescents’ subjective experiences of resilience and protective processes.

Many researchers view resilience as generalised across all aspects of life, whilst others argue that resilience is grounded within specific domains. Morrison and colleagues (2006) situate resilience in schools, as a multi-dimensional protective process which supports a trajectory of positive educational outcomes through sustained engagement, school bonding and holistic support. They identify interlinked categories of individual, family, classroom, school and peer “assets” for educators to target. A positive relationship with a key adult may be experienced as triggering a series of positive changes, particularly among young people who have had tumultuous family experiences (Drapeau et al., 2007). Interest in resilience as a multidimensional process incorporating interplay between protective mechanisms therefore poses intriguing questions as to whether resilience itself is equally fragmentary or contextual.
Such questions are relevant to approaches which prioritize social, relational and ecological contributions to resilience. Relational-cultural theories of resilience argue that psychological growth occurs through relationships, speaking towards a fundamental human desire for connection, and conceptualise resilience as a courageous, empathic form of connection. Growth-fostering relationships may promote the development of resilience through supporting vulnerability, mutual empathic involvement, building reliable relationships, empowering mutual growth and creating relational awareness alongside personal awareness (Jordan, 2013). Ungar’s recent sociological work understands resilience as a multifaceted “ecologically dynamic and mutually dependent process” (2005, pp. 92) encompassing the relationship between the individual, their social context and the meaning they extract from their experiences. One implication of this approach is heightened attention to the way that a young person’s resilience is embedded within the network of strengths, capacities and support available within his or her family system – including how the family is able to negotiate social, economic and political resources which would facilitate a young person’s psychological development (Ungar, 2010a). Ecological models of resilience incorporate diverse contextual factors relevant to a young person’s experience, including school, neighbourhood, peers and family. Such models help translate the general, distal risks of community deprivation or poor socioeconomic status into more proximal sub-contexts and discrete interpersonal relationships (Zimmerman & Brenner, 2010). An extension of this approach would be to posit adolescents as embedded within a network of interpersonal peer relationships which, in addition to providing immediate emotional support and companionship, may promote the capacity to meaningfully access resilience-promoting resources.

Approaching resilience from a social psychological approach, this thesis situates itself within the intersection between self, social, relational and contextual approaches, emphasizing the value of subjective, context-specific views of resilience. Ungar (2005) identifies the necessity of talking about resilience in a way which recognises how people themselves make meaning of and enact their responses to particular challenges. Interestingly, in the move to expand views of resilience and protective processes to a more social, relational and contextual approach, there has been comparatively little attention paid to one potential resource which is highly significant to the human experience and an important source of social support: close friendship.
A Critical Look at the Methodologies of Resilience Research

The development of resilience research depends upon marrying empirical research to theory building (Luthar, Cicchetti & Becker, 2000). At the interface of theory and empiricism lies methodology. This section briefly explores how the methods used to investigate resilience may simultaneously reflect and direct theory development and subsequent empirical research.

Rather than taking a salutogenic approach, early resilience research focused more on identifying risk factors predicting pathological symptomology – such as finding that lack of social support predicts post-traumatic stress. Such research implicitly assumed that inversion of these factors (e.g., presence of social support) would predict resilience, but this was only infrequently subject to explicit study (Bonanno, 2004). Because of the influence of personality-driven approaches, early literature was largely silent as to processes through which protective factors exert their effects, although this is swiftly changing (Vanderbilt-Adriance & Shaw, 2008). There is comparatively less understanding about what factors might predict resilience and the mechanisms through which such factors exert protective effects (Rutter, 1990). The use of within-subjects, longitudinal designs is particularly useful for highlighting critical protective processes within an identified risk group, such as socioeconomically vulnerable youth (Luthar, Sawyer & Brown, 2006). Vanderbilt-Adriance and Shaw (2008) suggest that when focus is on elucidating protective processes amongst the most vulnerable, comparing high-risk youth to low-risk youth adds little incremental value, compared to designs focusing upon variations in processes and outcomes amongst a group of young people sharing a similar type of risk. Complex cross-sectional and longitudinal statistical designs which include mediation and structural equation modelling specifying resilience as an outcome provide powerful tools to a focus on an interrelated network of protective mechanisms (see Chapter 2).

The robust debates about how to conceptualise resilience pose methodological challenges for researchers. The existence of varying definitions (and, consequently, measures) of resilience imparts a need for specificity in framing research questions and designs. Luthar, Cicchetti and Becker (2000, pp. 544) argue that “the theoretical and research literature on resilience reflects little consensus about definitions, with substantial variations in operationalisations and measurement of key constructs.” Harvey and Delfabbro (2004)
similarly note the variety of operationalisations of resilience across studies with youth, including academic achievement, positive behavioural adjustment, enhanced cognitive functioning, or the absence of psychopathology.

In light of this evolving discussion, the selection of measures which purport to indicate resilient outcomes or processes becomes particularly important. Many instruments measure subjective psychological resilience, but these operate from different theoretical foundations. For example, the Connor-Davidson Resilience Scale (Connor & Davidson, 2003) draws upon stress, coping and adaptation research (Ahern, Kiehl, Sole & Byers, 2006) but situates resilience strongly within the individual. The Baruth Protective Factors Inventory (Baruth & Carroll, 2002) sees resilience in terms of possessing protective factors across the domains of an adaptive personality, fewer stressors, environmental support and experiences which compensate for risk. Ahern and colleagues (2006) reviewed a number of assessments of adolescent resilience, recommending the Resilience Scale (Wagnild, 2009) as most appropriate to adolescents, and showing comparatively better psychometric robustness. This scale sees resilience as encompassing personal competence and acceptance of self and life (Wagnild & Young, 1993). Importantly, this instrument is also applicable to adults, which is useful given the different approaches to resilience measurement seen in the youth and adult literatures.

Although the use of self-report measures has its limitations, when employed within a salutogenic, social and relational approach, self-report is preferable to using purportedly “objective” measures. Assessments of psychosocial function (e.g. self-esteem) may not converge between parental and self-reports (Dubois et al., 2002). Competency criteria such as school outcomes furthermore necessitates judgments on what outcomes are to be considered extraordinary and what outcomes are merely expected (Luthar, Cicchetti & Becker, 2000). These judgments are made by researchers, not participants themselves. Varying methods of selecting outcomes may underpin observed discrepancies in the occurrence of youth resilience and the efficacy of hypothesized protective processes across time (Vanderbilt-Adriance & Shaw, 2008). External indicators of resilience are perhaps more appropriate when researchers are concerned with particular outcomes, such as educational attainment than when concern is focused upon the impact of a particular protective mechanism upon a subjective or multidimensional resilient capacity to face challenging circumstances. A given externally-determined outcome of resilience may hold little relevance to the intricacies and idiosyncrasies of an individual’s – and perhaps a
group’s – experience (Ungar, 2005). The social and cultural dimensions underpinning research operationalisations of competency (Harvey & Delfabbro, 2004) are perhaps more directly engaged within a framework prioritizing subjective experience. Considering the variety of opinions within the research community as to what constitutes resilience, the selection of external criteria for resilience – judged to relate to the subjective experience of the at-risk group – risks being of fragile or arbitrary theoretical utility, compared to measures which purport to measure subjective psychological resilience.

Engaging young people in examining their own capacities for resilience is undoubtedly challenging, but can only enrich theoretical understanding of resilience and protective processes. Drapeau et al. (2007) suggest that teenagers may struggle more than adults to identify turning points in their lives, given that adults are better poised to introspect about the course of their life from a distance. However, they note that in their study, participants were capable of considerable reflection about their life stories. Ungar (2005) similarly reflects that young people tend not to shy away from looking closely at their lives within a research encounter that uses everyday language, displays sincere curiosity, and is open to acknowledging the value that young people place on their experiences, even when this challenges conventional values. Approaches using individuals’ self-reflections about their life may be particularly useful for highlighting a developmental perspective on protective processes (Hauser & Allen, 2007). Resilience research has tended to assume culturally-specific views about what constitutes normal functioning (Harvey & Delfabbro, 2004), which may be confronted in qualitatively-driven theories. Ungar (2005) sees the development of a qualitatively richer description of resilience, reflecting the lived experiences and interpretations of the individuals or groups under investigation, as essential to developing a robust and contextually-sensitive view on resilience processes.

Mixed-methods designs incorporating both quantitative and qualitative techniques are advised for studying resilience (Almedon & Glandon, 2007). For example, triangulating multiple methods within a wider meaning-based approach may generate a theory of resilience able to interweave pre-extant empirical knowledge about resilience resources with the perspectives of adolescents and their families, including perceptions of risk factors (Haase, Heiney, Ruccione & Stutzer, 1999). A mixed-methods approach can balance the competing limitations and complementary strengths of strict qualitative and quantitative approaches, enabling a dialogue between and across perspectives. Examination of common methodological practices within resilience research highlights the
need for carefully designed longitudinal studies; sensitivity to varying definitions of resilience and consequent need for precision and specificity; greater incorporation of subjective resilience as a statistical outcome variable and a subject of qualitative study; and more systematic inclusion of methods which directly engage with young people. Such an approach may orientate theorising about resilience and protective processes towards a social and relational perspective incorporating subjective experiences.

**Close Friendships and Social Support**

Perceived social support is an important component of resilience (Rutter, 1990) and growth following adversity and trauma, although it is unclear whether and how the relationship holds over time (Hegelson & Lopez, 2010). Social support refers to those significant interpersonal ties which impact functioning and provide resources to satisfy expressed needs, especially at difficult times (Frydenberg, 1997). The intrinsically subjective nature of support means that perceived support, rather than actual support received, is of greater psychological relevance. Support from family, peers and significant others may be received differently, have different effects on coping skills, and be affected by the type of presenting problem. For example, an adolescent experiencing a problem at home is more likely to confide in a friend than a parent (Frydenberg, 1997). Perceptions of support and its availability are associated with coping effectiveness, adjustment, and psychological and physical well-being (Sarason et al., 1991). Accordingly, throughout this thesis, unless otherwise stated, “social support” refers to “perceived social support”.

Close relationships support basic needs for belonging (LaGuardia, 2008), empathy and mutual engagement (Jordan, 2013), forming a context of interpersonal exchanges through which growth and development occur (LaGuardia, 2008). Close relationships generally involve perceptions of mutual understanding in the form of beliefs that one is known by, and knows a relational partner, and that one feels valued by, and values a relational partner. This understanding is inherently social, dynamic, and relationship-specific, and may promote goal orientation and achievement through provision of affirming, validating and sensitive support (Finkenauer & Righetti, 2011). A sense of mutuality underpins both children’s and adults’ definitions of friendship (Hartup & Stevens, 1999).

Within adolescence and beyond, friendships are important sources of support (Frydenberg, 1997). Throughout life, friendships fulfil many functions associated with affection and satisfaction, such as providing stimulating companionship, help, intimacy, reliable alliance,
self-validation and, emotional security (Mendelson & Aboud, 1999). Although friendship shares some qualities with other significant relationships, important typical differences include more reciprocal disclosures than, say, in a relationship between parent and child (Finkenauer & Righetti, 2011). Friendships often involve similarities in life stages and interests. Best friendships are often distinguished by young people as involving secret sharing and intimacy, whilst partaking in diverting activities together is important to friendships more widely (Way, 2013).

Friendships are generally important to well-being throughout life, although they are not without downsides, such as conflict and instability (Hartup & Stevens, 1999). It is important to consider the supportiveness of a given friendship: friendship support does not always predict better adjustment (e.g. Demaray et al., 2005), and young people may refrain from seeking support or disclosing feelings when they perceive a lack of trust or wish not to burden others with problems (Frydenberg, 1997). However, supportive friendships may model effective coping skills and active information seeking, and demonstrate how to recruit and offer good support (Frydenberg, 1997). Friends may also be an important way of transcending self-concerns by being a target for generosity (Kinsel, 2005) and by promoting well-being through the perception that one is a good friend (Frydenberg, 1997).

**Friendship across the lifespan**

Friendships are important throughout life, though their features and meanings change. During adolescence there is a turn towards greater social connection with peers. Peer relationships become increasingly important in the formation of emotional stability and the general self-concept, including feelings of confidence and self-worth (Hay & Ashman, 2003). More time is spent with friends during adolescence than at any other point (Hartup & Stevens, 1999). Young people seek support from friends more frequently than other sources (Boldero & Fallon, 1995). Close friendships may be the most supportive relationships for some adolescents (Stanton-Salazar, 2005). Peer friendships are part of developmental and cultural emphases on developing autonomy (Way, 2013). With the importance of school to the adolescent experience, peer networks based on both in-school and out-of-school friendships are prominent features of adolescents’ social worlds (Frydenberg, 1997). The known benefits of friendship – positive effects of support from close relationships more generally, and the centrality of peers to the adolescent experience – suggests that adolescents’ close friendships are a worthwhile subject for investigation of social and relational mechanisms promoting resilience.
Social relationships including peer relationships may be implicated in a cascade of developmental effects, much as family context or biological factors are, such as through rejection by peers raising the risk for engaging in relationships with deviant peers, which further reinforces antisocial behaviour. This is particularly troubling given well-established developmental pathways of chain reactions as conduct problems negatively impact subsequent school achievement, social competence and internalizing problems (Masten & Cicchetti, 2010). Yet where there is risk, there are simultaneously possibilities of peer relationships supporting a cascade of positive chain reactions for adolescents.

Age sees some important shifts in how friendships are enacted, the meanings they hold to individuals, and their psychological effects. Adolescent friendships often centre on common activities and disclosure (Hartup & Stevens, 1999), with subtle but characteristic increases in intimacy and changes in typical friendship behaviours between early and late adolescence (Newcomb & Bagwell, 1995). Young adults’ friendships are blended with work-life and parenting. Middle-aged and older adults’ friendships are often uncoupled from work-life, focus on support and companionship, and entail less time spent together (Hartup & Stevens, 1999). These developmental changes make it important to examine how friendships may promote resilience in adulthood, as the character and effects of adult friendships may strongly differ from adolescent friendships.

Friendship characteristics have been inconsistently shown to vary across gender (Mendelson & Aboud, 1999). In adolescence, girls more readily turn to social support, perhaps because of a greater willingness to trust (Frydenberg, 1997). In research on adolescent boys, discussions of close friendships are generally absent or are defined by simplicity rather than complexity, emotional nuance and depth. Boys’ friendships may change substantially between middle and late adolescence as they encounter social pressures to be stoic, independent and masculine. Yet even as they begin to engage in less intimate and emotional talk, boys have been shown to believe that their close friendships benefit their mental health. They also report desiring and valuing sharing secrets with friends and yearning for close friendships into late adolescence even as they experience loss of trust and closeness during this transition (Way, 2013). In adulthood, women’s friendships have been argued to be more intimate and emotionally involved than men’s, although this may be linked to Western cultural gender norms about invulnerability and
masculinity (Crisp & Turner, 2010). A balanced approach might acknowledge the likelihood of observed gender differences in friendships, but be prepared to view these critically.

**Operationalising friendship**

Researchers interested in close friendships use a variety of methods of operationalising and assessing them, including looking at observable actions or correspondent reports between friendship partners in an attempt to document the effect of manifest friendship behaviours (Hartup & Stevens, 1999). Selection of methods is not straightforward. People have multiple relationships, interact with partners in multiple contexts (e.g., seeing a friend at school or in town), and experience evolution of their relationships over time (Gable & Reis, 1999). Engagement in friendship behaviours such as self-disclosure differs between relationship partners: this variation is a product of the qualities of the particular relationship itself, not merely individual differences (Gable & Reis, 1999). Qualities such as understanding within a relationship are not straightforwardly associated with relationship length (Finkenauer & Righetti, 2011). Research on understanding in adults’ close relationships has been conducted on romantic relationships, followed distantly by parent-child relationships, with less attention still to understanding in adult friendships (Finkenauer & Righetti, 2011). Interaction and emotional tie may differ not only by the length of the relationship, but the age of the relationship partners (Gable & Reis, 1999), with friendships having different meanings or effects over the lifespan (Hartup & Stevens, 1999). Many variables examined in the peer relationships literature infer relationship mechanisms rather than assessing them directly (Bukowski & Adams, 2005).

Alternatively, researchers may wish to focus upon an individuals’ subjective experience of their friendships. Understanding the social meanings and essences of friendship moves us beyond surface descriptions of interactions (Hartup & Stevens, 1997). Working empirically with individuals’ perceptions avoids attributions and inferences about how a friend meets a respondent’s needs and desires for that friendship (Mendelson & Aboud, 1999). Research on peer relationships has become more prominent and complex in recent years, yet there has been surprisingly little exploration on the meaning of supportive relationships from young people’s perspectives, assessing how they experience their close friendships and what they themselves value (Bukowski & Adams, 2005). Many studies examining links between social support and growth following adversity do not distinguish between support functions, and include only generic measures of support as part of a wider battery of
measures examining predictors of adaptation following trauma (Hegelson & Lopez, 2010). What constitutes support for one person may be different to another’s understanding (Frydenberg, 1997). Qualitative approaches interrogating subjective experiences can meaningfully engage with the breadth and depth of perceived close friendship support. Reliable subjective self-report measures assessing the specific qualities of particular friendships (e.g., McGill Friendship Function Questionnaire; Mendelson & Aboud, 1999) are valuable tools in statistical studies where variables must be constructed, yet researchers wish to prioritise respondents’ perceptions of how well their friendship fulfils important purposes along dimensions known to be important across different developmental stages (Mendelson & Aboud, 1999). Such measures are able to incorporate individuals’ subjective experiences of relationships into developing theories than can direct observations of behaviours which are not necessarily experienced as meaningful, or informant reports which rely upon others’ judgements of friends’ intimate experiences. Complementing approaches showing the value of general social support, then, there is a need to critically explore the qualities of what may be called perceived close friendship support. Considering what makes a friendship truly supportive may involve expanding understandings of support to include various manifest qualities of a friendship, such as providing distraction or being a reliable teammate, interrogating their importance for processes and experiences of resilience promotion. Researchers may then identify previously overlooked explanatory pathways linking support and resilience, and contribute to developing theories of resilience which capture the transformative capacities of relational resources.

**Friendships in the resilience literature**

Although peer friendships undoubtedly promote risk in some ways, evidence also suggests that supportive close friendships may have a more salutogenic role to play than is currently understood within the resilience literature. Luthar, Sawyer and Brown (2006) recommend prioritising potential protective mechanisms which fit the criteria of saliency, malleability, endurance, and generativity. Research should prioritise mechanisms that are salient to a large proportion of an at-risk group, are amenable to external intervention or modification, exert their effects or are present in a child’s life for an extended period of time, and initiate cascades of effects across other life domains, possibly generating other protective factors. Peer friendships are a defining feature of the adolescent experience (Frydenberg, 1997): the effects of a close friendship – and the friendship itself – may transcend the teenage years. Moreover, friendships intersect with a number of other dimensions of a young
person’s experience. As such, close friendships are ideal candidates to be a protective mechanism in an adolescent’s life. This section briefly reviews how peer relationships are situated within current understandings of resilience in adolescents and adults.

Peer relationships predict a wide range of negative outcomes, including psychiatric disorders, life dissatisfaction, criminal behaviour, and school leaving (Bukowski & Adams, 2005). Perhaps unsurprisingly, then, in the resilience literature peer relationships are often conceptualised as a risk factor predicting maladjustment, rather than as a resource for developing positive psychological resources (e.g. Parker & Asher, 1987). Such an approach risks overlooking the strengths, capacities and benefits which are available through meaningful social relationships. Resilience studies inconsistently include measures of the possible benefits available through adolescent peer relationships. For example, in one study of inner-city youths (Tiet, Huizinga & Byrnes, 2010), avoidance of delinquent peers longitudinally predicted resilience, which was conceptualised as, amongst other outcomes, avoiding gang involvement. A single measure of parentally-assessed psychosocial functioning was employed, whilst variables associated with peer relationships did not include support. The study design could not address either the generally supportive capacities of friendship or the potentially problematic (but experientially meaningful) value which young people may find in friendships involving transgressive activities.

This focus on the risk pathways of peer relationships is dissonant with the positive benefits to youth known to derive from social support. The absence of negative outcomes is not necessarily the presence of positive outcomes (Almedom & Glandon, 2007). Reducing risk on the individual, neutralizing negative outcomes or reducing negative chain reactions are just some of the ways in which resilience can be promoted. Increasing strengths and capacities through the development of new opportunities and fostering positive chain reactions are distinct processes (Rutter, 1999). Successful avoidance of delinquent peers therefore presents only a partial picture of how friendships might actually promote positive psychological adaptation through adversity.

Friendship may also intersect with other protective or vulnerability mechanisms by being situated within schools, communities, or a wider network of relationships including families. Positive school experiences may be a protective mechanism in young people (Rutter, 1990). Such experiences may be partially shaped by social relationships at school. Friendships may be conceptualised as sub-contexts nested within the larger neighbourhood context comprising young people, their families and their peers, and may mediate between
the distal neighbourhood risks and more proximal risks (Zimmerman & Brenner, 2010). For example, “peer assets” has been identified as a potential focus of resilience-promotion in schools, although the specific contribution of friendship to the ecology of resilience-promotion was not addressed (Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006).

Some models of resilience explicitly take into account supportive relationships, yet many curiously omit or underplay the potential protective role of supportive peer friendships. Vanderbilt-Adriance and Shaw (2008) identify three categories of protective factors: within the child, within the family, and within the community. Supportive peer relationships are not mentioned. Peer relationships are only cursorily mentioned in a Youth Resilience Framework of more resilient health outcomes (Rew & Horner, 2003). Peer friendships did not emerge as significant mechanisms of resilience in chronically ill young people (Haase, Heiney, Ruccione & Stutzer, 1999). However, peer relationships are noted as important assets for resilience promotion in schools, albeit mostly in terms of social competency (Morrison, Brown, D’Incau, O’Farrell & Furlong, 2006). Having healthy peer relationships is argued to be important for promoting resilience in fostering a sense of belonging and providing ways of coping (Hart, Blincow & Thomas, 2007). Positive peer relationships are a source of companionate, emotional and motivational support associated with resilience (Everall, Altrows & Paulson, 2006).

Qualitative approaches prioritizing the subjective meaning which people give to their experiences have suggested that friendship is important to nourishing individuals through challenging times, resonating more with intuitive beliefs about friendship as a source of life satisfaction, positivity and affirmation, including in the life experience of this researcher. Development of peer friendships was identified as a central part of the experience of resilient responses to suicide attempts, with friendship bringing a sense of belonging, camaraderie and acceptance that was lacking from other social relationships (Everall, Altrows & Paulson, 2006). Resilient young adults value their close friendships for satisfying deep needs for companionship and sustaining them through challenging circumstances, seeing many intersections between themselves, their life course and their relationships (Hauser, 1999). Resilient young adults often reflect deeply on others’ feelings and experiences (Hauser & Allen, 2007), connecting themselves to significant others. A friend’s support through a traumatic experience may offer solace during the isolation of challenge, and be experienced as bringing a friend’s underlying qualities to the fore (Wertz, 2011). Self-identified resilient young women valued their friends as confidantes and as partners in
creating a sense of normalisation amidst adversity (Shepherd, Reynolds & Moran, 2010). Friendships may therefore play a variety of roles in helping to carry vulnerable young people through adversity.

Little research directly investigates the impact of adults’ friendships upon resilience, and most of this focuses upon the impact of early friendship experiences in later life. Good quality peer relationships across childhood, adolescence and adulthood appear especially important for adult psychological well-being in the context of childhood abuse, predicting the absence of mental health problems in adult life (Collishaw et al., 2007). Friendships may have important, long-lasting effects across and through the lifespan, although the evidence is not definitive (Hegelson & Lopez, 2010). Self-disclosure to relational partners and received support may be particularly powerful promoters of growth following exposure to adversity or trauma (Hegelson & Lopez, 2010). Amongst resilient older women reflecting upon their lives, friendship was identified as an important source of strength-building social connectedness and belonging. It was suggested that relational resources may be the most prominent of external protective mechanisms (Kinsel, 2005). In adult life, good intimate relationships can boost positive self-concepts and perceptions about self-worth (Rutter, 1990). Understanding the impact upon resilience of supportive peer friendships amongst adults is important to developing a holistic lifespan perspective on this potentially important resource. Placing the protective qualities and associated processes of adults’ close friendships besides those observed amongst adolescents may give clues as to the most powerful, durable protective qualities of supportive close friendships, and provide indications of how the roles of friendship move between essence and evolution.

The ability to recruit and maintain supportive friendships is itself an important asset to resilience (Everall, Altrows & Paulson, 2006). Positive peer relationships are a source of companionate, emotional and motivational support (Everall, Altrows & Paulson, 2006). Luthar (1991) similarly found that social skills operated in protective processes amongst students from high-stress backgrounds. Social competency may therefore both support resilience processes and be an expression of resilience itself as the ability to engage more meaningfully with others grows as part of positive psychological adaptation (Hauser & Allen, 2007). Yet social support is distinct from effective social adjustment (Frydenberg, 1997). One way of disentangling social competency from the distinct construct of perceived close friendship quality is to focus upon a single close friendship – a relationship available to most people at a given point in time. Furthermore, a single close friendship may exert
distinct psychological effects than a supportive wider friendship network. In shifting
attention from general social competencies and wider friendship networks, the specifics of
support within that particular relationship may be subjected to analytical scrutiny and the
influence of factors such as social competence and extraversion may be less confounding.

The multiplicity of ways in which friendships may provide support through challenging
circumstances makes it clear that simply naming “social support”, “perceived social
support”, or even “supportive relationships” as a resource within resilience models does
not go sufficiently far to identifying ways in which such support is experienced and realised,
or to generate robust theories about how social relationships interconnect with other
protective mechanisms, including individual resources. While attention on social and
relational components to adolescent resilience has primarily emphasized family, the role of
peer friendships in promoting resilience may be greater than is currently appreciated.

**Protective Mechanisms: Promoting Resilience**

Identification of the predictive factors leading to risk and resilience is currently more
sophisticated than our understanding of why these relationships hold, and how they
operate. The presence or absence of a particular resource is not sufficient to predict
resilience: any given variable is grounded within a complex process, interacting with other
variables across time and domain (Rutter, 1990). Research has therefore increasingly
focused on the search for protective mechanisms which may directly or indirectly positively
modify a person’s response to a risk situation at turning points in life towards helpful or
beneficial outcomes. Rutter (1990) suggests that protective mechanisms may differentially
operate to reduce risk impact, reduce negative chain reactions, establish and maintain self-
efficacy, and open up new opportunities. Protective mechanisms are conceptually distinct
from vulnerability mechanisms (Luthar, Sawyer & Brown, 2006), just as the absence of
psychopathological symptomology in light of adversity does not necessarily signify the
presence of resilience (Almedon & Glandon, 2007).

This turn towards underlying processes – the how and why of resilience, not simply the
what – has been a defining characteristic of more recent research which reflects, in part,
the move away from seeing resilience as solely a personality trait (Luthar, Cicchetti &
Becker, 2000). Seeing factors as embedded within protective processes has been an
essential step in the evolution of resilience research (Richardson, 2002). Identifying
effective protective mechanisms is essential to developing effective resilience-promoting interventions (Rutter, 1990). Specific external protective mechanisms in interpersonal domains and socio-cultural realms include effective schools, family cohesion, good interpersonal relations, socioeconomic status, and positive school experiences (Carbonell, et al., 2002; Clauss-Ehlers, 2008; Gilligan, 2000; Rutter, 1990). Some personality factors which promote resilience include self-esteem, self-efficacy (Gilligan, 2000), and a sense of agency (Hauser, 1999). Researchers must, therefore, turn their focus towards how a constellation of protective factors may effectively promote resilience in interaction. Even if supportive peer friendships are empirically identified as promoting psychological resilience, there is still the distinct question of how this occurs.

Focus on proposed explanatory pathways

Peer relationships have been approached as predicting, mediating and moderating psychopathological outcomes (Bukowski & Adams, 2005), but have less frequently been examined as resilience-promoting mechanisms. Achieving clarity on the potential relationship between peer friendships and resilience is complicated by the use of various outcome measures of resilience and the task of drawing conclusions from different risk populations. The literature does, however, suggest a number of routes through which supportive friendships might promote psychological resilience. For example, social relationships are associated with increased perceived self-efficacy and self-esteem, and may promote effective coping (Greenglass, 1993). This section will briefly explore proposed explanatory pathways. More detailed discussions of these hypothesized mediating mechanisms are found in Chapter 3 (for the adolescent cohort) and Chapter 5 (for the adult cohort).

Self-efficacy, or an individuals’ own beliefs concerning their abilities to effectively cope and respond to challenging situations (Frydenberg, 1997), promotes resilience. Retrospective accounts of fostered youth point to perceived self-efficacy as a resilience-building process (Drapeau et al., 2007). Self-efficacy predicts students’ resilience in dealing with the typical challenges of academic life (e.g. poor grades, competing deadlines) both at a single time point and over time (Martin & Marsh, 2008). Self-efficacy has even been proposed as a potential integrative theory framing resilience as a confluence of personal, behavioural and environmental factors that develop resilient competencies through social cognitive processes (Harvey & Delfabbro, 2004). Friendships may be associated with self-efficacy. Self-efficacy may partially explain protective effects of peer relationships in light of risky
home environments: self-efficacy beliefs pertaining to peers moderate the relationship between home environment and social behaviour, academic achievement, and overall problems in American adolescents (Bradley & Corwyn, 2000). Self-efficacy is therefore a promising link between close friendships and psychological resilience.

Self-esteem, or an individual’s own evaluations of their self-worth and self-regard (Rosenberg, 1989), has been persistently linked to psychological resilience, although its role in resilience-promotion is clouded by its inconsistent status as either an indicator of resilience itself or a consequence (Harvey & Delfabbro, 2004). Self-esteem has been shown to mediate between ecological risk and depressive symptoms amongst urban African American youth (Prelow, Weaver & Swenson, 2006). Self-esteem has also been shown to mediate between social support and emotional and behavioural adjustment in adolescents, although greater support from peers, relative to family and educators, may promote a problematic emphasis on peers as a source of self-worth which may in turn be linked to behavioural problems (DuBois et al., 2002; Moran & DuBois, 2002). Peer-led health programmes have additionally been shown to have positively impact young people’s self-esteem (Turner, 1999). There is therefore tantalising, but not definitive, evidence suggesting promoting self-esteem may be a route for supportive close friendships to promote resilience.

Coping is an important component to resilience and may be linked to friendship. Emotion regulation and coping appraisal is associated with resilient outcomes, particularly in contexts of significant adversity (Vanderbilt-Adriance & Shaw, 2008). Task-oriented coping positively relates to resilience in university-aged young adults (Campbell-Sills, Cohan & Stein, 2006). Important for this research’s focus on socioeconomic vulnerability, coping efficacy mediated between ecological risk and depressive symptoms amongst urban African American youth (Prelow, Weaver & Swenson, 2006). Friendships have been credited with fostering young people’s emotional coping skills to withstand adversity (Stanton-Salazar, 2005). Taken together, these findings suggest potential for close supportive friendships to promote resilience through the facilitation of effective coping.

Perceived stress may also be modified by coping appraisals and behaviours (Pearlin & Schooler, 1978). Social support is generally an effective coping mechanism to dealing with stress (Frydenberg, 1997; Day & Livingstone, 2003). In younger adolescents the presence of a best friend buffers them from increased levels of cortisol, an objective measure of
stress (Adams, Santo & Bukowski, 2011). The importance of support and engagement in diverting activities within friendship suggests that reduction of perceived stress might be a way for close friendships to promote resilience.

Adolescence is a time of great change to the self, with the self-construct becoming increasingly multidimensional (Hay & Ashman, 2003). The salience of social relationships to the self is an important part of the self-construct which has yet to be considered systematically within either adult or youth resilience research. Individuals with high relational interdependent self-construal (RISC) value close relationships for well-being and construct their self-concept in terms of close relationships with significant others, valued roles, and social networks (Cross, Morris, & Gore, 2002). Same-sex peer friendships influence the formation of general self-concept amongst adolescent males (Hay & Ashman, 2003). Focusing upon feelings of relatedness with significant others buffers the negative effects upon well-being of a poor emotional self-regulation when under stress, although these findings emerged among an undergraduate student sample (Chatterjee, Baumann & Osborne, 2013). A supportive close friendship might promote resilience through the development of an interdependent self-construal incorporating supportive relationships.

A single supportive close friendship may promote the development of a wider friendship network which is supportive, rather than risk-promoting. A close friendship buffers against the negative impact of wider peer victimization on internalising and externalising behaviours (You & Bellmore, 2012) and is associated with a weaker relationship between internalising behaviours and peer victimisation (Hodges, Boivin, Vitaro & Bukowski, 1999). However, the potential for a single close friendship to promote resilience – rather than attenuate poor adjustment outcomes – has not yet been explored.

A supportive family environment is an important contextual factor to consider when evaluating whether and how close friendships might promote psychological resilience. Friendship may buffer between a problematic family environment and adjustment outcomes in youth. Friendship was more strongly linked to self-perceived well-being in children from less adaptive and less cohesive families than those in more adaptive and cohesive families, whilst stronger associations were observed between family and adjustment in children without a close friendship than in children with such a relationship (Gauze, Bukowski, AquanAssee & Sippola, 1996). Amongst very young children with high levels of positive peer relationships, family adversity was not longitudinally associated with
externalizing behaviour (Criss et al., 2002). Psychosocial risk and resilience may transfer across generations. For example, parents’ early experiences of childhood aggression, antisocial behaviour, risk-taking and educational outcomes have been shown to predict later parenting styles which present increased risk for offspring – although this risk can be moderated by these parents’ later adaptive experiences and should not imply a deterministic view of intergenerational resilience (Serbin & Karp, 2004). Although brevity does not allow a comprehensive review here, supportive family relationships have been shown to promote resilience, for example by impacting children’s self-esteem or perceived self-competence (Armstrong, Birnie-Lefcovitch & Ungar, 2005). Particularly for adolescents, who are likely to still reside with their parents, the perceived support of family may impact how, and how strongly, their peer friendships are able to provide support.

Although this list is not exhaustive, the literature points to a number of potential mechanisms through which a supportive close friendship might promote psychological resilience, but which have rarely been explicitly linked to resilience as a process or outcome. Additional pathways might also be suggested through interrogation of the subjective experience of friendship and resilience.

**Introduction to the Present Research**

Drawing upon a wide body of knowledge which maintains the importance of social support to resilience, and growing understanding of the significance of adolescents’ peer friendships to their psychological and behavioural functioning, there is a need to attempt to bridge these sometimes disparate conversations into a single programme of research which seeks to understand whether, and how, supportive peer friendships might positively promote resilience. Specifically addressing the capacity for a single close friendship to act as a protective mechanism promoting resilience, and exploring the explanatory pathways through which this effect may occur, will create voice where there is largely silence regarding the transformative qualities of these most meaningful relationships.

Importantly, assessing psychosocial functioning directly from adolescents, rather than using parental assessments or normative markers of success, may yield substantial theoretical insight in understanding resilience conceptualisation and development. There is a demand for resilience research to prioritize the reports and subjective experiences of people who have been through adversity, and to adopt a working definition of resilience which is focused more upon subjective psychosocial well-being in conjunction with sociocultural
context, especially within studies of young people (Harvey & Delfabbro, 2004). A focus on participant experience and participants’ own perceptions of support complements more objectivist approaches. A creative use of mixed methods may draw from the strengths of both subjective and objective perspectives. The programme of research presented in this thesis strives towards such methodological innovation within a coherent framework by exploring participants’ described experiences of close friendships as they are lived, as well as explanatory models of how friendships may promote psychological resilience that are derived from subjective self-report. Focus on a single close friendship enables detailed examination of specific support processes, and attends to a social resource which most people, even the most socially marginalised, will have available to them.

This thesis is primarily concerned with socioeconomic vulnerability as a risk factor because of personal interest in this type of adversity and the pervasive effects of low socioeconomic status across a variety of domains. In examining the potentially pivotal role of friendships during a stage of development in which such relationships take the spotlight, this thesis is primarily interested in adolescents as a target participant group. However, in adopting a dual-cohort, longitudinal approach, one aim of this research is to reveal some developmental insights on resilience by, for example, seeing whether resilience-promoting pathways observed in adolescents’ friendships are also characteristic of middle-aged adults’ friendships, and whether the composite dimensions of a supportive friendship are the same in adults and a younger cohort. The comparison of potentially resilience-promoting friendships across cohorts also engages with the evolving nature of relationships over the lifespan (Hartup & Stevens, 1999). In this, the research hopes to address calls for a more lifespan-driven perspective on resilience, viewing resilience as a continually unfinished process rather than a defined and crystallised product. A developmental perspective contextualises the social psychology of relationships and resilience, but the thesis is squarely situated within a social psychological framework, interested in understanding resilience from the perspective of individuals’ social behaviour, including environmental and personality influences on this sociality (Crisp & Turner, 2010).

The programme of research presented in this thesis looks at how supportive peer relationships may positively promote resilience, by posing three key research questions:

1. Does a supportive close friendship act as a protective mechanism promoting resilience in socioeconomically vulnerable adolescents, and through what
psychological processes might a supportive close friendship promote resilience over time?

(2) Does a supportive close friendship act as a protective mechanism promoting resilience in adults, as demonstrated amongst middle-aged adults drawn from the community? Through what psychological processes might a supportive close friendship promote resilience in this cohort?

(3) How are close friendships experienced by socioeconomically vulnerable adolescents as supporting them towards resilience?

Throughout this thesis, the predominant interest is on socioeconomically vulnerable adolescents, due to the significance of socioeconomic vulnerability to this age group, personal interest, the importance of friendships at this developmental stage, and the potential for resilience promotion to impact outcomes and experiences throughout later life. A conceptual comparison with a distinct developmental stage, using a cohort of middle-aged adults drawn from the community, sensitizes towards a lifespan approach regarding resilience and protective processes, and contextualises findings on adolescent friendship and resilience. The thesis approaches resilience as an observable on-going process of subjective psychological adaptation which incorporates social and relational mechanisms. It recognises that the subjectivity of adaptation demands attention to the experience of resilience and protective processes (including social support), such that theories incorporate a sense of what it feels like to a person encountering challenge to be resilient or, say, experience supportive relationships. This demand is informed by the extant literature and by experience of encountering adversity as a youth which has led to a belief that psychologies theories related to disadvantaged groups – including socioeconomically vulnerable adolescents – are incomplete without a systematic incorporation of their particular strengths, valued relationships and subjective experiences. It does not attempt to achieve strict agreement between these dual views of resilience-as-process and resilience-as-experience, but uses a mixed-methods approach to employ the strengths of each perspective. In so doing, the thesis aims to move towards an expanded, multi-faceted view of resilience which appreciates relational protective processes, and helps to contextualise and recognise subjective psychological resilience.

Chapter 2 explicates how a creative mixed methods approach draws upon complementary strengths of non-experimental statistical techniques to address the first two research questions, and a thematic, empirical phenomenological approach to the 3rd research
question. Chapter 3 presents a cross-sectional analysis including a structural model of how socioeconomically vulnerable adolescents’ close friendships may act as a protective mechanism promoting resilience. Chapter 4 examines whether and how any observed protective effects are maintained after a one-year interval. Chapter 5 looks at how a single close friendship may be a protective mechanism promoting resilience in adulthood by longitudinally exploring the current friendships of a community-drawn sample of adults aged 35-55 years. Chapter 6 presents qualitative analysis of an interview study focusing on socioeconomically vulnerable adolescents’ subjective experiences of close friendship and resilience. In Chapter 7, the threads of this multifaceted approach are woven together to form a coherent understanding of how close friendships might promote psychological resilience within a social and relational context. The chapter demonstrates how the research critically extends and problematizes existing theoretical understandings of resilience, its promotion and its subjective experience; whilst noting important limitations to the studies’ design, interpretation and implications and pointing towards future directions for resilience theory and application. In so doing, the research aims to widen the horizons of psychological resilience to sensitively include social and relational protective mechanisms, particularly the quietly powerful transformative capacities of a single close friendship to nourish strength, meaning and growth in the face of life’s adversity.
CHAPTER 2

A MIXED METHOD APPROACH TO THE STUDY OF RESILIENCE

Introduction

As described in Chapter 1, the study of resilience benefits from examination through non-experimental methods able to capture the effects of interpersonal relationships upon the individual. Furthermore, resilience research should increasingly seek to incorporate the subjective experiences of those subject to its study, particularly young people who cannot usually speak directly within scientific knowledge structures. The challenge of developing a holistic understanding of the interpersonal components of resilience, grounded within actual experiences, argues for a mixed-methods approach incorporating both quantitative and qualitative forms of data analysis.

This chapter describes the methodologies used within this thesis to address the broad question of “how do friendships promote psychological resilience?” First, an overview of ways of mixing methods demonstrates possibilities beyond the predominant format of using one type of analysis to corroborate or validate another. A summary is presented of how the different knowledge strands will complement each other in order to achieve a more holistic, grounded understanding of how close friendships may promote psychological resilience. Next, the non-experimental statistical methods used in the quantitative studies are described. Then, the novel integration of two types of qualitative methods is outlined: empirical phenomenological analysis and thematic analysis. The chapter concludes by with a discussion of the ethics of researching resilience with adolescents, evidence of ethical approval and a brief description of participating schools and colleges.

Creative Use of Mixed Methods

Mixing methods “actively invites us to participate in dialogue about multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished” (Greene, 2007, p.20). Although “mixed methods” most commonly refers to a combination of quantitative and qualitative methods, it is possible to combine a plurality of qualitative methods as well. This is less common (Frost et al., 2010), although a number of recent papers have shown the powerful
understandings gained from simultaneously examining a text using different qualitative methodological lenses (e.g. Frost et al., 2010; Wertz et al., 2011). Meaningful use of mixed methods requires consideration of the paradigmatic position taken by the research and, relatedly, specification of the particular types of knowledge each method aims to address.

There are numerous benefits to mixed methods within a single research programme. For example, participant accounts are often valuable in understanding complex systems and phenomena; furthermore, they are generally accessible, compelling and interesting to laypeople and researchers alike (Teddlie & Tashakkori, 2011; Todd et al., 2004). Mixed-methods research can be challenging, however, because of the perceived divide in the theoretical stances in different methodologies (Todd et al., 2004). In contrast to seeing qualitative and quantitative methods as ideologically incompatible, an alternative pragmatic overarching paradigm allows for multiple types of methods to be used (Cresswell, 2011; Teddlie & Tashakkori, 2011). A pragmatic paradigm prioritizes the research question, the knowledge and experience available, and the practical, real-life outcomes of the research endeavour (Greene & Caracelli, 1997). In this view, two or more separate (and generally sequential) streams of data analysis are mixed in order to address specific research tasks and questions (Tashakkori & Teddlie, 1998).

Some pragmatists would argue that findings within a mixed-methods study ought not to contradict, either by corroborating each other or by maintaining some sense of hierarchy in the research programme. A dialectical view extends pragmatism by maintaining that mixed-methods research will sometimes result in contradictory insights and findings. When these tensions occur, researchers ought to explore and exploit them for additional theoretical insight, or examine whether the paradoxes simply result from the different type of knowledge claims made possible by the different methods used. Multiple paradigms can exist within one programme of research, often using complex designs, but each should be respected, generating healthy tensions between and within findings, and consequently new insights (Greene & Caracelli, 1997). Irreconcilable differences, here, need not lead to a separation. A dialectical use of mixed methods seeks to conceptually and theoretically unite multiple streams of knowledge which themselves may operate in slight tension with each other. The strengths and shortcomings of each method may speak to each other, and the epistemological underpinnings of each of the methods employed are interrogated for whether they fundamentally contradict each other on an ontological level.
An ideologically coherent mixed-methods programme of research is driven by the epistemological framework and paradigm(s) adopted, as well as the research question, leading to a particular set of theories to be explored and methods through which this will occur (Todd et al., 2004). A mixed methods study which accepts contradictory or competing knowledge claims is unlikely to sit within a strictly positivist worldview supposing the existence of a single, uncontested truth. Nor is the adoption of statistical methods, with their assumptions of measurability and reliability, likely to be welcomed by a strictly constructionist viewpoint. Between these two poles, the epistemological approach employed by the present mixed-methods programme of research is one aligned with the subtle, analytic and critical realists. Together, these argue that whilst reality consists of objects and social structures independent of human subjectivity, and is therefore knowable, humans may only access and come to know the world through their subjective experiences, which are themselves shaped by sociocultural influences. Knowledge claims are based upon interpretation, and any account is only a partial account of a “truth” which is partially socially constructed and partially of the world, although there may be “better” accounts. Meaningfulness and attention to the human experience become central concerns within these positions. This way of thinking requires researchers to be explicit in their research context, transparent in their method, employ reflexivity throughout, and acknowledge multiple interpretations when applicable, in order to increase validity and plausibility of findings (Madill, 2008).

Moving beyond theory to practice, there are perhaps as many ways to combine methods as there are methods themselves. Ways of mixing methods may be distinguished in terms of, for example, the sequential or simultaneous order of different types of data collection; the stage(s) of the research at which more than one method is used; whether qualitative or quantitative data has priority within the research programme; and, arguably most importantly, the function of the integration (Bryman, 2006). In practice, the most common combination of data collection methods is pairing survey methods and qualitative interviewing, most commonly within a cross-sectional design (Bryman, 2006).

In general, mixed methods are used to triangulate findings, explain findings, develop further studies from previous findings, or explore different levels of a given phenomenon (Todd et al., 2004). Greene, Caracelli and Graham (1989) suggest five distinct justifications for mixing methods: (1) triangulation or corroboration of findings between data streams; (2) complementarity or elaboration of findings from one stream within another; (3)
development of materials or findings based upon the results from another method, such as using a focus group to generate questionnaire items; (4) initiation of new questions and results based upon findings from another method; and (5) expansion of enquiry by using different methods for different aspects of the enquiry. Although several other justifications may be distinguishable in practice, complementarity and expansion are the most common rationales for mixing methods offered by researchers (Bryman, 2006).

**Using mixed methods to explore the relationship between friendship and resilience**

The present thesis mixes methods in two key ways. The first is using a statistical study to develop selection guidelines for recruiting participants to a qualitative study. As detailed in Chapter 6, interview participants were selected using a combination of their responses to a set of 3 open-ended textual questions embedded within the longitudinal survey and their scores on measures of resilience and perceived close friendship quality at time 1.

The second mixing addresses an expansive enquiry by using the strengths of two primary methods to address distinct but integrated questions. These methods are (1) regression and structural equation modeling and (2) a thematic empirical phenomenological approach. Whether and how close friendships promote psychological resilience is addressed by a dual-cohort longitudinal statistical study, addressing a key empirical question concerning the potential influence of supportive peer relationships over resilience development. This method will also shed light on developmental aspects of resilience. The cross-sectional qualitative study, conducted between times 1 and 2 of the longitudinal statistical study, aims to (1) situate the statistical findings within the subjective experiences of the young people studied and aid in their interpretation and (2) explore young peoples’ subjective experiences of their close friendships and movements towards resilience, generating new theoretical insights which should drive future research and including young people’s experiences in current psychological theories of resilience. Conclusions from each study will be integrated into a more holistic understanding of how young people’s close supportive friendships may aid development of psychological resilience.

The next sections will provide detailed overviews of the two methodological strands used.
Quantitative Methods Overview

Regression analyses

Regression analyses are a set of non-experimental statistics used to describe the nature of the relationship between two variables. This is done by determining whether or not a relationship exists between these variables (p-values); describing the nature and strength of any existing relationship using a linear equation (β-values); and assessing the accuracy with which this equation predicts or describes the outcome variable, or the proportion of variance explained (R² values, Kash Kachigan, 1991). Regression analyses extend correlational analyses by enabling the prediction of an outcome variable from a predictor variable using a simple linear model incorporating a relationship established in the data plus error (Field, 2005). Multiple regression analyses may add further complexity by allowing the prediction of an outcome from several predictors (Field, 2005). In this case regression techniques allow assessment of the relative importance of a multitude of predictor variables in contributing to the outcome (Kash Kachigan, 1991).

Simple linear regression analyses are sufficient to analyse the predictive effect of one variable upon another, but additional analysis is required to explain how a third variable might causally explain this predictive relationship. A mediator is a mechanism through which a proposed causal process exerts its effect (Cole & Maxwell, 2003). Simple mediation analyses involve a predictor variable, a mediating variable and an outcome variable. A simple mediational model shows how the effect of a predictor variable on an outcome variable may be explained through unstandardized regression scores representing the combination of the direct effect of the predictor upon the outcome and the indirect effect of the predictor on the outcome through the mediating variable. Most methods of mediational analysis require that the mediator and criterion variable be continuous (Preacher & Hayes, 2008).

Preacher and Hayes (2008) devised a bootstrapping method of mediational analysis to overcome observed limitations with the popular Baron and Kenny (1986) and Sobel (1982) approaches. Its main advantage is that rather than assuming normality of the sampling distribution, which rarely holds except for in large samples, bootstrapping utilises a nonparametric resampling procedure to repeatedly sample from the data set and estimate the indirect effect in each resampled data set. An empirical approximation of the sampling
distribution of the indirect effect is therefore derived from the data itself. Percentile bootstrap confidence intervals for the indirect effect(s) are generated based on the refined sample distribution. Rather than interpreting significance via $p$-values (although these are provided), mediation is determined when the 95% confidence interval of a mediator does not contain zero (Preacher & Hayes, 2008). Simulation studies have generally recommended the bootstrapping method over Sobel’s product-of-coefficients approach and, except for in large samples, the causal steps approach. Bootstrapping methods have been observed to have higher power than the alternative approaches whilst maintaining a reasonable Type I error rate (MacKinnon, Lockwood & Williams, 2004).

However, researchers are often interested in the simultaneous effects of a number of hypothesized mediating variables, leaving simple mediation analyses a useful but penultimate step. By including simultaneous testing of multiple mediators, researchers may examine the mediational effect of a group of mediators, examine and compare a specific mediational pathway given the presence of other mediators, and reduce parameter bias because of the inclusion of variables which would otherwise be omitted in a simple mediation (Preacher & Hayes, 2008). There are currently two forms of analysis suitable for investigating addressing multiple mediation: bootstrapping multiple mediation, and its more sophisticated cousin, structural equation modeling (SEM).

Recent developments in bootstrapping allow for simultaneous testing of theoretically-selected multiple indirect effects. Whilst the total indirect effect of all mediators may be non-significant, it is still possible to find significant indirect effects for individual mediators. Bootstrapping allows for both total and specific levels of analysis. Because mediators are usually correlated, the magnitude of the effect of a given mediator will generally be smaller in a multiple-mediation model than when considered on its own. Multiple-mediator bootstrapping is generally superior in moderate samples to product-of-coefficient approaches in terms of power and Type I error rates. Macro additions to software including PASW Statistics 18 are available to conduct tests of total and specific indirect effects, conduct pairwise contrasts of unique indirect effects and statistically control for one of more covariates (Preacher & Hayes, 2008).

However, compared to multiple mediation, an SEM framework offers greater flexibility in model specification and estimation, including modeling of latent constructs. AMOS (Arbuckle, 2009) can furthermore compute percentile bootstraps for total indirect effects in
simple and multiple mediation models. For the present research, SEM was deemed most appropriate for a sophisticated and nuanced exploration of a complex dataset including modeling of latent constructs. SEM and further reasons for its use are explained in the following section.

**Structural equation modeling**

Although regression analyses provide meaningful insight into how a given set of variables linearly relate to each other, it may sometimes be desirable to consider variables in a pattern of interrelated linear pathways. A structural equation model graphically depicts a hypothesized pattern of linear relationships amongst a set of directly and indirectly observed variables, accounting for the variation and covariation amongst these variables. Structural equation modeling (SEM) is increasingly popular in social, developmental and personality psychology as a way of examining complex causal relationships between interrelated, multidimensional constructs when experimental studies would be problematic or inappropriate. It is a flexible, adaptable tool for examining complicated data cross-sectionally and longitudinally (Schnabel, Little & Baumert, 2000).

A structural equation model consists of two main components: a *measurement model* and a *structural model*. Each structural regression model is essentially underpinned by a measurement model, in which observed or manifest variables representing scale scores relate to each other through a series of regression equations. Overlying the measurement model (or, by another perspective, providing the foundation for a measurement model) is a structural model composed of latent variables. These are hypothetical constructs or factors which may be represented by one or more *indicators*, or observed variables used to indirectly measure the latent variable (Kline, 2011). The distinction between manifest and observed variables is analogous to that contained within the process of factor analysis, where it is understood that underlying observed variables (e.g. scores on verbal and mathematical tests) may be underlying constructs best measured indirectly using a combination of measures (e.g. intelligence). Indeed, confirmatory factor analysis (CFA) is a specific application of SEM (MacCallum & Austin, 2000).

Latent variable modeling particularly addresses the issues of creating a mediational (causal) model whilst minimising the error which naturally arises in the use of psychological measures, as estimates of paths between latent variables are not themselves biased by
measurement error (Cole & Maxwell, 2003). This is because in considering the measurement model together with the structural model, the error variance for a latent variable may be estimated, given the whole model and the data. This provides a more accurate representation of a construct than would be possible through other statistical techniques, such as multiple regression, which do not necessarily explicitly address the error corresponding to measures of latent constructs (Kline, 2011).

Importantly, SEM methods are “not mechanistic ends in themselves (i.e. fixed and rule-bound) but rather are flexible tools that should be adjusted and adapted into an appropriate means for testing a given substantive theory” (Schnabel, Little & Baumert, 2000, p. 10). Structural equation analyses aim to generate a model which makes theoretical sense, is sufficiently parsimonious, and adequately fits the data (Jöreskog, 1993). SEM adopts an empirical rationale which involves testing organised sequences of alternative models which differ according to theoretically-meaningful constraints, as opposed to a traditional investigative rationale of hypothesis testing (Schnabel, Little & Baumert, 2000; Widaman, 2000). The ability of SEM to adaptively incorporate ambiguity is appropriate for working with quasi-experimental data and can support theory-driven creativity (Schnabel, Little & Baumert, 2000).

Whilst determination of statistical significance is relatively straightforward in less complex analyses such as multiple regression analyses or analysis of variance (ANOVA) (in which a p value of less than .05 would support the existence of a significant relationship or difference between variables), assessing model acceptability in structural equation modeling requires a portfolio of absolute and relative fit indices. Absolute fit indices indicate the proportion of the covariances in the sample data matrix which is explained by the model. Comparative fit indices show the relative improvement of the hypothesized model compared to a statistical baseline model assuming zero population covariance amongst observed variables. As there is no definitive standard of acceptable model fit, it is advisable to use a number of indices and to make diagnostic assessments about fit over and above reliance on such indices. $R^2$ statistics and effect decompositions for outcome variables can give a sense of the predictive value and robustness of a model by showing the proportion of variance explained by the relationships represented therein (Kline, 2011).

Employing structural equation modeling therefore enables researchers to look with creativity, accuracy and sensitivity at latent, multidimensional variables interacting with
each other within a system of interpersonal relationships and psychological constructs. SEM is an endeavour which, whilst employing rigorous statistical methods and standards, is highly creative, flexible and adaptive, allowing exploration of complex questions with nuance and specificity. Importantly for its use within a mixed-methods programme of study, SEM allows researchers to respond to and creatively specify the emergence of underlying constructs and relationships. In exploring the effect of close friendships upon resilience, then, SEM enables thoughtful investigation of how a complex interpersonal relationship may promote a multidimensional aspect of well-being through the simultaneous development of a variety of interrelated psychological characteristics and coping behaviours.

**Regression analyses and structural equation modeling in longitudinal designs**

The present research includes both cross-sectional and longitudinal studies of how supportive close friendships may promote resilience. A *sequential longitudinal SEM design* applies SEM to the analysis of patterns of influence over time among the same or different variables. Such a model aims to illuminate the effects of variables at a given earlier time on other variables at a later time. In a *repeated measures* sequential design, we are interested in a relationship amongst repeated measures of the same variables as well as the overall pattern of change over time. A model therefore estimates the effects of directional influences over time (MacCallum & Austin, 2000).

Longitudinal models differ from cross-sectional models in their inclusion of *autoregressive pathways* in order to minimise bias of the estimated effect of the predictor variable at time 1 (T1) on the outcome (criterion) variable at time 2 (T2; MacCallum & Austin, 2000). *Autoregression* refers to the prediction of values of a criterion variable based on values of the same criterion variable obtained at an earlier time point (Kash Kachigan, 1991). A longitudinal SEM model should therefore include (i) the effect of the outcome variable at T1 on the outcome variable at T2 and (ii) the inter-correlation of the predictor variable at T1 and the outcome variable at T1 (MacCallum & Austin, 2000). In a longitudinal mediational model, autoregressive pathways denoting the values of hypothesized mediators at earlier time points would also be included.
Time is a crucial and sometimes problematic factor in any longitudinal study. It may be difficult to determine a priori the appropriate time interval to observe a causal effect whilst allowing time for constructs to interact in such a way as to produce this effect. This is further complicated by the examination of intermediary mediating variables which are hypothesized to direct the causal effect of a predictor upon an outcome: the time interval which maximises the magnitude of a simple (two-variable) causal relationship is not usually the same as the proper interval for estimating a mediational relationship, leading to biased estimation of a mediational effect (Cole & Maxwell, 2003). Indeed, there are few prospective longitudinal mediational studies of psychological resilience (Vanderbilt-Adriance & Shaw, 2008), leaving it unclear as to the most desirable time interval to employ. One benefit of the rising interest in this area may be a clearer indication of the optimal time interval to use when examining the roles of different types of protective mechanisms.

Although there is considerable value in presenting a longitudinal model, a robust cross-sectional model may still present valuable explanatory information, particularly when this model represents a novel exploration of a specific set of relationships, such as those linking supportive peer relationships to psychological resilience. Temporal sequence alone is not sufficient to prove causality (MacCallum & Austin, 2000). A researcher can arguably make causal or directional inferences in a cross-sectional study if she believes that the causal influence operates essentially instantaneously or within an extremely short period of time: “such situations may not be uncommon” (MacCallum & Austin, 2000, p.214). It will be important, then, that as well as seeking to build a longitudinally-significant model, any cross-sectional model is itself theoretically and empirically robust. Moreover, the strength of the model should be greater when friendship is set to predict resilience than when resilience is set to predict friendship. The development of a cross-sectional model and its longitudinal application may, then, be a valuable tool in understanding whether and how close friendships may promote psychological resilience in adolescents and adults.

**Qualitative Methods Overview**

**Empirical phenomenological psychology**

**Reorientation towards lived experience**

The aim of phenomenological psychology, and the range of methods associated with it, is simply to explore lived experience. In phenomenological research, the focus of any analysis
is the *lifeworld*: the world as experienced, the content of consciousness, the “flow of experiential happenings” (Todres, 2005, pp. 104). As foremost a philosophy of knowledge and theoretical position of enquiry, phenomenology is concerned with people’s *perceptions* of their worlds and what these perceptions mean to them (Langdridge, 2007). As a discovery-oriented method, phenomenology employs rich description within an attitude of phenomenological reduction to explore the essences of a phenomenon as it is lived (Giorgi, 1997). The research questions for a phenomenological project are simple, even as the answers are compelling, profound, and richly textural: “What is it like? How does it feel?”

**Relationship and Intersubjectivity**

In order to answer these questions, researchers attempt to empathically develop a theoretical understanding of participants’ subjective experiences. While most qualitative methods are somehow concerned with subjective experiences, phenomenological methods are distinctly focused upon the description of those experiences, as opposed to, say, formulating a grounded theory explaining those experiences or examining the discursive influences upon those experience (see Frost et al., 2010 and Wertz, 2011, for examples of different types of knowledge claims made using different methods upon the same text).

Phenomenological knowledge is generated in a relational context. Understanding evolves through empathetic dialogue between researcher and participant, often through a semi-structured interview format (Finlay, 2008). This focus on relationship reflects a deeper understanding of the world as itself fundamentally relational, as humans only access the world indirectly, through their experiences of a phenomenon (Langdridge, 2007). All of experience is about something, and external reality is accessible only by virtue of our experience of it. A cup of coffee may exist, but it is accessible to consciousness – and becomes meaningful - only by the experience of it: the weight of the mug in hand, the smell which calls to mind lazy Sunday mornings or the diligence of a late night, the bitter taste upon the tongue and senses slowly sharpening.

The phenomenological method’s concern with elucidating subjective experience is underpinned by a fundamental philosophical assertion that consciousness itself is “intentional”. That is, consciousness is neither a collection of ego components nor the internal perception of psychic acts, but rather a composite of psychic acts (intentionalities) themselves. In first developing the phenomenological method, Edmund Husserl adapted this principle of intentionality, posited by Brentano, to develop an empirical method based
upon the distinction between the apprehended object, and the object as it is apprehended: as object itself (the cup of coffee), and the subjective experience thereof. According to Brentano, all of consciousness is intentional and his empirical concern is with the “apprehension of psychic data in consciousness” (McCann, 1993, p.3). In accepting this distinction, description (as opposed to explanation) becomes a legitimate enterprise (Hammersley, 2008).

**Describing and understanding lived experience**

Empirical phenomenology is fundamentally concerned with understanding and description (Todres, 2005). In the sense that phenomenological inquiries aim to construct a thick, rich description, they are intrinsically related to a number of thematic qualitative methods. Phenomenology diverges from other qualitative methods, such as discourse analysis, in specifying the lifeworld – subjective human experience – as the target of its descriptive lens and integrating intersubjectivity into its epistemology. It is important to explore what is meant by the term “description” and the implications of adopting description as a psychological project.

Ryle (1971) termed thick description as explicating not just the *what* of doing, but also the *how*. The object of description is explored in the varieties in which it occurs and the meaning in which it is grounded. Geertz (1973) elaborated this idea within anthropological research. He argued that the discipline’s overarching aim was achieving a rich description of sociality: unpacking expressions of social life in an interpretative way. In a thick description, any action is intrinsically linked with its meaning through its social performance. In contrast to the psychological behaviourism dominant amongst Geertz’s contemporaries, this view (re) introduced non-physical and non-material entities into the realm of possible subjects for enquiry (Hammersley, 2008). A rich description is complex, multi-faceted, and conveys the context, intentions, meanings and processes of experience (Holliday, 2005). Rich description goes beyond simply detailing or reproducing a phenomenon to include a complex narrative structure, multiple layering of accounts, multiple frames of interpretation and relevant background information (Hammersley, 2008). A rich description will, moreover, have a sense of feeling true to others (Holliday, 2005).

As a product of analysis, theorizing which arises from rich description consequently remains close to the phenomenon expressed within its context, although Hammersley (2008) identifies a tension between the dual analytical projects of theorising-explaining and
describing-understanding. Interpretation will always feature to an extent in any description, partly because of meaning-making as a fundamental human activity (Richardson, 2002) and partly due to the active nature of analysis in constructing research findings. This view contrasts with a more positivist view of knowledge as emergent in which a researcher discovers a phenomenon (Madill, 2008). A discovery model points towards categorisation and classification as an analytical outcome, with thickness required only to the degree that this is possible. Although thick data is necessary for a thick description, thick analysis is also required: analysis should consider and incorporate different angles and details whilst considering wider contexts (Holliday, 2005). A thick description may be used to theorise, but it need not. Similarly, although a rich description may serve as a preliminary basis for explanation, description has legitimate theoretical import in its own right. A thick description, then, involves not only the network of interconnected data (in the phenomenological case, experience), but also includes an argument and discussion demonstrating this interconnection.

The boundary between description and interpretation is a defining (but not well-defined) feature of the difference between empirical phenomenological psychology and its methodological cousin, interpretative phenomenological analysis (IPA) (see Smith, 2008, for a comprehensive introduction to IPA). Ricoeur (1970) drew an effective distinction between description and interpretation. In accepting that there is a distinction between a hermeneutics of meaning-recollection and a hermeneutics of suspicion, describing phenomena in their appearing becomes a valid exercise in its own right. That is, a thick description becomes not only an attribute of an explanation or a form of criteria for judging the validity of a qualitative finding, but becomes a project in itself. An emphasis on interpretation, as in IPA, privileges interpretation-explanation over description-understanding. Psychologists using empirical phenomenological methods ought to prioritise understanding over explanation in this argument, even if the distinction between the two is sometimes quite fine and, arguably, primarily historical (Wertz, personal communication, September 22, 2012). This means empathically prioritising participants’ experiences, both in terms of the content of their interpretations and the analytical attention given to the researcher’s influence in the interpretation. An empirical phenomenological approach primarily looks to describe phenomena as they are experienced: it is interested in the textural qualities of a phenomenon, of what makes that that which it is.
In the present research, a phenomenological approach is useful in addressing the often-overlooked questions about what it is like for a vulnerable young person in contemporary Britain. A statistical exploration of peer-sourced social support, while highly valuable, can say little about how such support is subjectively experienced by the young people studied. A phenomenological approach restores young people’s subjectivities to the existing body of literature by orientating researchers towards what is important for young people and how they experience their worlds. The method offers tools towards new insights into what young people feel to be supportive about their friendships – which may be very different to how adults view their own friendships or those of adolescents. It may also enrich understanding of what resilience is, by providing a framework for understanding how young people themselves experience having survived through a difficult time. If meaningful understanding about young people’s intra- and inter-personal worlds is to be achieved, much less employed in social or educational policy, such a reorientation towards the lived experience of young people themselves is surely valuable.

**General features of an empirical phenomenological analysis**

Although practitioners vary in the steps they employ to conduct a phenomenological psychological analysis, the following procedures tend to be followed: collection of verbal data, holistic reading of the data, breaking the data into meaning-based parts, organising and expressing the developed meanings from a psychological perspective, and communicating the structure of the phenomenon as lived (Giorgi, 1997).

Any experienced phenomena may be a target for analysis. In a radical departure from a positivist position, a phenomenon is realised by virtue of it having been experienced, not any externalised rubric such as observability or measurability (Wertz, 2011). Given that the entirety of subjective experience may be an overwhelming subject for an analysis, it may be more manageable to consider particular aspects of experience. Ashworth’s (2003) phenomenological approach employs seven aspects of the lifeworld as heuristics through which a researcher can attend to its various aspects. These heuristics, derived from the work of Merleau-Ponty (1962; 2012) are: self-hood, sociality, embodiment, temporality, spatiality, project and discourse. For example, the self-hood heuristic attends to what a situation may mean for a person’s sense of social identity or agency; the sociality heuristic helps frame how a situation may affect a person’s relationships with others; and the spatiality heuristic touches upon how a person’s experience of their geography relates to their experience of a situation (Ashworth, 2003).
An empirical phenomenological analysis aims to describe the essences, or invariant constituent elements, of a phenomenon. These essences will be expressed variably and idiosyncratically in different individuals’ experiences, but they are common structures or dimensions essential to making the phenomenon distinctly that (Todres, 2005). For example, in Robbins’ (2006) exploration of joy, “fulfilment” was an essential aspect of being joyful. This fulfilment was a focus for movement, partially realised through a feeling of connectedness which varied between participants and was sometimes associated with a feeling of awe. Fulfilment is not all that joy is, but it is a key descriptive component to the experience even as it is experienced differently amongst different people.

A phenomenological attitude

Using a phenomenological approach means inter-relating with participants and their lifeworlds in order to access their experience in an open, flexible, reflective stance (Berndtsson, Claesson, Friberg, & Öhlén 2007). A researcher must be open to understanding an experience as it is lived by the participant, allowing herself to meaningfully engage with and accept that participant’s understandings and subjectivities, even when these are very different from her own or challenge existing psychological knowledge. Importantly, a phenomenological attitude involves a researcher engaging a sense of wonder and openness to the world as lived, whilst reflexively acknowledging and setting aside her pre-existing understandings through a process of bracketing (Finlay, 2008).

Researchers differ in their approach to bracketing. Paradoxical to earlier phenomenological thinking, the reflexive position of the researcher argues against the possibility of strict bracketing. Qualitative methods allow that the researcher is also an experiencing participant in any given phenomenon, and will therefore have a position related to any construct within the lifeworld (Shaw, 2010). This need not be a limitation, however. By being situated within the (inter-) subjective experience of any phenomenon, researchers are also present to empathise with participants and explore the essences of phenomena. Bracketing is not just about recognising and setting aside preconceptions, but may involve exploiting those preconceptions to recognise when core assumptions are being challenged, where essences and idiosyncrasies in phenomena are expressed, and engage with the intersubjectivity inherent to the phenomenological method (Finlay, 2008). Researchers can meaningfully balance processes of “setting-aside” and “engaging-with” by reflecting on their own experiences, acknowledging the limits of their empathic subjectivity, and being
mindful of how these considerations have influenced various stages of the research process (Shaw, 2010). Phenomenological analysis can meaningfully move beyond researchers’ pre-conceptions if there is a process of continual reflection on researchers’ interpretations of both the phenomena being studied and researchers’ own experiences (Finlay, 2003). This should be integrated within the method of conducting analysis, however, and ought not obscure the phenomenon itself in an exercise of methodological self-obsession (Gough, 2003). Rather, reflexivity may act as a kind of check that the wonder and openness integral to the phenomenological method is a genuine openness to ways of experiencing challenging to personal experience, prior knowledge, or professional investments.

In the present research, for example, it would be importantly to reflexively consider the researchers’ own changing views on friendships, vulnerability and resilience, including the aspects of these views which are derived from pre-extant psychological knowledge, wider social influences and personal experiences; and to consider the emergent relationship between the researcher and her research participants, particularly within the context of the social and educational institutions through which recruitment took place.

Limitations of a phenomenological approach

There are some limitations to a phenomenological approach as applied to the present research. Primarily, the logistics of conducting a phenomenological study make this relatively difficult to carry out in certain school contexts. Many phenomenological studies involve extensive and/or repeated interviewing of a participant. The interviews conducted for this research were anticipated to take place at a school or college, usually within a specified time frame such as over lunch or with the participant having been withdrawn from class. One school (School A) furthermore requested that interviews be limited to 35 minutes because of their sensitive nature. Additionally, very few phenomenological studies have been conducted with young people. Although the researcher had previous experience conducting research interviews and focus groups with this age cohort and working with this age group more generally (i.e. in residential camps and through a crime victim support organisation), it was initially unclear whether the younger adolescents, particularly, would routinely be able to describe their experiences with sufficient detail for a deep phenomenological analysis. Finally, although the interviews and analyses were open-ended with respect to exploration of the participants’ experiences of friendship and resilience, the desire to integrate findings with those from the statistical study suggested that a more
thematic approach might be desirable. The epistemology of empirical phenomenology does not strictly agree with the more positivist epistemology of the non-experimental statistical studies conducted as part of this research programme. Rather, as explained earlier in this section, a subtle, analytic or critical realist approach may be required to integrate these methods. These considerations encouraged exploration of how to combine an empirical phenomenological approach with a type of thematic analysis able to cope with datasets which might be constrained because of external considerations, might lack verbal richness and which need to be related to the statistical findings. A modified thematic analytic approach, as described below, therefore seemed appropriate.

**Thematic analysis**

**Thematic analysis as a distinctive qualitative method**

Thematic analysis may be considered both a family of qualitative methodologies and a specific method of performing qualitative analysis (Braun & Clarke, 2006). Most, if not all, qualitative methodologies engage in some sort of analytical thematising (Holloway & Todres, 2003), even if they have slightly different coding techniques and/or theoretical orientations (Madill & Gough, 2008).

Thematic analysis is referred to here as a distinctive qualitative analytic method in which meaningful patterns are identified within empirical data, and are analysed and presented, often with additional theoretical interpretation. Importantly, thematic analysis as a specific qualitative methodology is independent of a given epistemology and theory. This flexibility is beneficial as the method may be applied throughout different qualitative paradigms as either an essentialist/realist method of analysis or a constructionist method – or somewhere in between (Braun & Clarke, 2006). This is particularly useful for integrating qualitative findings with those obtained using non-experimental statistical methods. The method may also be applied to a number of different research areas as it is not contained within a philosophical framework directing which type of legitimate questions may be asked or analytical concerns attended to (in contrast to, say, feminist psychology).

Thematic analysis as a distinct qualitative method therefore possesses two advantages relevant to the present project. Firstly, its lack of an epistemological framework (beyond that common to all qualitative methods) lends it a flexibility which in turn encourages a creative mix with other methods. Secondly, the clear structure of decision points guiding
analysis explicated by Braun and Clarke (2006) provides a framework aiding adaptation of the analytical method, depicted in Figure 2.1.

These various points for making decisions lend thematic analysis a great deal of flexibility and utility, providing a useful framework for integrating an empirical phenomenological viewpoint within a thematic analytic approach. The main drivers guiding analytical choices should be, in equal measure, the research question and the epistemology behind the research. The qualitative research presented here is concerned with how young people experience their supportive close friendships, and how they perceive these friendships as moving them towards resilience. The decision points and how they have been applied to the present research will now be explored in turn. Specific analytical procedures are described in Chapter 6.

Decision point 1 asks what counts as a theme. Although the processes of discerning themes share some qualities across thematic analytical and empirical phenomenological methods, there is generally greater flexibility in the former and more theoretical robustness in the latter. Thematic analytic themes may be driven by prevalence in the data, or by pre-ordained theoretical interests. On the other hand, themes may also be identified based upon meaning to them ascribed by participants (Braun & Clarke, 2006). Empirical phenomenological themes are more broadly driven by their relevance and meaning to participants’ experiences. Empirical phenomenological psychologists employ a variety of steps through which these themes might be elucidated, and creativity is encouraged in the field. What these methods share in common is an initial immersive reading of the text, followed by the discrimination of meaning units, and a subsequent transformation into themes (Langdridge, 2007). In the present research, experiential themes were identified, with little regard to prevalence. Potentially non-experiential themes were interrogated for an experiential component.

Decision point 2 addresses whether findings should be presented as a rich, wide description or a detailed narrowed account. Many empirical phenomenologists argue for a generalised structural description as the key output of an empirical phenomenological analysis (e.g. Giorgi, 1970). This description should capture the invariant structures or essences of an experience. Alternatively, researchers may choose to present an account of specific aspects of the lifeworld, delineating essential aspects of an experience whilst maintaining a sense of
Figure 2.1. Interconnected thematic analysis decision point structure (adapted from Braun and Clarke, 2006)
the unique and varied ways through which this experience is embodied by different participants (Ashworth, 2003).

In keeping with a thematic analytic framework, the method employed here presents a detailed narrower account of specific aspects of experience. Specifically, decisions on what parts of the lifeworld to emphasize were driven by desire to illuminate the experience of supportive friendships and resilience amongst the participants. Considerations included how the particular strengths of qualitative analysis related to the particular strengths of the statistical analysis, with the ultimate aim of moving towards a holistic view on how friendships promote resilience as this is experienced by participants themselves.

As noted in decision point 3, thematic analysis allows for either inductive themes, generated exclusively by the data, or theoretically-derived themes, in which researchers draw out patterns within an *a priori* theoretical framework. The present analysis employed a more inductive approach to theme generation in the initial stages of analysis and then moved towards more theoretically selective themes at latter stages. It would be inappropriate in an empirical phenomenological psychological analysis to shut down emerging avenues of analytical insight or overly restrict the purview of the analysis, given that one maintains an emphasis on experience-as-lived. This initial analysis is followed by more theory-driven decisions to extend specific analytical considerations and discussions to particular themes, in line with the decision to present a detailed, narrower account of an experience as opposed to a generalised structural description of all essentials of an experience. Use of theoretical themes may sensitise analysis towards certain aspects of experience. Themes may also be later conceptualised in a way which resonates with findings from a related, statistical arm of the study.

Decision point 4 in Braun & Clarke’s (2006) framework entails selecting between semantic (explicit) or latent (implicit) themes. It would be quite difficult to reconcile the use of latent themes with an empirical phenomenological framework. The emphasis is on generating a rich description of the participants’ world as they experience it, and consequently as they relay it to the researcher within the negotiated research encounter. In terms of taking analysis beyond mere reporting, the researcher is concerned with broader meanings and implications of observed patterns. The present research is concerned with exploring the essences of friendship experiences as lived by our adolescent participants and their uniquely expressed, variant meanings and implications.
The decision to use semantic themes means accepting potentially “problematic” behaviour as genuine and meaningful, and not attempting to case a clinical or otherwise suspicious interpretation on participants’ experiences. For example, some of the participant accounts detail potential problematic behaviour such as reversal of roles between parent and child. From some perspectives this distortion may have quite negative implications, but if it is positively experienced by the adolescent, then this is accepted within the current methodological framework.

The decision to pursue semantic themes in a study with adolescents is particularly important given concerns about adolescents’ reflections in research encounters, such as their abilities to be reflective, self-aware and verbally fluent enough to relay their experiences (Koro-Ljungberg, Bussing & Cornwell, 2010). Researchers may value the expressions within the research encounter as the best participants are able to do at communicating some very hard to articulate experiences. Constraints will always exist due to context, such as a school/pedagogical setting and power differentials, but researchers may aim to effectively create a sense of rapport and empathy within research participants; accept their thoughts, feelings and behaviours as worthwhile and valid; and in doing so accept that simply exploring their experiences as lived is a worthy analytical endeavour. Attending to adolescents’ needs during the research encounter and critically examining the accounts produced may increase confidence in the ability of the research to provide a meaningful sense of participants’ experiences (Koro-Ljungberg, Bussing & Cornwell, 2010).

Finally, it is within decision point 5 that the necessity of modifying a purely empirical phenomenological approach is most evident. As discussed earlier in this chapter, the adoption of an empirical phenomenological psychological approach to thematic analysis means that a strictly essentialist/realist or strictly constructionist epistemology would be difficult to apply. Phenomenology is concerned with the experienced “reality” of the participant, without positing either a defined external reality to which the participant’s account does or does not adhere, or a strictly constructionist view of the world. Application of a phenomenological approach privileges the intersubjectivity of both the research encounter and of the participants’ life as embedded within a network of social relationships – that is, the relational component of experience. It prioritises empathy with the participant as a necessary component of the analytical process, unlike some other qualitative approaches, allowing difficult questions about the transformative power of human relationships. In acknowledging that truth is partial and experiential, whilst maintaining that
there is a world-to-be-known, a thematic analytic approach informed by phenomenology is situated within a subtle, analytic or critical realist epistemology.

Combining thematic analysis and empirical phenomenological psychology

The qualitative approach used in the present research combines the methodological framework of thematic analysis (TA) with the epistemology and selected methodological tools of empirical phenomenological psychology (EPP). The elegant decision point framework used by Braun and Clarke (2006) is used to unpack thematic elements of EPP, increasing transparency and adapting it for the demands of the research questions and contexts of this programme of study. EPP adds to thematic analysis an epistemological and theoretically rich layer of method. There are distinct advantages offered separately by empirical phenomenological and psychology and thematic analysis, but combining the two methods may achieve three key aims.

Firstly, adopting EPP as a philosophy and theory directs the formulation of manageable and psychologically potent research questions concerned with subjective experience and the selection of a coherent, relevant set of themes in a thematic analysis. The epistemological framework of EPP may deepen and enrich a thematic analysis which does not have an a priori epistemology and so drive the thematic analyst’s construction of the purview of the research. In the current qualitative study, for example, an empirical phenomenological approach to friendships encourages questions about how participants themselves see those friendships as positive forces in their lives, rather than questions about how specific friendship behaviours may promote normatively-desirable coping behaviours.

EPP provides a conceptual paradigm or roadmap for conducting the thematic analysis, with the actual method employed in the analysis being a mixture of empirical phenomenological and thematic analytic practices. Although most EPP analytical practices and techniques are maintained (i.e. meaning-based coding), others are adapted to the research question and design. It is not necessarily desirable in every research project to use the full toolbox of EPP techniques in order to investigate questions of human experience. It may be desirable – or even, in cases such as limited access to participants, necessary – to utilise a selection of EPP methods in the service of a phenomenologically-oriented project. For example, the time limits set on a schools-based study and duty of care towards younger adolescents did not
permit the type of extended interview and follow-up contact which a purely empirical phenomenological study would likely call for. Integration of empirical phenomenological psychology into a thematic analysis should attune the researcher’s analytical sensitivities towards questions of human experience. More than simply directing this sensitivity, the adoption of an empirical phenomenological viewpoint should saturate the thematic analysis to create a sense of how participants experience the world within the area specified by the research question.

Secondly, in elucidating points in the decision-making process of a thematic analysis, the integration of a thematic analytic structure with an empirical phenomenological psychology approach facilitates accessibility and creativity of phenomenological methods for researchers. In exploiting EPP’s status as a type of thematic analytic method and adopting the decision-point structure of TA, it may be easier to identify points at which creative choices may be made to adapt the EPP approach to specific research questions and contexts. This creativity is consistent with a tradition of phenomenological thought which has been characterised by a sense of openness, adaptability and even playfulness at times. Thematic analysis as a specific qualitative method has a degree of flexibility and adaptability which is arguably unmatched by other types of qualitative method, and consequently lends it to application in a wide variety of research questions and contexts. The decision point structure provides entry points to combine this qualitative methodology with a statistical analysis in an epistemologically-coherent way.

Finally, in combining the step-by-step nature of thematic analysis with the strong epistemological grounding of empirical phenomenology, quality of analysis may be more easily practised and evidenced. The decision point structure enables demonstration of a high level of methodological transparency. The grounding of analytical steps within an epistemological lens cautions against researchers adopting analytical approach or developing research findings which are methodologically or theoretically inconsistent with each other.

The combination of phenomenology with thematic analysis aids reflexivity into how aspects of my own experience, such as the value I place on my friendships for helping me through difficult times, might colour interpersonal connections with participants, engagement with their accounts, and my analysis of their experiences. Interpretive processes that incorporate reflection on the self (including pre-existing knowledge and beliefs), the
participants, and the world can facilitate fresh understanding of a given phenomenon. In this case, my background of growing up with socioeconomic disadvantage may be useful in sensitizing to the complexities of such environments and facilitating openness to empathic connection into the lived experience of the “other” – albeit a connection which is brief, incomplete, mediated by the research encounter and disrupted by differences in power, role, gender, cultural background and myriad other dimensions”, which is crucial to effectively engaging with experiential data (Finlay, 2003; Shaw, 2010; Wertz, 2011).

Ethics of Conducting Resilience Research with Adolescents

Conducting research on sensitive topics with adolescents, considered here as youth aged 11 to 19, requires some particular consideration. Although the research spoke to topics which are engaging to adolescents, and informal feedback was overwhelmingly positive, there were two main ethical concerns: provision of informed consent, and child protection. The strategies used to address informed consent and child protection were guided by current practice conducting research with young people, the logistics of schools-based research, and by my years of trained experience conducting schools-based research, interviewing young people about sensitive topics, and providing emotional support to young people and vulnerable adults. The ethical procedures employed within this thesis were driven by desire to treat participants with fairness and respect whilst maintaining legal, ethical and moral duty of care. Young people have been generally positioned as relatively powerless within social science research. Whilst adolescents are in a vulnerable position within research encounters, ethical practice goes beyond avoiding physical harm, obtaining parental consent and following legal reporting procedures to more inclusive practices. These include seeking young people’s own consent and assent to participation alongside the consent of key gatekeepers such as parents or educators, considering young people’s vulnerability within structures that may also protect them, expanding harm to include the psychological impact of distressing or thoughtless questions, and questioning whether the exclusion from social research of young people’s expertise on their own experiences is itself a form of disempowerment (Balen et al., 2006; Morrow & Richards, 1996).

Particularly within interviews but also within questionnaire research, consent includes acknowledging participants’ dual rights not to disclose their experiences but also to share as much as they wish insofar as doing so is not exploitative or harmful (Koro-Ljungberg, Bussing & Cornwell, 2010). Protective ethical procedures ought not to interfere with young
people’s abilities to participate in research on their lives (Balen et al., 2006). Two complementary strategies were employed for obtaining consent to participate in the research. Consent was always obtained from both the participants themselves and, when necessary, adults acting as guardians (Balen et al., 2006). An opt-out policy was employed for the Friendship and Resilience Survey. Educational institutions provided blanket consent to participate, without additional parental consent required. Participants’ consent was denoted by survey participation following presentation of detailed information about factors such as anonymisation, confidentiality of data (including confidentiality from parents and teachers), and ability to withdraw or skip a question without providing a reason. An opt-in strategy was employed for the Friendship and Resilience Interview Study by obtaining prior consent from participants. The age criteria for the study span an important legal and ethical distinction between young people over and above 16 years old. Accordingly, consent was also obtained from a parent or guardian when interview participants were less than 16 years of age. Parental consent was not required for participants over 16 years old, although all participants were encouraged to discuss the interview with a trusted adult. Information sheets, presentations and researcher presence during school-based administrations supported these consent procedures.

Legal advice and research practice formed a baseline standard embedded within wider consideration of duty of care. Child protection issues were foremost in mind. A number of possible scenarios were speculated: a participant might find the survey or interview upsetting, feel pressured into participating in the survey in a group setting, disclose a child protection issue such as abuse, or confess to illegal behaviour such as underage procurement of alcohol. These were each carefully addressed in the following ways.

At all times, the research aimed to maintain a meaningful duty of care incorporating legal standards, schools’ protection policies, and consideration of adolescents’ vulnerability within the research dynamic by virtue of their social roles, power differentials with the researcher, inexperience with research encounters and the potential of the research to touch upon emotionally powerful experiences that participants may still be living through (Morrow & Richards, 1996). It included reflecting on the multiple identities brought by me to research encounters, tensions therein and how they might impact participants’ experiences, reporting and accounts (Lavis, 2010). Identities included: interviewer, young woman, foreign-born, not a teacher but working alongside teachers. Interviewees will relate to interviewers along numerous presented and presumed cultural dimensions,
experiencing both difference and commonality, affecting their accounts (Song & Parker, 1995). Identities may create tensions for participants and the researcher (Lavis, 2010; Song & Parker, 1995). For example, effective phenomenological interviewing necessitates establishing good rapport with participants (Finlay, 2008), suggesting an open and genuine demeanour to set a young person at ease and implicitly challenge the typically more hierarchical or pedagogical interactions with adults at school. At the same time, creating a safe space for adolescents to present accounts of challenging experiences may also require beliefs that the interviewer is professional, competent, trustworthy and boundaried. In conducting research while maintaining a duty of care, researchers must balance a number of considerations, e.g., motivations in generating rich accounts or statistical datasets, respect for adolescent participants’ agency to disclose as much as comfortable whilst attending to legal or perceived constraints on that agency (Koro-Ljungberg, Bussing & Cornwell, 2010), and a mindfulness of how research encounters are distinct from others such as academic assessments, clinical assessments and counselling sessions are relatively more compulsory, interrogative or therapeutic (Morrow & Richards, 1996).

In the absence of guidance from the British Psychological Society about conducting interviews on sensitive topics with young people, legal advice was obtained from the University Legal Advisor with regards to concerns of emergent child protection issues and disclosure of illegal activities. In the event that the researcher believed there to be a possibility of serious harm to the participant or others, confidentiality did not apply and the appropriate authorities (i.e. child protection leads at participating schools) would be contacted. Participants were informed prior to interview that confidentiality did not apply if this was the case. Child protection policies of participating secondary schools were also considered. Only one such instance arose in the course of the research; in one free-text survey answer, a participant wrote of hurting himself. The school child protection lead was consequently informed of the incident using the participant’s project password to aid identification by the school. This password consisted of the first 3 letters of the participant’s surname and the date and month of birth. The school child protection lead was able to identify the child and followed up according to school procedures.

Participants’ ability to withdraw or skip a question was emphasised prior to both the survey and the interview. Additionally, comprehensive debriefing sheets were distributed which contained information on support organisations such as Childline. Participants were encouraged to speak about their research experiences with teachers and parents.
Researchers accommodated the request of one school coordinator to limit the length of the interview to 35 minutes out of concerns for the sensitive nature of the topic. In group administration of the survey, there was one instance of a teacher exerting pressure on a student to complete it. In this case, the researcher advocated that the student not be required to continue. In interviews, signs of distress were attended to and the researcher was prepared to terminate the interview if necessary, although no such occasion arose.

**Ethical approval**

Prior to beginning data collection, ethical approval was obtained from the Institute of Psychological Sciences, University of Leeds (see Appendix 1) for the longitudinal statistical study and the cross-sectional qualitative study. Further details of the ethical considerations for each project are provided in their respective chapters.

**School Recruitment**

Thirty-four secondary schools and colleges within the West and South Yorkshire areas were initially contacted for recruitment. A combination of purposive and convenience methods were used to select the educational institutions approached. Contact details for twenty-two of the approached schools were initially provided by a regional organisation which promotes aspiration and achievement in students in underperforming secondary schools, which also promoted the study through an email list contacting adolescent peer supporters. All institutions received at least one follow-up via email or telephone. Reasons given for declining involvement included concurrent participation in a similar study and, more commonly, coordinator workload.

Three comprehensive secondary schools and two colleges in West and South Yorkshire participated in the research. School A was located on a socioeconomically deprived council estate where the surrounding area reported 36.8% child poverty. School B had a lower rate of socioeconomic deprivation in its ward (6.8%) but bussed in a high proportion of children from other areas of a city where child poverty ranged as high as 29.8% (Pike, personal communication, April 19 2010). The intake of School C covered areas with child poverty ranging from 11.9% to 40.6%. The two colleges were located in central areas reporting a level of child poverty of 39.6%. All child poverty figures are taken from HM Revenue & Custom’s report by ward for the year 2010, when data collection commenced and 20.6% of children in England lived in poverty (HM Revenue & Customs, 2011).
CHAPTER 3

A STRUCTURAL MODEL OF ADOLESCENT FRIENDSHIP AND RESILIENCE

Introduction

Supportive adolescent friendships: A protective mechanism?

A thorough investigation of the possible protective functions of supportive peer friendships would expand existing theoretical understandings of resilience by incorporating appreciation of these developmentally-significant relational resources. Although research has identified peer relationships as a risk factor lessening the likelihood of resilient outcomes (e.g., Tiet, Huizinga & Byrnes, 2010), there is still a need to firstly, explore peer friendships as a protective mechanism supporting resilience in vulnerable young people and secondly, identify potential routes through which any such protective effect may operate.

Whilst most research into the role of peer relationships has focused upon wider peer networks, examination of the impact of a single close friendship may develop a rich theoretical understanding of how supportive interpersonal relationships facilitate the development of resilience. Increasingly sophisticated understandings of the specific qualities of peer relationships (Bukowski & Adams, 2005) are supported by recent measures of dimensions of friendship function and quality (e.g. Mendelson & Aboud, 1999), enabling exploration of interpersonal and relational processes in fine-grained detail. As well as establishing whether a supportive close friendship may be a protective mechanism, it is necessary to explore routes through which any observed protective effect may occur. The peer relations literature has increasingly focused on how and in what contexts peer relationships exert their developmental role, prioritizing interest in processes over earlier concerns with social acceptance and peer ratings (Bukowski & Adams, 2005).

Mediating mechanisms facilitating psychological adaptation

Although social support has been shown to promote psychological growth following adversity, the processes through which this occurs are complex and unclear (Helgeson & Lopez, 2010). Current models of adolescent resilience do not generally address the question of how adolescents’ interpersonal relationships – particularly amongst peers –
promote psychological changes. Researchers are increasingly developing multidimensional views of resilience that focus not only upon individual factors such as genetics and personality, but also incorporate community and cultural factors (e.g. Canvin, Marttila, Burstrom & Whitehead, 2009; Clauss-Ehlers, 2008; Ungar, 2005).

This chapter specifically attempts to bridge the self-social gap by identifying psychological resources and coping strategies which may be encouraged by adolescents’ closest friendship, and examining whether these effectively facilitate resilience. Hypothesized mediators included in the present research are now examined. The mediators suggested below should not be considered an exhaustive survey of possibilities. Psychological resources were selected as particularly relevant to a consideration of resilience as associated with supportive adolescent peers, based upon previous literature and with specific interest in psychosocial factors in promoting adaptation.

Coping. Coping refers to the multi-dimensional repertoire of cognitive, behavioural and affective responses that people actively employ when faced with challenges in their lives (Pearlin & Schooler, 1978). Not all coping responses are active or even efficacious; the term merely refers to how individuals deal with concerns in their lives, which is itself not static but will vary across the lifespan (Frydenberg, 1997).

There are nearly innumerable empirically and theoretically distinguishable coping responses available to individuals, in equally numerous specific situations (Frydenberg, 1997). Some theorists group coping styles according to whether they are problem-focused or emotion-focused (Lazarus & Folkman, 1984). Coping responses may also be differentiated in terms of whether they act to modify a problematic situation, affect the subjective meaning of a problem, or manage stress (Pearlin & Schooler, 1978). They may be more instrumentally conceptualised as involving self-help, approach, accommodation or self-punishment strategies, with specific cognitive, behavioural and affective tasks subsumed within these larger categories (Zuckerman & Gagne, 2003). It is perhaps less helpful to a priori identify particular coping styles as adaptive or maladaptive, and more useful to consider the contextual appropriateness of those strategies and the types of outcomes they actually promote (Zuckerman & Gagne, 2003). For example, some theorists maintain that post-traumatic growth requires some degree of cognitive rumination (Meyerson, Grant, Carter & Kilmer, 2011), a strategy which is associated with maladaptive outcomes when used excessively in adolescent female friendships (Bukowski & Adams, 2005; Rose, 2002). Avoidance tends to have some immediate beneficial effects but is
generally damaging when maintained in the long-term (Zuckerman & Gagne, 2003). Even self-identified weak adolescent copers may utilise a range of strategies, including more productive ones such as problem-solving and maintaining a positive focus (Lewis & Frydenberg, 2004). Some coping styles, however, generally promote either positive or negative outcomes. In one fairly representative study, self-help, approach (e.g. seeking instrumental support, planning and engaging with a problem) and accommodation (e.g. optimism, positive reinterpretation and acceptance) coping styles were associated with positive outcomes whilst avoidance and self-punishment were maladaptive (Zuckerman & Gagne, 2003). Although gender differences may be observed in coping, and indeed in experiencing stress, these may have a developmental (or socialization) component with differentiation strengthening in adulthood (Frydenberg, 1997).

Skilled, effective coping may be an important protective mechanism promoting resilience (Ahern, 2006; Campbell-Sills, Cohan, & Stein, 2006; Haase, Heiney, Ruccione & Stutzer, 1999). Little previous research has, however, explored the role of supportive peer relationships in promoting resilience through effective coping. Coping efficacy mediated the relationship between ecological risk and depressive symptoms amongst African American, but not European American, urban youths (Prelow, Weaver & Swenson, 2006). As coping underlies individuals’ habitual responses to challenges, it is reasonable to suggest that if close friendships promote ineffective or self-defeating coping mechanisms, this may help explain observed associations between peer networks and poor well-being and achievement (e.g. Tiet, Huizinga & Byrnes, 2010). There is, then, a need to explore whether supportive close friendships facilitate effective coping amongst vulnerable adolescents.

**Self-efficacy.** Another factor through which friendship might be associated with resilience is self-efficacy. Self-efficacy refers to individuals’ own beliefs concerning their abilities to respond effectively to demanding situations. These subjective beliefs in one’s own capabilities may be determined through prior experience and social learning (Frydenberg, 1997). Self-efficacy also relates to coping in that beliefs in one’s coping efficacy may interlink with willingness and ability to engage and persist with facing a problem (Frydenberg, 1997). General and specific self-efficacy beliefs relate to resilience and positive outcomes. Lending support for a protective role, self-efficacy has longitudinally predicted students’ academic resilience in the face of general educational challenges (Martin & Marsh, 2008). Academic and family self-efficacy beliefs also mediated the relationship between home environment and indices of social behaviour and overall
problems amongst adolescents, although this was not explicitly linked to resilience (Bradley & Corwyn, 2001). Tentatively linking with existing supportive peer relationships, peer-led initiatives, such as reciprocal peer support and the use of trained peer helpers, have positively influenced self-efficacy and health-related attitudes in different health contexts (Turner, 1999). A supportive close friendship may therefore facilitate resilience by fostering a sense of self-efficacy. As with many of the hypothesized mediators presented here, the theoretical relationship between self-efficacy and coping supports an approach which considers these mediators’ inter-relationships as well as their individual contribution towards explaining any relationship between supportive close friendships and resilience.

**Self-esteem.** Self-esteem is a well-evidenced protective mechanism facilitating the development of resilience, although its role in the literature is complicated by some researchers’ selection of self-esteem as alternatively an indicator of resilience itself and a consequent thereof (Harvey & Delfabbro, 2004). Self-esteem refers to an individual’s own evaluations of their self-worth and self-regard (Rosenberg, 1989). In adolescence, self-esteem may be experienced multi-dimensionally and influenced by both environmental factors (including socio-economic status, life events, and social support) and individual factors (including behaviours, emotions and cognitions) which may exert either negative or positive effects (DuBois, Lockerd, Reach & Parra, 2003).

Although a positive link between self-esteem and resilience would seem intuitive, some research suggests resilient youth tend to have lower self-esteem than their peers (Dumont & Provost, 1999). Elsewhere, self-esteem has been shown to mediate the relationship between social support and reduced problem behaviour among adolescents (Moran & DuBois, 2002). Self-esteem longitudinally mediated positive effects of social support on both emotional and behavioural adjustment (DuBois et al., 2002). Breaking down both support and self-esteem as being oriented towards either peers or family, peer-focused self-esteem mediated a negative effect of peer-oriented support on behavioural adjustment (DuBois et al., 2002). Whilst self-concept is developed by a constellation of influences incorporating environment, family and – increasingly in adolescence—peers (Hay & Ashman, 2003), overreliance on peers for support and self-definition may promote problematic outcomes (DuBois et al., 2002; Moran & DuBois, 2002) particularly amongst youths who are unable to receive positive feedback from non-peer sources (Hay & Ashman, 2003). However, DuBois et al (2002) did not include a measure of positive adjustment, well-
being or resilience in their research, enabling only a partial picture of the mediational role played by self-esteem as an intersection of social interaction and individual self-concept.

**Relational interdependent self-construal.** The question of how social influences come to be incorporated into the self is quite wide. The salience of social relationships to the self has yet to be considered systematically within resilience research. Adolescent self-construits are multi-dimensional and become increasingly differentiated during development towards adulthood (Hay & Ashman, 2003). Same-sex peer friendships have been shown to significantly influence the formation of general self-concept amongst adolescent males—but, interestingly, not amongst females (Hay & Ashman, 2003).

Individuals vary in the degree to which their social relationships define their sense of self. Those with high relational interdependent self-construal (RISC) tend to construct their self-concept in terms of close relationships with significant others, valued roles and important social networks (Cross, Bacon & Morris, 2000). RISC impacts tendencies to self-disclose and seek disclosure within a relationship, to be viewed as responding sensitively, and to include specific individual relationships within the self (Cross, Bacon & Morris, 2000). High-RISC individuals implicitly and explicitly value close relationships for self and well-being (Cross, Morris & Gore, 2002). Although research is nascent in this area, high-RISC individuals may be more likely to incorporate social support within the self (i.e. moderating the relationship between social support and resilience), or the development of a relational interdependent self-construal may be a mechanism associating support with resilience itself.

**Perceived Stress.** Perceived stress addresses the subjective experience of a stressor, with appraisal dependent upon personal and contextual factors rather than a stressor’s intensity or other seemingly objective qualities. Perceived stress strongly predicts health outcomes, independent of related psychological symptomatology such as depression (Cohen, Kamarck & Mermelstein, 1983). Social support is an effective general coping mechanism to dealing with stress (Frydenberg, 1997; Day & Livingstone, 2003). Adolescents perceive school-related stressors and family-related stressors as different in complexity and causation, affecting later coping behaviour. Increasing their vulnerability, some of the most highly stressed young people have lower perceived capacities to seek social support (Seiffge-Krenke et al., 2001). The link between perceived stress and subsequent coping behaviour, as well as the potential role of friendships in providing distraction and support, suggests close friendships might be associated with resilience through reducing perceived stress.
Friendship network support. Most studies of how peer relationships influence adolescent outcomes examine friendships in the plural rather than the singular. Such an approach may overlook the potentially transformative effects of a single close friendship. The effects of a friendship group need not reflect the effects of a single friendship. Women are more likely to consider their social groups as a composite of dyadic friendship bonds, whilst men tend to view their groups as categorical affiliations, although this finding has not yet been replicated amongst adolescents (Foels & Tomcho, 2009). Focus upon friendship networks increases the challenge of examining specific processes through which friendships shape development, as participants must generalise to appraisals of groups. Indeed, many studies examining peer relationships do not study the processes operating within those friendships themselves (Bukowski & Adams, 2005).

It is nevertheless clear that the negative effects of friendship networks upon achievement can be quite dramatic. Some adolescents perceive their peers to be barriers to achievement of positive health and education outcomes (Shetgiri, et al., 2009), whilst the effects of peers on antisocial behaviour and gang membership have been found to be partially mediated by academic failure (Dishion, Nelson & Yasui, 2005). Perceived peer victimisation is associated with lowered feelings of self-worth and educational achievement (Juvonen, Nishina & Graham, 2000). Prior peer victimization predicts poorer subsequent educational attainment through increased psychological maladjustment and physical symptoms (Nishina, Juvonen & Witkow, 2005). Bukowski and Adams (2005) suggest roles for two key processes, which may differentiate further along gender lines: an internalizing process of co-rumination (Rose, 2002) and an externalizing process of deviancy training (Dishion, 2000), in which friendships reinforce antisocial behaviour in young people who are already exhibiting antisocial behaviour. The former may be particularly relevant to girls, and the latter to boys (Bukowski & Adams, 2005). Even when focusing upon a single close friendship, then, it is prudent to include a measure of perceived support provided by the wider friendship network to account for this key source of psychological influence. This also allows for the consideration of how a single supportive close friendship may aid the development of a wider friendship network which is itself supportive, rather than risk-promoting.

When might close friendship support resilience?

Aspects of friendship, self and social context may moderate the proposed relationship between close friendship quality and resilience – that is, they may affect the strength or direction of this relationship. The present analysis considers gender, age, self-concept in the
form inclusion-of-the-other-in-the-self (IOS) and RISC, and perceived family support as potential moderating variables.

As outlined earlier in this chapter, there may be gendered components to many of the constructs included in the analysis. Rew and Horner (2003) also consider gender a risk factor in their model of youth resilience because of cascading effect on health and coping behaviours (e.g. Ellis & Torabi, 1994), with males more likely to engage in problematic, externalising coping responses and risky health-related activities than females. Participant gender was therefore hypothesised to moderate the relationship between friendship and resilience and any explanatory pathways. Likewise, although the chapter focuses upon friendship and resilience in adolescents, the participant age range encompasses the entirety of the teenage years. Inclusion of age in the model allows consideration of whether the relationships explored differ from early adolescence to late adolescence in the sample.

Inclusion-of-the-other-in-the-self conceptualises closeness within relationships as involving overlapping, interconnected, partially unified selves in which an individual cognitively experiences aspects of a significant other as being partially or wholly within her own self (Aron, Aron, Tudor & Nelson, 1991; Aron, Aron & Smollan, 1992). This is similar to RISC, but is specific to a particular relationship. A type of closeness which includes a sense of unification between selves may strengthen the impact of a close friendship upon resilience.

Perceived family support was also hypothesized to moderate the proposed relationship between friendship and resilience. Two theoretical rationales supported this position. Parental support and family well-being are key promoters of resilience in young people (Armstrong, Birnie-Lefcovitch & Ungar, 2005), and unsupportive families might prove an additional risk factor for adolescents. Adolescents from high-conflict homes are more susceptible to negative impacts on a range of psychological outcomes including academic self-efficacy (Bradley & Corwyn, 2000). Similarly, the social skills and other psychological resources gained from a supportive home may mean that the significance of peer friendships as a risk or protective factor partially depends on the quality of young people’s relationships with their parents (Masten, 2005). Popular children show decreased links between harsh parenting and externalising behaviours (Lansford et al., 2003). Peer friendships may mediate the relationship between parenting practices and outcomes (Masten, 2005) and family context may hugely affect how resilience is expressed in individual young people (Ungar, 2010a), suggesting differing paths to resilience depending on whether participants perceive their parents as supportive.
The common risk factor of socio-economic status

The present study employs socioeconomic vulnerability as the common risk factor facing the participants. Low socio-economic status is a key risk factor for British adolescents and a frequently investigated variable in risk research (Luthar, 1991). Low socioeconomic status is linked to problematic behaviour such as school dropout, substance use, violence and risk-taking (Serbin & Karp, 2004; Zimmerman & Brenner, 2010). The deleterious effects of childhood adversity upon mental health outcomes in late adolescence and young adulthood may be particularly potent amongst socioeconomically disadvantaged youth (Schilling, Aseltine & Gore, 2002). In the UK, the risks of growing up in low-income households include increased likelihood of poor health, worse educational outcomes, early pregnancy, and future unemployment, as well as engagement in criminal and anti-social behaviour (Canvin, Marttila, Burstrom & Whitehead, 2009).

The negative effects of socioeconomic disadvantage at a neighbourhood level – over and above effects for a particular household – add accumulated risk through an interrelated web of effects (Zimmerman & Brenner, 2010). Low socioeconomic status may extend risk into the family environment as problematic parental behaviour in vulnerable populations may perpetuate future risk and disadvantage in the next generation (Serbin & Karp, 2004). Neighbourhood socioeconomic disadvantage colours the context of adolescents’ key relationships: they are more likely to encounter with deviant peers, and experience chronic stress within the family (Zimmerman & Brenner, 2010). Low socioeconomic status is therefore a key and compelling vulnerability.

Introducing the present study

This chapter aims to develop a robust theoretical understanding of how a single, supportive close friendship may operate as a protective mechanism promoting psychological resilience amongst socioeconomically vulnerable UK adolescents. I use correlational, regression and structural equation analyses to develop a cross-sectional structural model of how and when supportive close friendships may facilitate psychological resilience in this sample. In so doing, the research aims to (1) establish whether a supportive close friendship is positively associated with resilience amongst vulnerable youths; (2) develop a rich understanding of the potential causal psychological processes through which any observed protective relationship may be enacted; (3) integrate these findings into a structural model which accounts for interrelationships between hypothesized mediators as well as their individual
indirect effects and (4) consider whether the model is more applicable to particular groups based upon theoretically important variables. This model may later be applied to longitudinal analysis of adolescents and to an adult sample. Uniquely, the study focuses upon a single, supportive close friendship as a source of support and resilience-promotion, as distinct from adolescents’ wider friendship networks.

It is hypothesized, firstly, that a supportive close friendship will be positively associated with socioeconomically vulnerable adolescents’ psychological resilience. Secondly, it is suggested that this relationship is fully or partially explained by friendships’ role in promoting resilience-building psychological resources. The explanatory pathways assessed include self-esteem, self-efficacy, coping, a relational self-concept, perceived stress, and a supportive friendship network. The moderating effect of selected contextual variables (e.g. family support, age, gender, relational self-concept) on the relationship between friendship and resilience is explored. The study adopts an inquisitive perspective towards the qualities of participants’ friendships, incorporating details such as inclusion of the friend in the self into the analysis. Furthermore, the research explicitly focuses upon resilience as a psychological construct measured according to participants’ subjective assessments of their strengths and resources. The research presented in this chapter aims to achieve a fuller theoretical understanding of resilience promotion by focusing on the potential for peer relationships to act as a source of strength, promoting positive adaptation in the face of socioeconomic vulnerability.

Method

Ethics

Before beginning data collection, ethical approval was obtained from the Institute of Psychological Sciences, University of Leeds (see Appendix 1). Informed consent for adolescents to participate using an opt-out system was obtained from administrators in participating schools and colleges, wherein completion of the questionnaire denoted consent for responses to be used in research. Participants were ensured of anonymity, able to leave any question unanswered, and able to withdraw from the study at any time without providing a reason. Further details of ethics are considered in Chapter 2.
Design

A single-time point correlational design was employed to assess a hypothesized relationship between a single perceived close friendship quality and psychological resilience, using moderated regression and structural equation modeling to explore this relationship in greater detail. Potential mediating mechanisms underlying this relationship were assessed. These included: self-esteem, self-efficacy, RISC, perceived stress, a perceived supportive friendship network, and coping styles. Contextual factors which might moderate the relationship between friendship and resilience were likewise considered. These were: perceived family support, gender, age, friend’s gender, friendship gender-congruence, the IOS associated with the single close friendship, and RISC.

Participants

Recruitment took place online and through educational institutions from January 2010 to May 2010. Three secondary schools and two colleges in West and South Yorkshire participated following extensive outreach with educational institutions serving socioeconomically vulnerable catchment areas. Participants were also recruited online via a mailing list for peer supporters in a scheme run by a local education authority and through a direct link to the online survey from the project website. A total of 409 (160 male, 245 female, 4 unknown) participants aged between 11 and 19 (M= 14.77 years, SD. = 2.16) comprised the final sample. Table 3.1 provides age and gender composition of the sample by educational institution.

Table 3.1.

<table>
<thead>
<tr>
<th></th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>College A</th>
<th>College B</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total N</td>
<td>133</td>
<td>62</td>
<td>64</td>
<td>66</td>
<td>69</td>
<td>15</td>
</tr>
<tr>
<td>-Male</td>
<td>84</td>
<td>26</td>
<td>26</td>
<td>20</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>-Female</td>
<td>48</td>
<td>36</td>
<td>37</td>
<td>45</td>
<td>68</td>
<td>11</td>
</tr>
<tr>
<td>Age M</td>
<td>12.74</td>
<td>15.05</td>
<td>13.42</td>
<td>17.15</td>
<td>16.71</td>
<td>17.80</td>
</tr>
<tr>
<td>SD</td>
<td>1.16</td>
<td>1.03</td>
<td>0.64</td>
<td>0.98</td>
<td>1.29</td>
<td>1.37</td>
</tr>
</tbody>
</table>

Although the study was originally aimed at 12-18 year olds, School A provided a Year 7 group with a number of 11-year olds. After discussion with school coordinators and
supervisors, the records of the 11-year olds were retained. The participant groups in the two participating colleges were of mixed age ranges, although predominantly containing 16-18 year olds. The records of the 19-year olds in these groups were retained. Students over age 19 were reassigned to the adult study if they fit the age criteria for the adult study. Reasons for discarding participant records included failure to complete at least 70% of the questionnaire (22); falling outside the specified age range for the study (21); failing to complete at least 50% of the Resilience Scale or McGill Friendship Questionnaire (6); or providing clearly false/joke answers, e.g. repetitions of the word “bob” (3). A number of “false starts” were also recorded, likely because of online administration.

**Materials**

The Friendship and Resilience Questionnaire was completed by all participants. It was comprised of 10 psychometric scales, 3 free-text items, 2 items on preferences for mode of interaction, and one item on preferences for support-seeking. Measures on close friendship quality were counterbalanced with measures on self-psychology characteristics.

*Measures Unique to the Questionnaire.* Participants rated the frequency with which they interacted with their close friend in a range of modalities (e.g. face-to-face, across social networking sites, by telephone) using a 5-point Likert-style scale with frequencies ranging from “never” to “daily.” Participants also rated the importance of interactions across each of those modalities with a 5-point Likert-style scale with responses ranging from “very unimportant” to “very important.” Basic demographic information for the participant was also obtained, including age, gender, and length of friendship with the selected friend. Additionally, three free-text items were presented which were used to facilitate purposive sample for the qualitative study as reported in Chapter 5. A full copy of the adolescent version of the Friendship & Resilience Questionnaire is available in Appendix 2.

*Psychometric Scales.* Cronbach’s alphas (α) were calculated using unstandardised scores and assessed against established guidelines (Field, 2005). Analysis of Cronbach’s alphas for the respective scales if individual items were deleted indicated that some small improvements in internal reliability could be achieved with select item deletion, but as these were negligible no changes were made. Individual item scores were allowed to be missing from reliability analysis to obtain accurate reliabilities. Substitution of missing item scores for individual participants’ sub-scale or scale mean scores (as appropriate) was
subsequently performed for use in further analyses. This is an acceptable solution when data is missing at random, but not completely at random, which is most likely given the supervised administration conditions of the questionnaire (Schafer & Graham, 2002).

McGill Friendship Questionnaire – Friendship Function (McGill FF). The McGill-FF (Mendelson & Aboud, 1999) is a 30-item measure of participants’ subjective assessments of the extent to which a particular friend fulfils 6 friendship functions, each represented by a 5-item sub-scale. The Stimulating Companionship sub-scale measures fun and amusement within the friendship. Help refers to perceived assistance and tangible available support. The Intimacy sub-scale assesses perceptions of openness, honesty and acceptance within the friendship. Reliable Alliance refers to beliefs in the continuing availability and loyalty of the friend, even in the face of disagreement. The Self-Validation sub-scale measures perceptions of the friend as bolstering feelings of encouragement, self-worth and competency. Finally, the Emotional Security sub-scale builds upon perceived available emotional support to include security, conceptualised as trustworthiness, confidence and comfort. Each item is scored on a 9-point Likert-style response scale with responses ranging from 0 (“Never”) to 9 (“Always”). Items tap into both friendship behaviours (e.g. “__ points out things I am good at”) and perceptions of the friendship (e.g. “__ makes me feel special”). The measure is applicable across ages and generally differentiates between friendships on the basis of closeness and longevity. The subscales have each demonstrated high internal consistency. The Stimulating Companionship, Help, Intimacy, and Reliable Alliance sub-scales predict positive feelings towards the friend, and Help and Reliable Alliance independently predict satisfaction with the friendship (Mendelson & Aboud, 1999). The scale showed excellent internal reliability in the sample (α = .94, N = 404).

Resilience Scale (RS). The Resilience Scale (Wagnild, 2009) is a 25-item subjective self-report of psychological resilience. Underlying the scale are two factors, Acceptance of Life and Personal Competence. Items reflect five characteristics of resilience identified through qualitative work and subsequent review of the coping and adaptation literatures. The five dimensions serve as the conceptual foundation of the scale and are differentiated as subscales. These are: 1. Self-reliance, or the belief in oneself and one’s abilities, with the ability to depend on oneself; 2. Meaning, or the sense that one’s life has a purpose; 3. Equanimity, or a balanced perspective of one’s life and experiences, moderating extreme responses to adversity; 4. Perseverance, or persistence and self-discipline despite adversity or discouragement; and 5. Existential aloneness, or the realisation that whilst some
experiences are shared, others must be faced alone, conferring a feeling of freedom and uniqueness (Wagnild, 2009; Wagnild & Young, 1993). Each of the five characteristics is represented by five scale items. The internal consistency of the Resilience Scale is very good, with $\alpha$ ranging from 0.85 to 0.94 in adults samples (range of $n= 50$ to $n=706$).

Excellent internal reliability was achieved in the present sample ($\alpha = .94$, $N = 404$). RS scores range from 25 to 175. Scores of 120 and below indicate low resilience; scores ranging from 121 to 145 indicate moderately-low to low levels; and scores of 146 and above indicate moderately-high to high levels (Wagnild, 2009).

Relational Interdependent Self-Construal (RISC) Scale. The RISC scale is an 11-item measure of participants’ tendency to exhibit a relational-interdependent self-construal, or to think of themselves in relation to close others. Participants rate statements of their attitudes and feelings on a 7-point Likert-style response scale with options ranging from “strongly disagree” (1) to “strongly agree” (7). Two of the items are reversed in scoring. The resulting mean of item responses is taken, with higher scores indicating a higher level of RISC.

Psychometric analysis performed across a pool of 8 samples ($N=4,228$) indicated a single-factor structure underlying the scale. The RISC shows good convergent validity with various measures of communal orientation, displaying moderate correlations with scales of collective self-esteem, communal orientation and group-orientated self-construal, and has demonstrated divergent validity through poor correlations with measures of independent self-construal and the related concept of instrumentality (Cross, Bacon & Morris, 2000). Good internal consistency was shown in the present sample ($\alpha = .80$, $N = 384$).

Inclusion of the Other in the Self (IOS) Scale. The IOS is a brief, pictorial self-report measure of relationship closeness (Aron, Aron & Smollan, 1992) used here to assess subjective closeness of the relationship between the participant and their closest friend. Seven Venn-like diagrams are presented. Each diagram contains two circles, labelled “Self” and “Other” in regularly increasing intervals of overlap. Participants are instructed to select the diagram which best represents their relationship. The scale has shown very good test-retest reliability and convergent and discriminant validity (Aron, Aron & Smollan., 1992). Internal reliability was not calculated because the IOS is a 1-item measure.

Multi-dimensional Perceived Social Support Scale (MPSSS). The MPSSS (Zimet, Dahlem, Zimet & Farley, 1988) is a 12-item subjective assessment of perceived social support across three sources: Friends, Family and an unspecified Special Person. Each sub-domain is comprised of 4 items scored using a Likert-style scale ranging from 1 (“Very strongly
disagree”) to 7 (“Very strongly agree”). Scale sub-totals and total score are calculated from mean scores. Factor analysis shows differentiation of support sources (Zimet, Dahlem, Zimet & Farley, 1988) in studies with adolescents (Cheng & Chan, 2004). Excellent internal reliability was shown for overall support ($\alpha = .95$, $N = 385$), family ($\alpha = .92$, $N = 399$), friendship network ($\alpha = .94$, $N = 400$) and special person ($\alpha = .92$, $N = 402$) sub-scales.

**Social Support Scale (SS).** The Social Support Scale is an abridged measure comprised of 6 items scored along a 7-point Likert-style scale focusing on perceived emotional and instrumental support within intimate relationships (Xu & Burleson, 2001). It achieved excellent internal reliability ($\alpha = .95$, $N = 407$) but was not retained due to its focus on highly specific types of support and redundancy with the McGill FF.

**Perceived Stress Scale (PSS).** The PSS (Cohen, Kamarck & Mermelstein, 1983) is a 14-item global measure of the degree to which a participant perceives her life as stressful which has demonstrated validity across age and sex. Participants assess on a 5-point Likert-style scale (0=“never”, 4=“very often”) how often, within the past month, they have experienced their lives to be unpredictable, uncontrollable or overloading. The PSS demonstrated good internal consistency in the adolescent sample ($\alpha = .73$, $N = 407$).

**Brief COPE.** The Brief COPE (Carver, 1997) is a 28-item measure of coping assessed across 14 sub-scales of conceptually distinct coping reactions. Participants use a 4-point scale to rate how often they perform the various behaviours in response to a problem, from 1 (“I don’t do this at all”) to 4 (“I do this a lot”). A dispositional item format was used (e.g. “I get emotional support from others”). Alphas were calculated for sub-scales as the scale measures a constellation of distinct coping behaviours rather than a uni-dimensional construct (Carver, 1997). Moderate to excellent internal reliability ($N = 409$) was achieved for each of the 2-item sub-scales: active coping such as direct engagement with a problem ($\alpha = .58$), planning and strategizing ($\alpha = .51$), positive reframing of a situation to find positive aspects ($\alpha = .58$), acceptance of a difficult situation ($\alpha = .50$), prolonged behavioural disengagement from a challenge ($\alpha = .46$), self-blame ($\alpha = .51$), humour (Cronbach’s $\alpha = .49$), religion ($\alpha = .72$), substance use ($\alpha = .81$), using emotional support ($\alpha = .58$), using instrumental support including tangible help or advice ($\alpha = .43$), temporary self-distraction ($\alpha = .39$), denial ($\alpha = .63$) and venting ($\alpha = .42$).

**General Self-Efficacy Scale (GSES-12).** The GSES-12 (Bosscher & Smit, 1998) is a 12-item measure of general self-efficacy encompassing three subscales: Initiative (3 items), Effort (5
items) and Persistence (4 items). Participants score statements on a 5-point Likert-style response scale with options ranging from “Strongly disagree” to “Strongly agree”. Confirmatory factor analysis has shown that the 12-item scale supports a model of three correlated factors and one higher-order factor, general self-efficacy. The measure shows good internal consistency in the current sample (N = 409) for overall scores (α = .77) and the effort (α = .79), initiative (α = .76) and persistence sub-scales (α = .78). Two of the GSES sub-scales were reverse-scored to achieve consistent direction of scores.

Rosenberg Self-Esteem Scale (SES). The SES (Rosenberg, 1989) is a 10-item scale of general self-esteem scored on a four-point Likert-style scale, with options ranging from “Strongly agree” to “Strongly agree”. Example items include “I feel that I have a number of good qualities” and “I take a positive attitude towards myself.” Half of items are reverse-scored. Scores range from 0-30, with 30 being the highest possible score and representing low self-esteem. The scale demonstrated good internal reliability (α = .82, N = 407).

Modified Sense of Coherence 3-item Scale (SOC-3-mod). The SOC-3 (Lundberg & Peck, 1995) is a uni-dimensional 3-item scale based on the proposed component structures of coherence: comprehensibility, manageability and meaningfulness. The 3-point response was modified in the present questionnaire to a 7-point Likert-style rating (“Very often...Never”). However, the scale showed poor internal reliability and was not retained.

Procedure

In schools and colleges, administration took place in classrooms during PHSE, English or science lessons lasting 45-90 minutes. A brief presentation by the researcher introduced the study, ensured understanding of key terms, and restated ethical information. All participants received written or online information sheets. The researcher was present to clarify items as necessary. Administration was primarily online using computer clusters or laptops, with occasional use of paper questionnaires when computer facilities were unavailable. Following completion, college participants were invited to provide their email address for follow-up at Time 2 as not all were expected to be enrolled at that time. Participants recruited online completed the survey anonymously without the assistance of the researcher and were invited to provide their email address for follow-up at Time 2. All participants were fully debriefed via a detailed information sheet about the study (online-only in the case of participants included online). This included contact information for
support organisations and instructions on how to withdraw retroactively from the study. They were encouraged to share the debriefing information with a trusted adult.

**Analysis and Results**

**Overview**

This section opens with a statistical description of the sample characteristics, including characteristics of participants’ close friendships and available psychological resources and support available. As part of preliminary analyses, the creation of distinct coping styles through exploratory factor analyses and factor regression scores are reported. ANOVA address group differences at the level of educational institutions. The chapter moves on to report inter-correlations between the examined variables. This is followed by simple regression analyses to examine the hypothesized predictive effect of perceived close friendship quality upon resilience. Bootstrapping mediational analyses form the basis for exploring how this hypothesized relationship might be explained. Finally, the development and evaluation of a structural equation model is presented, including the reporting of multiple group analyses to describe effects of contextual moderating variables.

**Descriptive statistics**

Adolescents were asked to select their closest friend, who was not a sibling or romantic partner, and respond to a number of questions describing this friendship. Adolescents reported a high-quality close friendship and a consistently high degree of perceived support from their social network. 89.6% of participants reported gender-congruent friendships, with 88.13% of males listing another boy as their closest friend and 90.50% of females listing another girl. The mean length of this friendship was 5.47 years (SD = 4.50, N = 374). Participants spent an estimated hours they spent each week with their friend, which, at $M = 21.9$ (SD = 20.25, N = 388) and a high degree of variability, reflects the length of time possible to spend with a friend if there are a number of shared lessons in the school day.

Adolescents rated their closest friendship as of generally high quality on the McGill Friendship Function Questionnaire ($M = 7.52$, SD = 1.44, N = 409). This was consistent across component dimensions, with particularly high Reliable Alliance within the friendship ($M = 8.00$, SD = 1.45) and Stimulating Companionship ($M = 7.97$, SD = 1.29). Also strong were the degree of perceived Intimacy ($M = 7.53$, SD = 1.63) and Emotional Security ($M = 7.33$, SD = 1.73), as well perceived available Help ($M = 7.32$, SD = 1.62). Friendships were
strong in the amount of perceived Self Validation ($M = 7.08, SD = 1.71$). These friendships were of reasonably high closeness ($M = 1.79, SD = 0.75, N = 405$) and show a moderately high degree of inclusion in the self ($M = 5.23, SD = 1.52, N = 402$). Overall, participants’ closest friendships were generally perceived as highly supportive and fulfilling along a number of dimensions, even as they varied in closeness and integration into daily life.

Adolescents had a moderately high level of overall perceived social support across their social network ($M = 5.29, SD = 1.46, N = 408$). Adolescents reported greatest support from an unspecified “special person” ($M = 5.40, SD = 1.65, N = 408$). They reported slightly greater support from their wider friendship network ($M = 5.34, SD = 1.66, N = 409$) than from their family ($M = 5.11, SD = 1.72, N = 409$).

Table 3.2 reports means and standard deviations for resilience, self-esteem, self-efficacy, RISC and perceived stress. The adolescents showed moderately-low mean resilience.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>122.18</td>
<td>25.85</td>
</tr>
<tr>
<td>Self-Esteem†</td>
<td>22.28</td>
<td>5.00</td>
</tr>
<tr>
<td>General Self-Efficacy</td>
<td>40.19</td>
<td>7.01</td>
</tr>
<tr>
<td>- Effort</td>
<td>17.19</td>
<td>3.90</td>
</tr>
<tr>
<td>- Initiative</td>
<td>10.07</td>
<td>2.73</td>
</tr>
<tr>
<td>- Persistence</td>
<td>12.93</td>
<td>3.51</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>41.08</td>
<td>7.10</td>
</tr>
<tr>
<td>RISC</td>
<td>5.00</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Note. † Denotes scale is inversely coded such that high scores reflect low levels of self-esteem. $N = 409$.

Self-esteem was moderately low within the sample, although self-efficacy was moderately high. The particular strengths of self-efficacy (effort, persistence and initiative) were represented fairly equally. Adolescents reported feeling moderately stressed within the previous month. Mean RISC scores indicated that adolescents showed a moderately-high tendency to incorporate significant others’ into their self-concepts.

Table 3.3 shows descriptive statistics for specific coping behaviours organised by coping style. Adolescents demonstrated an engaged, constructive coping style over a disengaged
and externalising coping style, particularly using self-distraction, acceptance and mobilising external support. Participants tended towards a constellation of coping behaviours. Adolescents were most likely to use self-distraction techniques, such as shopping or leisure activities, and to accept the occurrence of distressing events in their lives. They tended to call upon others for emotional and instrumental support, and to positively reframe a distressing event whilst engaging in planning and strategizing. Appeals to religious beliefs or practices were less frequent. Participants tended to vent their frustrations and blame themselves. They were not likely to engage in substance use.

Table 3.3.

Means and standard deviations for coping behaviours by coping style

<table>
<thead>
<tr>
<th>Coping Style</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructive Coping</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Positive Reframing</td>
<td>5.40</td>
<td>1.62</td>
</tr>
<tr>
<td>Active Coping</td>
<td>5.41</td>
<td>1.56</td>
</tr>
<tr>
<td>Planning</td>
<td>5.43</td>
<td>1.58</td>
</tr>
<tr>
<td>Using Instrumental Support</td>
<td>5.54</td>
<td>1.73</td>
</tr>
<tr>
<td>Using Emotional Support</td>
<td>5.46</td>
<td>1.68</td>
</tr>
<tr>
<td>Acceptance</td>
<td>5.81</td>
<td>1.53</td>
</tr>
<tr>
<td>Self-Distraction</td>
<td>5.88</td>
<td>1.56</td>
</tr>
<tr>
<td>Humour</td>
<td>4.83</td>
<td>1.88</td>
</tr>
<tr>
<td>Religion</td>
<td>3.62</td>
<td>2.00</td>
</tr>
<tr>
<td>Disengaged and Externalising Coping</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Behavioural Disengagement</td>
<td>4.18</td>
<td>1.78</td>
</tr>
<tr>
<td>Self-Blame</td>
<td>4.91</td>
<td>1.89</td>
</tr>
<tr>
<td>Denial</td>
<td>3.78</td>
<td>1.76</td>
</tr>
<tr>
<td>Venting</td>
<td>4.98</td>
<td>1.79</td>
</tr>
<tr>
<td>Substance Use</td>
<td>3.11</td>
<td>1.84</td>
</tr>
</tbody>
</table>

Creation of coping factor scores

The 14-sub scales of the Brief COPE (Carver, 1997) were reduced into broad coping styles using exploratory factor analytic (EFA) methods to more manageably interpret coping data, generate variables for simple and multiple regression analyses, and serve as the basis for
variables in a structural equation model. The EFA was carried out across the entire T1 adolescent sample (N=409). A principal axis factoring extraction was performing using a direct oblimin rotation because coping behaviours were hypothesized to be interrelated.

Preliminary analyses demonstrated data suitability. A determinant of .015, indicated no issues of singularity or multicollinearity. A Kaisser-Meyer-Olkin value of 0.848 indicated acceptable sample size. Bartlett’s test of sphericity \( (p<.001) \) indicated that the correlation matrix was suitable for factor analysis.

Initial extraction of factors with eigenvalues over 1 resulted in a 3-factor structure cumulatively explaining 53.38% of the total variance. However, inspection of the resulting pattern matrix and scree plot prompted a subsequent extraction as the third factor did not appear robust. Religion was the sole indicator loading onto this factor and there was poor discrimination of item loading onto the first and second factors for venting and humour.

A principal axis factor extraction extracting 2 factors using a direct oblimin rotation was consequently performed. The rotated solution revealed an acceptable 2-factor structure which cumulatively explained 45.27% of the total variance. Factor 1 contributed 32.30% of the variance and Factor 2 contributed 12.97%. Upon inspection of the scree plot and pattern matrix, as well as comparison to the factor structures obtained using analyses with T2 and longitudinal data, the 2-factor structure was retained as this structure reflected more distinct coping styles which were more stable across the samples.

Factor 1 was termed Constructive Coping (CC). The pattern matrix showed that items loading onto Factor 1 included positive reframing (0.811), active coping (0.755), planning (0.736), using instrumental support (0.689), using emotional support (0.627), acceptance (0.523), self-distraction (0.397), humour (0.342) and religion (0.262). Factor 2 was termed Disengaged and Externalising coping (DEC). It was composed of behavioural disengagement (0.806), self-blame (0.555), denial (0.555), venting (0.434), and substance use (0.442).

Regression scores were created for each of the 2 factors and used for subsequent analyses.

**ANOVAs for group effects**

A series of one-way ANOVAs with Bonferroni post-hoc tests to correct for multiple tests were conducted to detect any differences in participants according to educational institution, over and above age differences tested in moderated regression and multiple group analyses. Sample sizes prevent meaningful testing of institutional differences in the
structural model, although the model’s emphasis on personal and relational factors, as distinct from structural (e.g. school-level) factors, lessens the imperative of such testing. A series of 14 one-way ANOVAs \((p = .004)\) tested for differences in FF scores, IOS, MPSSS total scores (and its 3 sub-scales), RISC, perceived stress, general self-efficacy (and its 3 sub-scales), self-esteem, constructive coping, and disengaged and externalising coping. Only significant differences are reported. Analysis revealed a significant difference in FF scores \([F(5, 403) = 5.66, p < .001]\) such that College A expressed greater friendship quality than School C \((p < .001)\) and School A \((p < .001)\). There was similarly a difference in perceived stress \([F(5, 403) = 3.98, p = .002]\) such that School B was less stressed than College A \((p = .002)\). Finally, there was a difference in disengaged and externalising coping \([F(5, 403) = 4.82, p < .001]\) with School B showing less of this style of coping than College A \((p = .003)\) and College B \((p < .001)\). The differences in perceived stress and coping style divide rather neatly between secondary school and college, suggesting a developmental or selective component. Of greater interest is the finding that College A reported slightly higher friendship quality than two secondary schools. Confirmatory factor analyses presented later in this chapter suggest that this need not be problematic, as factor structure for this variable showed good fit across the sample with minor modification. The differences revealed by the ANOVA suggested that the sample is suitable to be examined in its entirety rather than in a nested analysis, with close attention to any age differences observed.

Correlations

Bivariate correlations were performed to explore significant relationships between all assessed variables: close friendship quality; resilience; IOS; perceived social support from family, friends, and a special person; self-esteem; self-efficacy and its components; perceived stress; RISC; constructive coping (CC) and disengaged and externalising coping (DEC). Table 3.4 shows the resulting Pearson’s correlations using listwise deletion.

As hypothesised, perceived close friendship quality significantly correlated with psychological resilience, with better quality of friendship moderately associated with higher resilience. Perceived close friendship quality was reflective of overall perceived social support, showing significant, positive relationships with friendship network support and, less strongly, family support. Perceived close friendship quality weakly related to IOS. Only the effort and persistence components of self-efficacy were related to perceived close friendship quality, with persistence being, intriguingly, inversely related to friendship.
Table 3.4.

**Intercorrelations of measures in the friendship and resilience questionnaire at T1**

<table>
<thead>
<tr>
<th></th>
<th>RS</th>
<th>IOS</th>
<th>MPSSS Total</th>
<th>MPSSS Family</th>
<th>MPSSS Friends</th>
<th>MPSSS Special</th>
<th>SES†</th>
<th>GSES Total</th>
<th>GSES Effort</th>
<th>GSES Initiative</th>
<th>GSES Persistence</th>
<th>PSS</th>
<th>RISC</th>
<th>CC</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF</td>
<td>.285***</td>
<td>.456***</td>
<td>.317***</td>
<td>.123*</td>
<td>.414***</td>
<td>.299***</td>
<td>-.031</td>
<td>.029</td>
<td>.203***</td>
<td>-.064</td>
<td>-.117*</td>
<td>.008</td>
<td>.468***</td>
<td>.379***</td>
<td>.139**</td>
</tr>
<tr>
<td>RS</td>
<td>-</td>
<td>.131**</td>
<td>.266***</td>
<td>.174***</td>
<td>.285***</td>
<td>.239***</td>
<td>-.310***</td>
<td>.392***</td>
<td>.462***</td>
<td>.120*</td>
<td>.176**</td>
<td>-.267***</td>
<td>.265***</td>
<td>.331***</td>
<td>-.132**</td>
</tr>
<tr>
<td>IOS</td>
<td>-</td>
<td>-</td>
<td>.216***</td>
<td>.090</td>
<td>.261***</td>
<td>.219***</td>
<td>.065</td>
<td>-.045</td>
<td>-.031</td>
<td>-.050</td>
<td>-.084</td>
<td>.047</td>
<td>.309***</td>
<td>.188**</td>
<td>.100*</td>
</tr>
<tr>
<td>MPSSS Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.844***</td>
<td>.877***</td>
<td>.898***</td>
<td>-.211***</td>
<td>.155**</td>
<td>.182***</td>
<td>.031</td>
<td>.083</td>
<td>-.165**</td>
<td>.352***</td>
<td>.224***</td>
<td>-.033</td>
</tr>
<tr>
<td>MPSSS Family</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.571***</td>
<td>.628***</td>
<td>-.277***</td>
<td>.204***</td>
<td>.200***</td>
<td>.062</td>
<td>.137**</td>
<td>-.278***</td>
<td>.174***</td>
<td>.100*</td>
<td>-.155**</td>
</tr>
<tr>
<td>MPSSS Friends</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.731***</td>
<td>-.143***</td>
<td>.090</td>
<td>.137**</td>
<td>-.012</td>
<td>.036</td>
<td>-.132**</td>
<td>.387***</td>
<td>.241***</td>
<td>.040</td>
</tr>
<tr>
<td>MPSSS Special</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.129*</td>
<td>.109*</td>
<td>.138***</td>
<td>.031</td>
<td>.041</td>
<td>-.017</td>
<td>.365***</td>
<td>.251***</td>
<td>.033</td>
</tr>
<tr>
<td>SES†</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.580***</td>
<td>-.293***</td>
<td>-.374***</td>
<td>-.540***</td>
<td>.495***</td>
<td>-.020</td>
<td>-.062</td>
<td>.468***</td>
<td></td>
</tr>
<tr>
<td>GSES Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.575***</td>
<td>.772***</td>
<td>.755***</td>
<td>-.356***</td>
<td>.040</td>
<td>.213***</td>
<td>-.404***</td>
<td></td>
</tr>
<tr>
<td>GSES Effort</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.076</td>
<td>-.020</td>
<td>-.156**</td>
<td>.208***</td>
<td>.330***</td>
<td>-.104*</td>
<td></td>
</tr>
<tr>
<td>GSES Initiative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.679***</td>
<td>-.174***</td>
<td>-.073</td>
<td>.050</td>
<td>-.354***</td>
<td></td>
</tr>
<tr>
<td>GSES Persistence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.402***</td>
<td>-.094</td>
<td>.019</td>
<td>-.414***</td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.004</td>
<td>-.022</td>
<td>.433***</td>
<td></td>
</tr>
<tr>
<td>RISC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.386***</td>
<td>.148**</td>
</tr>
<tr>
<td>CC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.465***</td>
</tr>
<tr>
<td>DEC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Perceived close friendship quality was moderately associated with higher RISC and a constructive coping style, but weakly associated with disengaged and externalising coping.

Psychological resilience significantly related to each of the assessed variables. Notably, although self-esteem did not relate to perceived close friendship quality, it positively related to resilience. Likewise, self-efficacy and its components each significantly related to resilience. Persistence positively related to resilience, despite an inverse relationship with friendship. Greater resilience was associated with lower perceived stress. Resilience was positively associated with a constructive coping style, and inversely, weakly related to disengaging and externalising coping behaviours. Observed effects were weak to moderate.

Results support the first hypothesis that perceived close friendship quality is positively related to psychological resilience. Furthermore, although significant relationships were observed between resilience and a number of resource-building psychological constructs, not all of these constructs were related to perceived close friendship quality. Taken together, the findings suggest that particular psychological resources may be developed by supportive close friendships to facilitate resilience. Given that coping style, RISC, sub-types of self-efficacy and support from the wider friendship network were related to both resilience and perceived close friendship quality, it is likely that these resources play a specific role in the relationship between close friendship quality and resilience.

**Moderated regression analyses**

Moderated regression analyses tested whether certain contextual variables affected the strength or direction of the relationship between perceived close friendship quality and psychological resilience. Proposed moderators were perceived family support, gender, age, friend’s gender, friendship gender-congruence, IOS scores and RISC. To guide moderation by age, a categorical variable was created coding participants as belonging to early (N = 222) or late (N = 187) adolescence according to the guidelines of the *Journal of Early Adolescence*, which demarcates early adolescence as 10 through 14 years of age (*Journal of Early Adolescence*, 2013).
Perceived close friendship quality and the proposed moderator were entered at Step 1. An interaction variable comprised of perceived close friendship quality multiplied by the moderator was entered at Step 2 with resilience scores as the dependent variable. Table 3.5 reports the standardized slope ($\beta$) of the multiple regression line describing the predictive relationship between the two predictor variables and resilience, the amount of variance of resilience explained by the interaction of the variables over and above their individual predictive effects ($R^2$ change), and the significance of the interaction ($p$).

Table 3.5.

Moderated regression analyses

<table>
<thead>
<tr>
<th>Moderator</th>
<th>$B$</th>
<th>$R^2$ Change</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPSSS-Family</td>
<td>.26</td>
<td>.00</td>
<td>.40</td>
</tr>
<tr>
<td>Gender</td>
<td>-.38</td>
<td>.00</td>
<td>.30</td>
</tr>
<tr>
<td>Age</td>
<td>-.36</td>
<td>.00</td>
<td>.22</td>
</tr>
<tr>
<td>Friend’s Gender</td>
<td>-.49</td>
<td>.01</td>
<td>.15</td>
</tr>
<tr>
<td>Friendship Gender-Congruence</td>
<td>.14</td>
<td>.00</td>
<td>.61</td>
</tr>
<tr>
<td>IOS</td>
<td>-.60</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td>RISC</td>
<td>.25</td>
<td>.00</td>
<td>.52</td>
</tr>
</tbody>
</table>

Only IOS emerged as a significant moderating variable. A significant $R^2$ change at Step 2 indicated a significant interaction effect of IOS with perceived close friendship support upon resilience, displayed in Figure 3.1. Psychological resilience was higher amongst those adolescents with higher friendship quality than those with lower friendship quality, with less of a difference at high levels of IOS. However a simple slopes analysis revealed no significant differences in resilience levels due to IOS at lower friendship quality level ($\beta$(IOS) = 0.77, $p>.1$) or higher friendship quality level ($\beta$(IOS) = -0.92, $p>.1$).
Mediation analyses

To facilitate construction of a structural model, mediational analyses examined which mechanisms might partially or fully explain the significant relationship between perceived close friendship quality and psychological resilience. Proposed mediating variables were a supportive friendship network; RISC; perceived stress; self-efficacy (in total and component sub-scales); self-esteem; constructive coping; and disengaged and externalising coping.

Table 3.6.

Bootstrapping results for mediators of predictive relationship of perceived close friendship quality upon resilience

<table>
<thead>
<tr>
<th>Mediator</th>
<th>95% BC Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point estimate</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Supportive Friendship Network*</td>
<td>1.40</td>
</tr>
<tr>
<td>RISC*</td>
<td>1.39</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>-0.09</td>
</tr>
<tr>
<td>Self-Efficacy (General)</td>
<td>0.18</td>
</tr>
<tr>
<td>- Self-Efficacy (Effort)*</td>
<td>1.50</td>
</tr>
<tr>
<td>- Self-Efficacy (Initiative)</td>
<td>-0.14</td>
</tr>
<tr>
<td>- Self-Efficacy (Persistence)*</td>
<td>-0.46</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.15</td>
</tr>
<tr>
<td>Constructive Coping*</td>
<td>1.76</td>
</tr>
<tr>
<td>Disengaged and Externalising Coping*</td>
<td>-0.43</td>
</tr>
</tbody>
</table>

NB N = 409, * denotes significant mediation.
A series of simple linear bootstrapping mediations, reported in Table 3.6, were performed using 5000 resamples and 95% bias-corrected intervals (Preacher & Hayes, 2008). A confidence interval which does not contain zero indicates a significant mediational effect.

The total effect of perceived close friendship quality upon resilience (c) was 5.11 (p<.001). Examination of the 95% bias-corrected confidence intervals indicated that the predictive relationship of perceived close friendship quality upon resilience was significantly and partially mediated by, separately, promotion of a supportive wider friendship network (direct effect of friendship upon resilience (c’ = 3.72, p<.001), relational-interdependent self-construal (c’ = 3.72, p<.001), the effort (c’ = 3.62, p<.001) component of self-efficacy, and constructive coping (c’ = 3.36, p<.001). The relationship was additionally mediated by the suppression of the persistence component of self-efficacy (c’ = 5.57, p<.001) and an externalising and disengaging form of coping (c’ = 5.54, p<.001). Total indirect effect sizes as indicated by the point estimates showed that constructive coping was the most powerful individual mediator, followed by effort, supportive friendship network and RISC. Persistence and reduced use of a disengaged and externalising coping style were weaker, albeit still significant, mediators of the relationship between friendship and resilience.

To summarise, analyses indicated that the relationship between perceived close friendship quality and psychological resilience was mediated by, separately: a supportive friendship network, RISC, effort, constructive coping and, inversely, persistence and a disengaged and externalising style of coping. These results informed construction of a proposed structural model for how supportive close friendships may be associated with resilience. Significant mediational relationships were proposed as pathways within the model, to be considered together within a complex context of psychological resources and social support.

**Structural equation analyses**

Structural equation modeling (SEM) using AMOS 18 (Arbuckle, 2009) was used to examine how supportive close friendships might be associated with psychological resilience. Analyses sought to build a model which would significantly fit the data whilst making theoretical sense and accounting for a reasonable proportion of outcome variance. First, the latent variables included in the model were refined through confirmatory factor analysis. An initial model was then hierarchically refined through a process of model trimming, constraining an existing parameter estimate to zero, effectively dropping it from the model (Kline, 2011). Model re-specification may be driven by theoretical (a priori)
considerations (e.g. a belief that $x \rightarrow y_2$ is mediated by $y_1$) or by *empirical* considerations (e.g. removing any paths not significant at .05). Model re-specifications were led by theory and supported by empirical modifications (MacCallum & Austin, 2000), considering both overall model robustness as well as relative model fit between re-specified models (Kline, 2011). Changes based on modification indices were considered carefully as they derive from statistical, not theoretical, consideration. Simulation studies indicate that purely empirical respecification may lead to erroneous models (MacCallum & Austin, 2000). Once a model was developed across the dataset, it was tested in a series of multiple group analyses across variables hypothesized to show differential patterns of fit and explanatory power, as explained in the next section.

Goodness of model fit was assessed using absolute and relative fit indices. The absolute indices used were chi-square and the Root Mean Square Error of Approximation (RMSEA). RMSEA values of 0.05 or below indicate a very close fit; values of 0.08 or below indicate acceptable fit; and values greater than 1.0 should prompt model rejection (Brown & Cudeck, 1993). A non-significant chi-square value indicates that the hypothesized model fits the data well. However, because large samples can prompt small differences between the predictive and observed covariant matrices to result in a significant chi-square (Kline, 2011), a chi-square should not be the sole indicator of model fit. A ratio of chi-square to degrees of freedom (CMIN/DF) of 3.0 indicates good model fit (Arbuckle & Wothke, 1999). Relative fit indices less sensitive to sample size are also used, including the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI). For these indices, values of .95 and above generally indicate good model fit. A smaller Akaike Information Criterion (AIC) also indicates better model fit (Kline, 2011). The CFI may be a better index of change in model fit than the chi-square difference test, with fit changes of .01 or more being important (Cheung & Rensvold, 2002). Excepting the RMSEA, fit indices are affected by model complexity so that fit indices of highly complex models are generally lower than those of lower complexity models (Schmitt & Kulijanin, 2008). A portfolio of indices was therefore used, taking into account the complexity of the hypothesized model and the study aim of developing new theory in this research area.

**Confirmatory factor analyses of latent variables**

Confirmatory factor analyses were performed on each of the hypothesized latent variables to be included in the proposed structural Adolescent Friendship and Resilience (AFR) model: perceived close friendship quality, resilience, constructive coping and disengaged
and externalising coping. Model complexity meant that individual inspection of latent components facilitated later inspection of the overall measurement model.

As demonstrated in Table 3.7, although the McGill FF (FF.1) had shown excellent internal reliability, a CFA revealed relatively poor model fit according to absolute and relative indices. A revised friendship quality model comprising 5 indicators (self-validation, emotional support, intimacy, help and stimulating companionship) yielded the most acceptable fit, removing “reliable alliance”. Although the CMIN/DF ratio for the resulting FF.2 variable is higher than the desired ratio of 2.0, the relative indices show excellent fit.

Table 3.7.

<table>
<thead>
<tr>
<th>Iteration</th>
<th>Latent Variable Model Name</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>CFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF1.</td>
<td>6-indicator Friendship Quality</td>
<td>15.14*</td>
<td>.19</td>
<td>.96</td>
<td>.80</td>
<td>.76</td>
<td>160.23</td>
</tr>
<tr>
<td>FF2.†</td>
<td>5-indicator Friendship Quality</td>
<td>5.34*</td>
<td>.10</td>
<td>.99</td>
<td>.98</td>
<td>.93</td>
<td>46.73</td>
</tr>
<tr>
<td>RS1.</td>
<td>5-indicator Resilience Score</td>
<td>8.25*</td>
<td>.13</td>
<td>.98</td>
<td>.97</td>
<td>.90</td>
<td>61.25</td>
</tr>
<tr>
<td>RS2.†</td>
<td>4-indicator Resilience Score</td>
<td>2.98*</td>
<td>.07</td>
<td>1.0</td>
<td>.99</td>
<td>.96</td>
<td>21.96</td>
</tr>
<tr>
<td>CC.1</td>
<td>9-indicator Constructive Coping</td>
<td>5.43*</td>
<td>.10</td>
<td>.89</td>
<td>.92</td>
<td>.87</td>
<td>182.69</td>
</tr>
<tr>
<td>CC.2</td>
<td>Constructive Coping with Venting</td>
<td>5.77*</td>
<td>.11</td>
<td>.89</td>
<td>.92</td>
<td>.86</td>
<td>191.84</td>
</tr>
<tr>
<td>CC.3†</td>
<td>2-Level Constructive Coping</td>
<td>2.80*</td>
<td>.07</td>
<td>.96</td>
<td>.96</td>
<td>.93</td>
<td>110.66</td>
</tr>
<tr>
<td>DEC.1</td>
<td>5-Indicator Disengaged and Externalising Coping</td>
<td>3.39*</td>
<td>.08</td>
<td>.97</td>
<td>.98</td>
<td>.95</td>
<td>36.94</td>
</tr>
<tr>
<td>DEC.2†</td>
<td>4-Indicator Disengaged and Externalising Coping</td>
<td>3.15*</td>
<td>.04</td>
<td>1.0</td>
<td>1.0</td>
<td>.98</td>
<td>19.15</td>
</tr>
</tbody>
</table>

Note: † Denotes the latent variable models retained for subsequent analyses. *Denotes $\chi^2$ significant to $p<.001$.

A full 5-indicator resilience latent variable (RS.1) showed relatively poor fit, with a high CMIN/DF ratio and unacceptable RMSEA. A revised 4-indicator model (perseverance, equanimity, self-reliance and meaning) removing “existential aloneness” yielded the best fit. Although the CMIN/DF ratio for the revised RS.2 variable is slightly above desirability, the RMSEA and relative fit indices, less sensitive to sample size, show acceptable fit.

The CFA of a nine-indicator constructive coping variable (CC.1) showed inadequate model fit on the absolute fit index (CMIN/DF) and consistently good fit across relative indices.

Given that “venting” demonstrated a tendency towards factor cross-loading in a prior EFA,
a revised 9-indicator model (CC.2) was tested, adding “venting”. This did not improve fit. However, modification indices on the CC.2 analysis suggested a link between the disturbances of two indicators: using emotional support and using instrumental support. A 2-level constructive coping factor comprised of two lower-order factors (support seeking and engaged coping) was hypothesized. The 2-level constructive coping factor (CC.3) showed improved fit along an absolute fit index and good fit along relative indices. Accordingly, this 2-level factor was retained for subsequent analyses.

Model fit for the 5-indicator disengaged and externalising coping variable (DEC.1) was similarly above desirable limits according to absolute fit indices but achieved excellent fit according to most relative fit indices. Because of “venting” having demonstrated a tendency towards factor cross-loading in the EFA, a four-indicator model (DEC.2) was tested, eliminating “venting”. This achieved excellent fit across all relative fit indices, and an improved fit on the absolute index, and was consequently retained for analysis.

**Model development**

The initial mediational analyses performed revealed a number of mechanisms which might explain the significant facilitating relationship between perceived close friendship quality and psychological resilience. Specifically, significant individual mediating effects were demonstrated by a supportive friendship network, RISC, effort, constructive coping and, inversely, disengaged and externalising coping and persistence.

Model development was first undertaken across a single sample (N = 409) before proceeding to multiple group analyses in the next section. The hypothesized model suggested that perceived close friendship quality supports the development of psychological resilience through the promotion of a supportive friendship network, a relational-interdependent self-construal, effort and a constructive coping style (itself comprised of engaged coping and external support-seeking); and the suppression of disengaged and externalising coping and persistence.

Figure 3.2 shows the initial 6-mediator structural model hypothesized by assembling the five significant mediational relationships as proposed pathways. The 4 latent variables present adopted the structures derived from the preceding confirmatory factor analysis. No latent variable was constructed for self-efficacy because persistence and effort demonstrated opposing directionalities in their prediction of resilience and their combination to a latent variable would result in an inadmissible solution. As in the
Figure 3.2. 6-Mediator Adolescent Friendship and Resilience Model. Note: indicators of latent variables are represented by arrowhead connectors and (error) residuals are represented by straight connectors.
confirmatory factor analysis, both absolute and relative fit indices were used to assess fit of theoretically robust structural models and alternatively specified models were considered.

As shown in Table 3.8 initial analysis of a 6-mediator Adolescent Friendship and Resilience model (AFR.1) demonstrated moderate fit according to relative and absolute indices. The model predicted a good proportion of resilience variance ($R^2$ resilience = .42). However, inspection of the regression pathways revealed that neither persistence ($p>.1$) nor RISC ($p>.1$) predicted resilience. This was not unexpected given the marginal significance of persistence as a mediator. Nonetheless, all other relationships were in the hypothesized direction and were significant to $p<.05$, with the path from friendship to externalising and disengaged coping marginally significant at $p=.06$. It was decided to test an alternative model, removing persistence and RISC due to non-significant regression pathways.

Table 3.8.

**T1 AFR single-group structural equation modeling analyses**

<table>
<thead>
<tr>
<th>Iteration</th>
<th>Model Name</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>CFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR.1</td>
<td>6-Mediator Adolescent Friendship and Resilience Model</td>
<td>2.38*</td>
<td>.06</td>
<td>.94</td>
<td>.88</td>
<td>.85</td>
<td>806.68</td>
</tr>
<tr>
<td>AFR.2†</td>
<td>4-Mediator Adolescent Friendship and Resilience Model</td>
<td>2.52*</td>
<td>.06</td>
<td>.94</td>
<td>.88</td>
<td>.86</td>
<td>723.54</td>
</tr>
<tr>
<td>AFR.3</td>
<td>4-Mediator AFR with Friendship Network Variant</td>
<td>2.40*</td>
<td>.06</td>
<td>.94</td>
<td>.89</td>
<td>.86</td>
<td>695.20</td>
</tr>
<tr>
<td>AFR.4</td>
<td>Reverse 4-Mediator Adolescent Friendship and Resilience Model</td>
<td>2.52*</td>
<td>.06</td>
<td>.94</td>
<td>.88</td>
<td>.86</td>
<td>723.54</td>
</tr>
</tbody>
</table>

Note: † Denotes the model retained as final. *Denotes $\chi^2$ significant to $p<.001$.

A revised 4-mediator model (AFR.2) was analysed, aiming to achieve a better-fitting, parsimonious model demonstrating good predictive value with only significant regression pathways. The resulting model achieved moderate fit according to relative and absolute indices, with improved AIC. In contrast to the previous model, all regression paths were significant ($p<.01$) in the hypothesized directions. The path from friendship to externalising and disengaged coping was marginally significant at $p=.06$. Perceived close friendship quality significantly predicted the hypothesized mediating variables, promoting effort, a supportive wider friendship network and a constructive coping style whilst discouraging disengaged and externalising coping. Use of disengaged and externalising coping negatively
Note: *** denotes p<.001, ** denotes p<.01, † denotes p=.06.

Figure 3.3. AFR.2 Adolescent Friendship and Resilience Model.

Note: indicators of latent variables are represented by arrowhead connectors and (error) residuals are represented by straight connectors.
predicted resilience, whilst relationships were positive between resilience and the other mediators. All indicators loaded significantly onto lower order factors \( (p < .001) \). The model predicted a good proportion (42%) of the variance in resilience. This model, the Adolescent Friendship and Resilience Model (Figure 3.3), was therefore retained.

A noteworthy alternative model was tested. Modification indices suggested an appreciable difference in the \( \chi^2 \) value might be achieved by linking effort and supportive friendship network, respectively, to support seeking. The 4-mediator model (AFR.2) was revised to reflect this change such that effort and a supportive friendship network additionally predicted support seeking. This alternative model (AFR.3) showed improved absolute fit over a simple 4-mediator model but no change in relative fit indices (Kline, 2011). Despite this slight improvement in fit, nested model comparison suggested retention of the less parsimonious model \( (\Delta \chi^2 (2) = 32.34, p < .001) \). A 4-mediator model (AFR.2) was therefore retained. This model showed acceptable fit according to a portfolio of indices, considering model complexity and the novelty of theory development in this research area. This model is presented in Figure 3.3, which includes standardized regression weights for the paths.

In order to test that the model showed mediational effects over and above indirect effects, a full model in which a direct effect of supportive close friendship upon resilience was compared to the hypothesized, nested model in which this direct effect was removed by setting the regression weight of the parameter to zero. Nested model comparison supported retention of the more parsimonious (i.e. the mediational) model \( (\Delta \chi^2 = 1.70, p > .1) \). Analysis showed that the model fully mediated the relationship between friendship and resilience as this direct effect was non-significant \( (\beta = .06, p > .1) \). The results therefore show a mediational model, as opposed to one comprised of indirect effects.

Finally, the directionality of paths was reversed on the selected model to investigate the alternative possibility that, instead of close friendships promoting resilience, resilience might facilitate supportive close friendships via the hypothesized mediating mechanisms. The results of this analysis generally supported retention of our proposed model over its reverse. Although the reverse model (AFR.4) had equivalent fit indices to the forward-directional model (AFR.2) and was fully mediational, it was less predictive of friendship quality \( (R^2 = .28) \) than the forward-directional model was of resilience. Neither externalising coping nor effort predicted friendship quality. Compared to a resilience outcome, total standardised effects on friendship quality were weaker for engaged coping (.35), effort (.03), and externalised coping (-.02). Total standardised effects of a supportive friendship
network upon friendship quality (.30) were higher than with a resilience outcome, likely reflecting linkages between these social relationships. Finally, the total standardised effect of resilience upon friendship quality (.25) was equivalent to its reverse with the unstandardised effect slightly higher (.26) but not a statistically meaningful degree.

Returning to the Adolescent Friendship and Resilience Model (AFR.2), Table 3.9 shows the direct, indirect and total effects of perceived close friendship quality, coping style, effort, and supportive friendship network on resilience. The strongest predictor of resilience was a constructive coping style, itself comprised of social support-seeking and engagement with the problem. Reduced use of a disengaged and externalising coping style predicted resilience. Interestingly, supportive close friendships positively predicted the use of this coping style, albeit weakly, indicating that adolescent friendships which are positively appraised may nonetheless promote some externalising, disengaging or antisocial behaviours. Coping style and effort facilitated resilience more strongly than did a supportive friendship network, suggesting that although building a supportive extended friendship network is an important mechanism through which a supportive friendship exerts a protective effect, there may then be other linkages through which a supportive friendship network indirectly supports resilience. Alternatively, and consistent with other findings, a single supportive close friendship may be a more effective protective mechanism than a supportive friendship network.

**Multiple group analyses**

Multiple groups analysis enable examination of group differences at the level of a structural model. Although no direct effects of gender were observed in simple moderation analyses, considerable literature on gender differences in peer relationships suggested that friendship might be associated with resilience differently for boys than for girls. Similarly, a test of difference in Adolescent Friendship and Resilience Model fit across age was prudent given the range of the sample across early to late adolescence, particularly as participants were drawn from both secondary schools and colleges. It was furthermore hypothesized that friendships may be associated with resilience differently for adolescents from supportive or non-supportive family contexts. Finally, significant moderating effects of IOS on the relationship between friendship and resilience suggested that differential effects might be seen on this basis, as well.
Table 3.9.

**Decompositions for effects of predictor and mediating variables on resilience in the Adolescent Friendship and Resilience Model**

<table>
<thead>
<tr>
<th></th>
<th>Perceived Close Friendship Quality</th>
<th>Supportive Friendship Network</th>
<th>Effort</th>
<th>Disengaged and Externalising Coping</th>
<th>Constructive Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resilience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 409)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.126**</td>
<td>.041</td>
</tr>
<tr>
<td>Total indirect</td>
<td>.248</td>
<td>.252</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>.248</td>
<td>.252</td>
<td>.126**</td>
<td>.041</td>
<td>.142</td>
</tr>
<tr>
<td><strong>Males</strong> (N = 160)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.122</td>
<td>.074</td>
</tr>
<tr>
<td>Total indirect</td>
<td>.313</td>
<td>.338</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>.313</td>
<td>.338</td>
<td>.122</td>
<td>.074</td>
<td>.125</td>
</tr>
<tr>
<td><strong>Females</strong> (N = 245)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>.237</td>
<td>.199</td>
<td>.117**</td>
<td>.051</td>
<td>.134</td>
</tr>
<tr>
<td>Total indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.237</td>
<td>.199</td>
<td>.117**</td>
<td>.051</td>
<td>.134</td>
</tr>
</tbody>
</table>

*Note: Unst., unstandardised; St., unstandardised. ***Denotes p<.001, **denotes p<.01, *denotes p<.05.*
To support a hypothesized difference in the mechanisms through which this relationship may operate, a multiple groups analysis should show a significant difference in model fit when a test of invariance is performed. Relationships between latent variables and their indicators are set to be identical across groups to facilitate meaningful comparisons (Widaman & Reise, 1997), preceding hierarchical tests of structural invariance, first looking at invariance of the measurement model across groups and then of the structural model (Vandenberg & Lance, 2000). The fit of a model with paths constrained to equality across groups is compared to an unrestricted model free from equality constraints, which must itself fit the data well. If the fit of the constrained structural model is significantly lower than that of the unconstrained model, this indicates that parameters are not equal across groups, or that paths from friendship to resilience differ by group.

Several indicators may be used when comparing models in addition to inspection of absolute and relative fit indices for each model (Kline, 2011). A smaller Akaike Information Criterion (AIC) indicates better model fit. Invariance is also tested using a difference in chi-square ($\Delta \chi^2$) between increasingly constrained models which are nested within previously-estimated less constrained models. A non-significant $\Delta \chi^2$ indicates that a more constrained model in which more parameters are set to equality should be retained over a less restricted nested model, or that there is no difference in model fit between groups (Widaman & Reise, 1997). The final model should significantly fit the data whilst making theoretical sense and accounting for a reasonable proportion of the outcome variance.

A hypothesized difference in model fit based on participant gender was tested comparing male adolescents (N = 160) with females (N = 245). An unconstrained model fit the data well across groups (CMIN/DF = 1.88, p<.001, RMSEA = .05, CFI = .92, GFI = .84, AGFI = .80, AIC = 1140.51). Analysis demonstrated measurement invariance ($\Delta \chi^2$ (19) =24.51, p>.1). Assuming the measurement model correct, a marginally significant difference was detected in the structural weights across the models ($\Delta \chi^2$ (6) = 12.18, p = .05). The model was more predictive for males ($R^2$ resilience = .48) than females ($R^2$ resilience = .39).

Factor loadings of the individual structural pathways between the groups were assessed to determine which pathways needed to be freely estimated. The structural weight model showed a non-significant path from supportive close friendship to externalising coping ($\beta = .03, p>.1$). Furthermore, pairwise parameter comparisons showed a significant difference in this path across groups ($z= 1.98$) suggesting it should be unconstrained from equality. The critical difference ratio for the path from disengaged and externalising coping to resilience
also showed a significant difference across groups (z=4.39). These structural paths were freely estimated whilst the others were constrained and the model was re-run. The revised structural model now showed a statistically significant fit across both males and females ($\Delta \chi^2 (4) = 1.83, p>.1$). The model demonstrating how close friendships supports resilience therefore works equally well in males and females when the paths from perceived close friendship quality to disengaged and externalising coping and from disengaged and externalising coping to resilience are allowed to be freely estimated.

As shown in Table 3.9, a supportive friendship network facilitated resilience only for females. Direct effects of an externalising coping style upon resilience were far larger for males than females, although this was a negative relationship for both genders. A supportive close friendship showed promoted effort and a supportive friendship network more strongly for males ($\beta = .34, p<.001, \beta = .48, p<.001$, respectively) than females ($\beta = .23, p<.01, \beta = .36, p<.001$, respectively). By contrast, a supportive close friendship facilitated a constructive coping style slightly more strongly for females ($\beta = .35, p<.001$) than males ($\beta = .30, p<.001$). Interestingly, a supportive close friendship was weakly associated disengaged and externalising coping amongst girls ($\beta = .12, p<.05$) but not amongst boys ($\beta = -.04, p>.1$).

A multiple groups analysis tested a difference in model fit between adolescents reporting low perceived family support and those reporting high family support. Participants were assigned to a high family support group (N = 219) or low family support group (N = 190) based upon median MPSSS-Family subscale scores. An unconstrained model fit the data well across groups (CMIN/DF = 1.90, $p<.001$, RMSEA = .05, CFI = .92, GFI = .84, AGFI = .80, AIC = 1149.26). Measurement invariance was supported by a non-significant chi-square difference test in measurement weights ($\Delta \chi^2 = 20.83 (19), p>.1$) but no difference between structural paths to resilience based on family support was found ($\Delta \chi^2 = 5.82 (6), p>.1$), indicating invariance across groups. Although measurement variation across groups hinted at the influence of un-assessed variables, findings suggest that close friendships exert their protective effects through similar mechanisms regardless of perceived family support.

A multiple-groups analysis examined a hypothesized difference in model fit between early (N = 222) and late (N = 187) adolescents. An unconstrained model fit the data well across groups (CMIN/DF = 1.88, $p<.001$, RMSEA = .05, CFI = .93, GFI = .84, AGFI = .80, AIC = 1143.55). Analysis indicated both metric invariance ($\Delta \chi^2 (19)=22.75 p>.1$) and structural
invariance ($\Delta \chi^2 (4) = 2.42, p > .1$), suggesting no difference in the mechanisms thorough which close friendships facilitates resilience between early and late adolescence.

Finally, multiple-group analyses compared model fit across adolescents reporting high IOS ($N = 202$) or low-IOS ($N = 200$) with their closest friend, based upon median IOS scores. An unconstrained model fit the data well across groups (CMIN/DF = 1.81, $p < .001$, RMSEA = .05, CFI = .93, GFI = .85, AGFI = .81, AIC = 1109.91). Analysis demonstrated both metric invariance ($\Delta \chi^2 (19) = 21.74, p > .1$) and structural invariance ($\Delta \chi^2 (6) = 9.41, p > .1$), suggesting no difference in the mechanisms through which close friendships facilitates resilience according to IOS with the close friend in question.

**Discussion**

**Summary of key findings**

In focusing upon the hypothesized potential benefits of a single supportive close friendship for facilitating resilience in socioeconomically vulnerable adolescents, the findings reported in this chapter represent a novel contribution to the literature. The findings here support this hypothesis, as perceived close friendship quality was associated with higher levels of resilience. The high perceived quality of these adolescents’ closest friendships was reflected in their assessments of their wider peer networks and families as fairly supportive. Overall, participants’ closest friendships were generally experienced as close, highly supportive and fulfilling, even as these friendships varied in integration into the self and daily life. Most participants’ closest friendships were gender-congruent. For these adolescents, reliability is not necessarily a key component of supportive close friendships.

The research further extended the literature by identifying routes through which this protective relationship might operate. Examination of individual mediational pathways revealed that the positive relationship between a supportive close friendship and resilience could be partially explained by how that friendship facilitated a supportive friendship network, relational interdependent self-construal, effort, constructive coping and a decreased use of disengaged and externalising coping and persistent self-efficacy. These findings were then used to develop a structural model which considered the interrelationships between these constructs in a novel analysis of how a single supportive close friendship may facilitate resilience.
As demonstrated through a fully mediational Adolescent Friendship and Resilience Model (Figure 3.3), a single close friendship generally supports resilience by facilitating a constructive coping style, encouragement of effort, utilisation of an extended supportive friendship network, and a reduction in disengaged and externalising coping. Interestingly, close friendship support was not significantly associated with disengaged and externalising coping amongst boys, although this coping style was associated nearly twice as powerfully with lowered resilience amongst boys than girls. The Adolescent Friendship and Resilience Model fit equally well across early and late adolescence. Despite a hypothesis that the friendships of adolescents from a more supportive family background would more effectively promote resilience, perceived family support showed no moderating effect. Furthermore, although IOS directly moderated the relationship between friendship and resilience, this effect did not persist across to the model, suggesting complex roles for self-identification with a close friend.

Close friendships and psychological resilience processes

This study revealed a significant, positive relationship between perceived close friendship quality and psychological resilience, suggesting a supportive close friendship may indeed function as a protective factor facilitating resilience. This finding represents a key empirical contribution to a resilience literature which has mainly focused upon peer relationships as risk factors or omitting such relationships from consideration. Indeed, elsewhere, resilient adolescents themselves report valuing the consistent support of significant peers, with friendships providing a unique sense of belonging, camaraderie and acceptance (Everall, Altrows & Paulson, 2006). Morrison and colleagues (2006) furthermore suggest that peers may be a source of strength in promoting positive educational trajectories in a school setting by focusing on aspects such as friends’ feelings and behaviours in school, and integration into a young person’s family life. The present findings support this view that close, supportive friendships have resilience-building effects in vulnerable young people.

By contrast, Tiet, Huizinga and Byrnes (2010) conceptualised friendships only in terms of involvement with delinquent peers, generating an unsurprising conclusion that increased peer involvement predicted negative outcomes. Friendships feature in Hunter and Chandler’s (1999) conceptualisation of resilience amongst inner-city adolescents, but counter to the current study’s findings, researchers suggested that resilience for their participants meant not having an ability to connect with or trust significant others as part of a more defensive and “less optimum” style of resilience. The present findings pose initial
challenges to those conclusions by demonstrating a significant, positive relationship between psychological resilience and meaningful, warm, supportive close friendships in a similar participant group, suggesting the need for further research in this area.

Meanwhile, the Adolescent Resilience Model (Haase, Heiney, Ruccione & Stutz, 1999) does not specifically include friendships. The absence of significant peer relationships in a participant-driven model, derived partially through phenomenological focus groups, is intriguingly counter to present findings. Adolescents in that study had all experienced cancer, a quite different risk factor from the socioeconomic vulnerability explored in the present sample. The findings here encourage speculation regarding whether the omission of peer relationships is an artefact of the study or a comment on the generalizability of friendships’ protective functioning to different contexts such as medical risk. In a health-promotion context, the Adolescent Resilience Framework includes peer relationships within the context of community factors. This framework, however, conceptualised adolescent friendships as a risk factor with potential negative implications for resilience and subsequent health behaviours (Rew & Horner, 2003). The present findings suggest that the framework should also acknowledge the potential resilience-promoting (and, perhaps, health-promoting) resources of supportive peer friendships in effecting change.

**An Adolescent Friendship and Resilience Model of socioeconomically vulnerable boys and girls**

This analysis extended the current resilience literature by exploring the mechanisms mediating the relationship between friendship and resilience: that is, **how** friendship may exert a protective effect. The Adolescent Friendship and Resilience Model shows that a supportive close friendship is associated with resilience amongst socioeconomically vulnerable adolescents through promotion of constructive coping, encouragement of effort, utilisation of an extended supportive friendship network, and reduction of disengaged and externalising coping. The model fit well for both genders, although it was more predictive for boys than for girls. Intriguingly, findings suggested that reliability of the alliance within the friendship was unimportant to perceived close friendship quality.

The promotion of a constructive coping style, characterised by social support-seeking and active engagement with a problem, was the most powerful way in which participants’ supportive close friendships supported resilience. Importantly, this was true for both girls’ and boys’ friendships. Although focus upon the externalisation-promoting or deviance-
training aspects of boys’ friendships (e.g. Bukowski & Adams, 2005) has been valuable for theory development and understanding empirical risk, it is imperative to acknowledge the psychological strength promoted by boys’ supportive friendships. Effective coping is a key element of resilience (Ahern, 2006; Campbell-Sills, Cohan, & Stein, 2006; Haase, Heiney, Ruccione & Stutzer, 1999). Given that young people’s closest supportive friendships are promoting resilience through positive coping, theorists and practitioners should include supportive peer relationships within their assessments of psychosocial resources, and consider whether support of these relationships might be a useful target for interventions.

Use of a constructive coping style had similarly beneficial effects upon resilience across genders, but there were notable differences in both the promotion of a disengaged and externalising coping style and the impact of this type of coping upon resilience. A disengaged and externalising coping style was significantly more deleterious for psychological resilience amongst boys than amongst girls – indeed the effect size here was nearly double. This is perhaps not unexpected given previous findings of antisocial behaviour training amongst peers (Bukowski & Adams, 2005), the effects of linkages with delinquent peers (Dishion, Nelson & Yasui, 2005; Tiet, Huizinga & Byrnes, 2010), and males’ more frequent coping through the employment of high-risk behaviours compared to females’ increased internalisation of negative feelings (Brack, Brack & Orr, 1994). It is important to not simply consider the occurrence of such a coping style, but its appropriateness to a specific problem and its persistence over time. In measured amounts such a coping response may be entirely appropriate: for example, early, time-limited use of a defensive coping style may facilitate later use of courageous coping, involving optimistic, sustained efforts to deal with problems (Haase, Heiney, Ruccione & Stutzer, 1999). However, prolonged use of a coping style which includes normatively-undesirable behaviours such as disengagement, substance use, denial and self-blame may not only work against promotion of resilience. Moreover, in social and educational contexts, it may be particularly disruptive to the achievement of goals such as academic success.

Interestingly, amongst boys’ supportive friendships, there was no significant relationship between the quality of their closest friendship and the promotion of disengaged and externalising coping. By contrast, amongst girls’, supportive close friendships were weakly associated with a disengaged and externalising coping style which included behaviours likely to be unproductive in the long-term, such as substance use. A small effect size encourages cautious interpretation, but the conclusion concurs with previous findings that
girls’ close friendships may be characterised by a degree of problematic co-rumination (Rose, 2002). These results implicitly challenge previous findings however, by suggesting that those friendships which boys deem supportive – indeed, their closest friendships – are not necessarily those which tend to promote additional risk.

The complex relationship between friendship, resilience and disengaged and externalising coping suggests that adolescents may perceive benefits – particularly social benefits in the form of satisfaction with their closest friendship – from normatively negative coping responses, even when these have negative implications for resilience. Particularly when used with other, more constructive responses, the occasional promotion of disengaging behaviours does not necessarily preclude the development of resilience, even if it does present a significant challenge. The research offers a compelling argument for treating adolescent relationships on their own terms: recognising their strengths, but also acknowledging that qualities which may be externally assessed as limitations may be perceived positively by young people. Although some promotion of maladaptive coping was found, the overarching message is that this was not consistently related to close friendship quality, whilst supportive close friendships was consistently associated with a constructive coping style which strongly facilitated resilience across genders.

Friendship network support facilitated by a single close friendship was only associated with resilience for females, suggesting a disjunction between the effects of a single close friendship and a wider group. This may be related to differences in how males and females view the composition of their friendship groups (Foels & Tomcho, 2009), or the wider context of increasing vulnerability for boys when their friendships promote antisocial behaviour and maladaptive coping. It may also relate to the participants’ number of friends or specific group qualities, neither of which were measured in detail in this questionnaire. Supportiveness of a wider friendship network is also tied to social skills, peer acceptance, peer rejection and victimization, which have their own effects upon outcomes (Dishion, 2005; Luthar, 1991). Further research might examine these questions in more detail.

These young people’s close friendships were also associated with resilience through an effortful self-efficacy. This is a powerful implication in light of previous findings linking self-efficacy to academic resilience (Martin & Marsh, 2008) and successful peer interventions to promote self-efficacy in health contexts (Turner, 1999). The specificity of effort as a mechanism for exerting a protective effect, as opposed to a general self-efficacy, suggests that a close friendships uniquely supports successful effort in this age group and that effort
is key to responding to the types of challenges typically seen at this developmental stage, during which major decisions about participants’ lives are still largely taken by adults acting on their behalf. It is also noteworthy that analyses revealed that resilience, for this age group, is slightly different than the conceptualisation offered by the Resilience Scale. Existential aloneness – recognition that some life tasks are faced alone – was not related to the other dimensions of resilience for this age group. It may not be appropriate or desirable for adolescents to feel that they should face important life tasks on their own, even as they move towards the ability to do so. Embedded within a social context, this particular aspect of resilience and a more general type of self-efficacy may be more applicable later in life, or may cluster with different dimensions of positive adaptation than are assessed here. Further investigation is warranted, particularly considering the finding that persistence partially mediated the relationship between perceived close friendship quality and resilience when considered alone but not within the context of the structural model.

How do friendships not facilitate resilience?

Not all of the hypothesized mediating mechanisms played an explanatory role. Perceived stress, self-esteem, general self-efficacy and a specifically initiative-type of self-efficacy did not mediate the relationship between friendship and resilience. Although RISC and persistence showed mediational effects in isolation, these explanatory effects were not retained within the model. Similarly, no moderating effects on the model of age, IOS and perceived family support were found. This section examines the implications of these non-significant effects, with the exception of self-efficacy, discussed in the preceding section.

Perceived stress neither related to close friendship quality nor mediated the relationship between friendship and resilience. Although stimulating companionship is valued by these adolescents and stress-reducing activities may be key components of many close friendships (Masten, 2005), this did not translate to reduced perceived stress. Stimulating companionship is but one aspect of friendship quality (Mendelson & Aboud, 1999). The changing nature of social relationships may itself be a source of stress. The chronic stress potentially presented by participants’ social contexts (Zimmerman & Brenner, 2010) or stressors encountered may not be amenable to persistent reduction through supportive close friendships, even when these friendships are fun and diverting.

Self-esteem is highly related to resilience but, intriguingly, did not mediate the relationship between a supportive close friendship and resilience. Although self-esteem was unrelated
to perceived close friendship quality, it nevertheless related to resilience. Whilst self-esteem remains a key component of resilience development, the supportiveness of a close friendship is neither associated with self-esteem itself nor contributes to resilience through this route amongst these socioeconomically vulnerable adolescents. The relationship between friendships and self-esteem is exceedingly complex at this developmental stage and with demonstrated vulnerability. Resilient young people do not necessarily demonstrate higher self-esteem (Dumont & Provost, 1999). High-risk adolescents’ own conceptualisations of resilience may focus less on having a strong sense of self-worth, and more on surviving: inoculating themselves against hurt by disconnecting, distrusting and building a sense of invincibility (Hunter & Chandler, 1999). Self-esteem itself may be multi-faceted in source and effect: although negatively-experienced peer interactions may have negative effects on peer-oriented self-esteem and subsequent externalisation (DuBois et al., 2002), positively-experienced peer interactions may not have measurably positive effects on general self-esteem and, therefore, on resilience through this path.

This study presented the first known assessment of relational-interdependent self-construal in resilience promotion. Although RISC partially mediated the relationship between close friendship quality and resilience when considered independently, it did not predict resilience within a model alongside other proposed mediators, despite being associated with supportive close friendships. Similarly, IOS did not moderate the structural model. Although supportive close friendships encourage construction of self-concept in relational terms, defining themselves in light of valued social roles, such a self-concept does not straightforwardly relate to increased resilience. This may relate to the finding that self-esteem does not mediate the relationship between perceived close friendship quality and resilience. It is insufficient for an adolescent to develop a self-concept defined by significant relationships; he or she must use this to promote effective coping behaviours, construct a positive view of the self, and strengthen psychological resources.

Although there are developmental aspects to many of the constructs examined within the model, multi-group analysis revealed no differences between younger and older adolescents. Thus, whilst resilience does have developmental components, the pathways examined here are not particularly sensitive to the shift from early to late adolescence – nor, implicitly, by the transition from secondary school to college.

Findings suggested that amongst these socioeconomically vulnerable adolescents, the perceived supportiveness of the family environment did not affect the nature or strength of
the protective functions of their single closest friendship. The literature in this area is mixed, with some maintaining that a supportive home environment begets further social support (Masten, 2001). Findings suggest this need not be the case when applied to the ability to recruit, maintain and benefit from the support of a single close friendship. Whilst social skills, especially those developed at home, undoubtedly play some role in the relationship between social support and resilience, there is a distinct protective effect of supportive peer friendships which is available to these vulnerable adolescents regardless of perceived family support, and regardless of whether they have ten close friends or “merely” one. This may provide some optimism for educators, practitioners and policymakers targeting resilience-promotion in adolescents coming from difficult family backgrounds or who do not presently have good family relationships. The power of a supportive peer relationship in promoting resilience regardless of family support should encourage development of peer support programmes and informal fostering of existing peer relationships, even (or especially) when perceived family support is not forthcoming.

**Limitations**

Model fit was good given the novelty of theory development and high model complexity. Greater predictive effects and stronger model fit may have been demonstrated, however, with a sample more varied in resilience and close friendship quality. Not unexpected in an assessment of a participant’s closest friendship, perceived close friendship quality was consistently high. It may be unreasonable to expect participants’ closest friendships to be of subjectively, self-assessed poor quality. The presented model was generally robust with good predictive value, but greater variability in friendship quality may have improved fit. Future studies might explore refine and confirm the model with larger samples. Future research might compare poor- and high-quality friendships, encompassing both risk- and protective-factors. The focus here, however, was in uniquely exploring whether and how participants’ most valued friendships might promote resilience. These adolescents also demonstrated generally low resilience. Furthermore, the patterns of resilience promotion explicated here may differ for adolescents facing other risk factors, such as trauma or chronic illness. The way one experiences a particular risk factor is better addressed by a qualitative study which can be dialectically employed to examine what is unique and essential about an adolescent’s encounters with socioeconomic risk, as explored in Chapter 6, which can then be taken as a frame to consider intersections with other vulnerabilities (Greene & Caracelli, 1997). Future research might explore this possibility.
The present study offers novel insight into the causal processes behind social promotion of resilience, with a robust model in the hypothesized direction (friendship -> resilience) generating good cross-sectional understanding. The Adolescent Friendship and Resilience Model offers a framework which may be used to direct such longitudinal research, and itself adds to the resilience literature in its focus upon an underexplored protective mechanism. A pragmatic perspective on research methodology underscores the value of cross-sectional structural modelling methods for addressing the key concern within this thesis of identifying the possible inter-connected mechanisms of adaptation facilitated by close friendships (Greene & Caracelli, 1997). The creative, robust regression and modelling analyses used in the present study, and the large sample size which enabled sufficient statistical power to support these, are strengths of retaining this cross-sectional approach. However, a longitudinal study would better aid understanding of a causal role of supportive close friendships in resilience promotion and the pathways through which this may operate by being able to specifically address temporally-evidenced patterns of causation. Within an overarching paradigm of pragmatism, a longitudinal study can be sequentially employed to complement and extend the findings of the present cross-sectional study (Tashakkori & Teddlie, 1998). It is to this point that we turn in the next chapter.
CHAPTER 4

DO SUPPORTIVE ADOLESCENT FRIENDSHIPS PROMOTE RESILIENCE OVER TIME?

Introduction

Findings presented in Chapter 3 provided compelling cross-sectional evidence of a significant role of supportive close friendships in resilience promotion amongst socioeconomically vulnerable adolescents. The Adolescent Friendship and Resilience Model demonstrated that perceived close friendship quality was associated with greater resilience through the facilitation of effective, constructive coping, a supportive wider friendship network, greater effort and the suppression of disengaged and externalising coping behaviours. This represented a novel contribution to the literature by showing the potential transformative resources available to vulnerable young people through their current closest friendship, arguing for peer friendships to be more widely considered as a relational factor in resilience.

The next step in exploring the protective role of supportive close friendships in promoting resilience is a longitudinal investigation of this relationship. Whilst analyses offered robust support for the hypothesized directionality between friendship and resilience, longitudinal analyses would further demonstrate causality, although such a claim will always be limited within a non-experimental design (Masten & Cicchetti, 2010). Longitudinal analyses help to understand the persistence of any direct and indirect protective effects over time and over possible changes in the adolescents’ closest friendships. Further understanding would also be gained by a longitudinal test of mediational processes, exploring how close friendships might promote resilience over time. This investigation will facilitate further understanding of the processes and potentials of supportive close friendships in promoting psychological resilience in socioeconomically vulnerable adolescents.

How and when might a close friendship promote resilience over time?

Research has yet to explore the possible protective effects of a single supportive close friendship over time, and the longitudinal mediational mechanisms through which this
effect might occur. The significance of peer relationships to adolescent psychology highlights their potential import as a resilience-promoting process. Findings in Chapter 3 suggested that a supportive close friendship is an important mechanism to developing resilience amongst socioeconomically vulnerable adolescents, but whether and how this relationship operates over time requires further investigation.

Although the negative implications of problematic peer relationships are fairly well-established, the positive long-term implications of supportive friendships are largely unexplored. The resilience literature has largely focused on the observed risk-promoting effects of damaging peer networks. Youth involvement with delinquent peers, for example, is associated with further peer involvement and simultaneous pulling away from protective bonds with parents and teachers, to increasingly deleterious effect (Tiet, Huizinga & Byrnes, 2010). Rejection by normative peers may increase risk of initiating or entrenching relationships which reinforce patterns of antisocial behaviour, reflecting a cascade of negative effects (Masten & Cicchetti, 2010). Relevant research from the related area of post-traumatic growth suggests limited potential of peer relationships to exert a lasting protective effect. Whilst perceived social support has generally been associated with greater cross-sectional post-traumatic growth, there is little longitudinal evidence supporting this relationship, whether or not earlier growth is controlled (Helgeson & Lopez, 2010). One study, for example, reported that support-seeking from peers at baseline did not predict growth six years later (Wolchik et al., 2009).

However, social sources for growth may be most strongly linked to interpersonal dimensions of growth, with less impact on growth more generally (Helgeson & Lopez, 2010). Furthermore, earlier studies may have measured the multifaceted dimensions of support with insufficient detail. Investigation of the dynamic longitudinal interactions between individuals and peers is a relatively new field, with much still to be understood (Masten, 2005). Peer relationships may be more likely to show persistent protective effects in the context of sustained socioeconomic adversity – an adversity itself shared amongst participants – than in a context of trauma. The pervasiveness of effects is also unclear.

The protective mechanisms promoting resilience – and the mediational pathways supporting those mechanisms – vary in significance and quality over time with respect to developmental stage, biological age and the particular context of the individual at a given point (Harvey & Delfabbro, 2004; Luecken & Gress, 2010). Chapter 3 showed that effective coping, effortful self-efficacy and development of a relational-interdependent self-construal
were effective mediational mechanisms within a complex model of resilience-promotion accounting for interrelationships between these constructs. Persistence and the development of relational-interdependent self-construal also demonstrated significant mediational effects, albeit when considered independently of other constructs. It may therefore be expected that these pathways to resilience are maintained longitudinally. Although significant cross-sectional mediational effects were not observed for general self-efficacy, initiative, perceived stress and – intriguingly – self-esteem, these constructs might nonetheless play key roles which are only revealed over time. The full array of measures assessed at T1 (except self-coherence, which showed poor internal reliability) was therefore included at T2.

One additional hypothesized mediator, emotional intelligence, was introduced at T2. The importance of constructive coping suggested that a particular strength of supportive close friendships might be to develop an emotional intelligence which was then useful in coping with an array of challenges. Emotional intelligence (EI) describes individuals’ adaptive interpersonal and intrapersonal emotional skills and competencies. These are conceptualised as a combination of emotional appraisal and expression, emotional regulation, and utilisation of emotion in problem solving, with impact on mental health and performance outcomes (Davies, Lane, Devonport & Scott, 2010).

Aspects of friendship, self and social context may affect the strength or direction of the proposed relationship between close friendship quality and resilience. The impact of gender upon resilience development (e.g., Rew & Horner, 2003), reinforced by findings in Chapter 3, suggested that gender may moderate the longitudinal relationship between close friendship quality and resilience. The inclusion of participants ranging in age from early adolescence to late adolescence in the sample warrants consideration of age as a moderator, as mechanisms may change over adolescence.

Additionally, an adolescent’s closest friend may change over time, and this process may itself be a source of stress or pose increased vulnerability if the loss of this friendship is reflective of the adolescent becoming more socially excluded or victimised (Nishina, Juvonen & Witcow, 2005). There arises, then, a question of whether the maintenance of a particular friendship is required in order to see later benefits from that friendship, or alternatively whether the earlier supportive effects of a friendship will survive that friendship’s evolution, dissolution or demise by being included in the self. The
consideration of inclusion of the other in the self and of the constancy of friendship
selection as moderators helps to address this.

Challenges in longitudinal resilience research

Aside from concerns generic to longitudinal research, such as reducing participant attrition,
there are particular challenges to longitudinal studies of resilience. It is unclear when
certain developmental aspects to gender differences in vulnerability and adaptation might
emerge (Meyerson, Grant, Carter & Kilmer, 2011) – such as the gender differences in
resilience-promoting coping facilitated by supportive friendships revealed in Chapter 3.
Evidence from lifespan approaches increasingly suggests that resilience is a non-linear
process with individuals inconsistently demonstrating resilience as they move through
subsequent developmental stages (Luecken & Gress, 2010). Positive adjustment in young
people may vary across time as individuals work through particular challenges, undergo
developmental transitions or show delayed manifestations of adaptation or deterioration.
Interestingly, adjustment may furthermore be domain-specific (e.g., school achievement)
rather than global (Vanderbilt-Adriance & Shaw, 2008). Domains of potential competence
and challenge themselves vary across development, e.g. an emerging domain of romantic
competence in adolescence and onwards into adulthood (Masten & Cicchetti, 2010).

The resilience literature is largely silent on the processes through which protective
mechanisms may exert their influence over time, although this is changing (Vanderbilt-
Adriance & Shaw, 2008). Few studies have examined longitudinal interrelations between
predictors of resilience or have looked at how resilience may subsequently promote the
development of protective resource in a feedback loop (Tiet, Huizinga & Byrnes, 2010).
Indeed, not all longitudinal studies of resilience control for earlier growth (Helgeson &
Lopez, 2010). Few studies in the related area of post-traumatic growth have utilised a
prospective design or included control groups (Meyerson, Grant, Carter & Kilmer, 2011),
although one may argue about what constitutes a control group in this line of research. This
poses intriguing theoretical questions about how an interrelated web of resilience-
promoting processes changes over time, and methodological challenges in selecting
appropriate time intervals for assessment in the absence of well-established norms.
Might longitudinal processes differ for more or less resilient youth?

Some assert that as risk begets risk, so too “competence begets competence” as adaptation in one domain or stage of life becomes a strength from which later competencies develop (Masten & Cicchetti, 2010, pp. 492). Few studies have incorporated concepts of resilience trajectory into their analyses, however (Vanderbilt-Adriance and Shaw, 2008). Analytical approaches incorporating a developmental, process-oriented conceptualisation of resilience might include controlling for prior levels of assessed psychological constructs or exploring their continuity or change over time (Masten & Cicchetti, 2010).

Of course, a particular challenge of cross-sectional research is that it is impossible to know where on their individual resilience-trajectories specific participants lie. Intervention efficacy will be increased by greater understanding as to how such trajectories operate and how they sit within developmental timelines (Masten & Cicchetti, 2010). Young people at higher risk tend to have lower levels of available protective resources. When they are exposed to protective factors, these adolescents are likely to demonstrate lower and more domain-specific expressions of resilience than otherwise expected, as protective mechanisms may be unequally effective across all levels of risk (Vanderbilt-Adriance & Shaw, 2008). One may expect unequal development of resilience-promoting psychological resources – including supportive relationships – in low-resilience adolescents. A particular advantage of the current study is the ability to compare resource-development of low-, moderate- and high-baseline resilient socioeconomically vulnerable adolescents.

Introducing the present study

This chapter aims to explore how the immediate protective effect of a single, supportive close friendship may persistently promote resilience amongst socioeconomically vulnerable UK adolescents. Participants were drawn from the wider pool of participants from the cross-sectional study at T1. A one-year assessment interval was employed. The main theoretical consideration for this time point was to enable significant changes in psychological resilience to emerge, as a shorter assessment might be insufficient to capture meaningful growth. Methodological considerations were that this assessment interval was easier for school coordinators to manage within the school term schedule, and was less likely to overburden participants completing an array of measures. The time interval further allowed for the collection of interview data between time points.
Firstly, using a combination of correlation and regression analyses, analysis aims to:

(1) establish whether a supportive close friendship is associated with later resilience in socioeconomically vulnerable youths, controlling for prior resilience, hypothesizing that a significant relationship;

(2) test the hypothesized mediational roles of self-esteem, coping, self-efficacy, a supportive friendship network, relational interdependent self-construal, perceived stress, and emotional intelligence. It was expected that cross-sectional mediations would hold longitudinally, whilst mediational effects which were not observed cross-sectionally (e.g., self-esteem) but become evident over time; and

(3) test hypothesized moderating roles of theoretically meaningful variables. These variables are: gender, age, IOS at T1 and selection of the same close friend at T1 and T2. Moderating effects of gender were expected because of moderating effects on the model in Chapter 3. Age was examined to test applicability across early and late adolescence. IOS and friend selection were included to address whether the persistence of any observed protective effect was dependent upon the maintenance of that friendship over time.

As in Chapter 3, the study uniquely focuses upon a single, supportive close friendship as a source of support and resilience-promotion, distinct from adolescents’ wider friendship networks. The research therefore aims to present a rich, nuanced and contextualised understanding of the proposed protective effects of a single supportive close friendship, building upon the knowledge developed in Chapter 3. It explores this observed web of protective effects over time, and contextualises the enriching effects of this relationship within a consideration of these adolescents’ troubled, uncertain and complex pathways towards emergent resilience.

**Method**

**Ethics**

Ethical approval for the longitudinal study was obtained from the Institute of Psychological Sciences, University of Leeds (see Appendix 1) prior to commencement of data collection. As at T1 (see chapter 3), informed consent for adolescents to participate was obtained from administrators in participating schools and colleges wherein completion of the
questionnaire by the students denoted their consent for responses to be used in the research. At the follow-up administration, participants were reminded of the anonymity of their responses, their ability to leave questions unanswered, and their right to withdraw from the study at any time without providing a reason. Further details of the ethical considerations running throughout this doctoral research are considered in Chapter 2.

**Design**

A longitudinal correlational design employed regression analyses to assess a series of hypothesized causal relationships of perceived close friendship quality upon psychological resilience and suggested mediating mechanisms: self-esteem, self-efficacy, RISC, perceived stress, a perceived supportive friendship network, and coping styles. The impact of moderating contextual variables of the hypothesized longitudinal relationship between friendship and resilience was analysed using multiple regression analyses. These variables were: gender, age, IOS at T1, and the selection of the same friend at T1 and T2.

**Recruitment**

As planned within the thesis design and in coordination with participating schools and colleges, the longitudinal study aimed to examine the same participant pool as the cross-sectional study. Consequently, the 3 secondary schools and 2 colleges in South and West Yorkshire used at time 1 (T1) of the Friendship and Resilience Questionnaire study were approached for follow-up survey administration at 1 year, between February and June 2011. College B chose not to participate because of the school coordinators’ other commitments. School coordinators at the remaining institutions were asked to arrange survey administration with the same students as at T1. As no schools were able to secure recruitment from entire year groups at T1, follow-up required tracking T1 participants, bearing in mind that no identifying details had been collected by the researcher. Because class composition had changed over the year in each of the secondary schools, coordinators used schedules from previous administration sessions to maximise capture of previous participants. To aid them in selecting classes containing last years’ participants, coordinators were given a calendar of the T1 administration to enable identification of the year group classes which had participated at T1. Administrators were also provided with the project passwords (but not survey responses) provided by the students at T1 which indicated the first 3 letters of their surname and their birthdate, providing some guidance as to which students had participated initially. The survey was then administered during lessons to groups which contained as many T1 participants as possible. In order to facilitate
class cohesion, rather than selecting out T1 students at the point of T2 survey administration, all students in the follow-up lesson groups were invited to fill out the questionnaire (using the same consent procedures as at T1) leaving the researcher to extract the responses of T1 participants from the sample. The coordinator at College A was unable to secure in-class survey administration due to timetabling constraints. She instructed students to complete the follow-up survey in their own time. Computer facilities were available at the college. Some of the students participating at T1 had, however, left the course in the interim. Finally, students at T1 had been given the option of providing an email address for follow-up. T1 participants from colleges and the community who provided an email address invited via email to participate. There was consequently some non-selective attrition because of constraints in survey administration at each of the educational institutions, despite the best efforts of the researcher and school coordinators. The researcher subsequently extracted the responses of T1 participants from the wider group participating at T2 by comparing project passwords and dates of birth, retaining only those participants who had participated at both time points.

Participants

121 adolescents (55 males, 65 females, 1 unknown) from 2 secondary schools and 1 college in Yorkshire participated in the longitudinal Friendship and Resilience Questionnaire study. Participants were aged between 11 and 19 years at T1 ($M=13.73$, $SD=2.00$) and between 12 and 20 years at T2 ($M=14.83$, $SD=1.97$). Table 4.1 provides age and gender composition for the sample at each time point for each educational institution.

<table>
<thead>
<tr>
<th>Gender</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>College A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Unknown</td>
<td>Male</td>
</tr>
<tr>
<td>Total N</td>
<td>29</td>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>31</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>Age $M$</td>
<td>11.59</td>
<td>12.70</td>
<td>14.90</td>
<td>16.00</td>
</tr>
<tr>
<td>SD</td>
<td>0.50</td>
<td>0.46</td>
<td>0.87</td>
<td>0.89</td>
</tr>
</tbody>
</table>
Overall, 68.6% of the adolescents reported that they were of White British descent and 2.5% were another White background. 14.2% of participants were Asian or British Asian and 10.1% were Black or Black British. 2.4% were of mixed background. The remaining participants identified as Chinese, Other or failed to specify.

**Materials**

With a few noted exceptions, the measures employed were identical across time points. Details of the Questionnaire administered at T1 are provided in Chapter 3. The Questionnaire at T2 was composed of 10 psychometric scales, 3 free-text items, 1 item on the importance of different mode of interaction, and 1 item on preferences for support-seeking. One item on utilised modes of interaction within the friendship was removed at T2. At each time point, measures on close friendship quality and social support were counterbalanced with measures on self-psychology characteristics.

**Measures Unique to the Questionnaire.** Participants at T2 rated the importance of interactions across a range of modalities to their friendship including face-to-face interactions, social networking sites, telephone, email, texting, and others. Basic participant demographic information collected included age, gender, and length of friendship with the selected friend. Ethnic background information was collected at T2. Three free-text items followed up from those used at T1. These 3 free-text items concerned: (1) how their closest friend may have helped them through a difficult time in the last year; (2) how their friendship with their closest friend may have changed in the time they have known each other; and (3) whether their friendship has shaped who they are. A full copy of the Friendship & Resilience Questionnaire (Adolescent Version 1) is available in Appendix 2.

**Psychometric Scales.** Ten psychometric scales were employed at T2: the McGill Friendship Function Questionnaire, which measures self-reported close friendship quality along six dimensions (Mendelson & Aboud, 1999); the Multi-dimensional Perceived Social Support Scale (MPSSS) looking at perceived social support available from family, friends and a significant other (Zimet et al., 1988); the Relational Interdependent Self-Construal (RISC) Scale (Cross, Bacon & Morris, 2000); the Inclusion of the Other in the Self (IOS) scale (Aron, Aron & Smollan, 1992); the Brief COPE, looking at 14 distinct coping reactions (Carver, 1997); the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983); the 12-item General Self-Efficacy Scale (Bosscher & Smit, 1998); the Rosenberg Self-Esteem Scale
(Rosenberg, 1989); and the Resilience Scale (Wagnild, 2009) measuring self-reported resilience along five dimensions was again used as an outcome measure of psychological resilience. Further information about these scales may be found in Chapter 3.

Some changes from T1 administration are noted. The Special Person subscale of the Multidimensional Perceived Social Support Scale was specified at T2 to apply to the participant’s closest friend, whereas assignment was open-ended at T1. The 3-item Sense of Coherence Scale (Lundberg & Peck, 1995) was omitted from T2 administration because of its poor reliability at T1. Finally, a measure of emotional intelligence (Davies, Lane, Devonport & Scott, 2010) was added because interim analysis of T1 data suggested that a coping style promoting effective cognitive- and emotion-focus engaged coping may mediate the relationship between supportive friendships and resilience. Developing emotional intelligence was thought to be potentially related to this finding. The Brief Emotional Intelligence Scale (BEIS-10) is a psychometrically robust self-assessment using a 5-point Likert style scale, with one reverse-scored item, which assesses strengths of interpersonal and intrapersonal emotional competence and functioning including recognition, appraisal, expression and utilisation of one’s own and others emotions. Items include “I seek out activities that make me happy” and “I can tell how people are feeling by listening to the tone of their voice,” (Davies, Lane, Devonport & Scott, 2010; see Appendix 3).

Using the longitudinal dataset, internal reliability of each psychometric scale in the Friendship and Resilience Questionnaire was assessed at T1 and T2. Each scale was also intercorrelated longitudinally. Table 4.2 displays Cronbach’s alpha for each scale at each time point and the corresponding longitudinal Pearson’s correlation. Cronbach’s alpha for each scale was calculated using unstandardised scores and assessed against established guidelines (Field, 2005). Reliability of IOS was not calculated as it is a one-item measure. Alphas were calculated for sub-scales of the Brief COPE as the scale measures a constellation of distinct coping behaviours rather than a unidimensional construct (Carver, 1997). Longitudinal intercorrelations of coping style are based on the sub-scale groupings derived from exploratory and confirmatory factor analyses at time 1 and time 2. Because of the changes to the use of the MPSSS-Special Person sub-scale, Intercorrelations of this scale and, by extension, total MPSSS scores are not reported. As EI was only assessed at T2, internal reliability at T1 and longitudinal intercorrelation are omitted.
Table 4.2.

Intercorrelations and internal reliabilities of measures across T1 and T2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Internal Reliability</th>
<th>Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \alpha ) (T1)</td>
<td>( \alpha ) N(T1)</td>
</tr>
<tr>
<td>Resilience</td>
<td>.94</td>
<td>119</td>
</tr>
<tr>
<td>FF Total</td>
<td>.98</td>
<td>99</td>
</tr>
<tr>
<td>Self-esteem†</td>
<td>.83</td>
<td>120</td>
</tr>
<tr>
<td>IOS</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>General self-efficacy</td>
<td>.82</td>
<td>119</td>
</tr>
<tr>
<td>- Effort</td>
<td>.80</td>
<td>120</td>
</tr>
<tr>
<td>- Initiative</td>
<td>.81</td>
<td>121</td>
</tr>
<tr>
<td>- Persistence</td>
<td>.78</td>
<td>121</td>
</tr>
<tr>
<td>Perceived stress†</td>
<td>.69</td>
<td>121</td>
</tr>
<tr>
<td>EI</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RISC</td>
<td>.83</td>
<td>113</td>
</tr>
<tr>
<td>MPSSS– Total</td>
<td>.95</td>
<td>114</td>
</tr>
<tr>
<td>- Family</td>
<td>.92</td>
<td>118</td>
</tr>
<tr>
<td>- Friends</td>
<td>.95</td>
<td>118</td>
</tr>
<tr>
<td>- Special Person</td>
<td>.91</td>
<td>118</td>
</tr>
<tr>
<td>Constructive coping</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Active coping</td>
<td>.64</td>
<td>121</td>
</tr>
<tr>
<td>- Planning</td>
<td>.48</td>
<td>120</td>
</tr>
<tr>
<td>- Positive reframing</td>
<td>.67</td>
<td>120</td>
</tr>
<tr>
<td>- Acceptance</td>
<td>.42</td>
<td>119</td>
</tr>
<tr>
<td>- Humour</td>
<td>.47</td>
<td>121</td>
</tr>
<tr>
<td>- Religion</td>
<td>.70</td>
<td>121</td>
</tr>
<tr>
<td>- Using emotional support</td>
<td>.53</td>
<td>121</td>
</tr>
<tr>
<td>- Using instrumental support</td>
<td>.37</td>
<td>121</td>
</tr>
<tr>
<td>- Self-distraction</td>
<td>.41</td>
<td>121</td>
</tr>
<tr>
<td>Disengaged and externalising coping</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Behavioural disengagement</td>
<td>.56</td>
<td>121</td>
</tr>
<tr>
<td>- Self-blame</td>
<td>.48</td>
<td>121</td>
</tr>
<tr>
<td>- Substance use</td>
<td>.85</td>
<td>121</td>
</tr>
<tr>
<td>- Denial</td>
<td>.70</td>
<td>121</td>
</tr>
<tr>
<td>- Venting</td>
<td>.48</td>
<td>121</td>
</tr>
</tbody>
</table>
Measures were generally moderately intercorrelated across time points. Friendship network support was only weakly intercorrelated longitudinally. The measures generally achieved satisfactory to excellent levels of internal reliability at T1 and T2. Internal reliability scores of Brief COPE sub-scales at T1 were moderate, but within each sub-scale the 2 component items significantly intercorrelated. Individual sub-scales were also significantly intercorrelated longitudinally. Although Cronbach’s alphas for the scales if individual items were deleted suggested that some small improvements in internal reliability could be achieved with select item deletion from the PSS at T1 and T2, RISC at T1 and SES at T2, no changes were made as these improvements were negligible. As in Chapter 3, individual item scores were allowed to be missing from reliability analysis to obtain accurate reliabilities. Substitution of missing item scores for individual participants’ sub-scale or scale mean scores (as appropriate) was subsequently performed for use in further analyses (Schafer & Graham, 2002).

Procedure

At each time point, survey administration was preceded by a brief presentation by the researcher introducing the study, ensuring understanding of key terms, and explaining ethical information. All participants received information sheets which were largely identical across time points. Chapter 3 reports details of T1 survey administration. In schools and colleges at T2, administration took place in classrooms using computer clusters during PHSE, English or science lessons of 45-90 minutes with the researcher and a research assistant present to clarify items as requested by the students. Participants were provided with debriefing sheets including contact information for support organisations and instructions on how to withdraw retroactively from the study (see Appendix 4). Participants were encouraged to share their experience in the research process with a trusted adult.

Analysis and Results

Descriptive statistics

This section reports longitudinal descriptive statistics participants’ reported close friendships. Paired-sample t-tests were additionally used to determine whether assessed variables demonstrated change over time; only significant changes are reported.
Table 4.3.

Means and standard deviations of assessed variables at T1 and T2

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1 M</th>
<th>T1 SD</th>
<th>T2 M</th>
<th>T2 SD</th>
<th>Δ M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>122.75</td>
<td>25.57</td>
<td>121.47</td>
<td>23.17</td>
<td>-1.28</td>
</tr>
<tr>
<td>FF Total</td>
<td>7.38</td>
<td>1.53</td>
<td>7.45</td>
<td>1.33</td>
<td>0.07</td>
</tr>
<tr>
<td>Self-esteem†</td>
<td>22.22</td>
<td>4.97</td>
<td>23.80</td>
<td>5.17</td>
<td>1.58***</td>
</tr>
<tr>
<td>IOS</td>
<td>5.36</td>
<td>1.53</td>
<td>5.36</td>
<td>1.51</td>
<td>0.00</td>
</tr>
<tr>
<td>General self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Effort</td>
<td>17.58</td>
<td>3.83</td>
<td>17.87</td>
<td>3.71</td>
<td>0.29</td>
</tr>
<tr>
<td>- Initiative</td>
<td>10.25</td>
<td>2.74</td>
<td>10.33</td>
<td>3.00</td>
<td>0.08</td>
</tr>
<tr>
<td>- Persistence</td>
<td>13.03</td>
<td>3.49</td>
<td>13.10</td>
<td>3.65</td>
<td>0.07</td>
</tr>
<tr>
<td>Perceived stress†</td>
<td>39.90</td>
<td>6.98</td>
<td>40.73</td>
<td>6.82</td>
<td>0.83</td>
</tr>
<tr>
<td>Emotional Intelligence†</td>
<td></td>
<td></td>
<td>2.26</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>RISC</td>
<td>4.92</td>
<td>0.96</td>
<td>5.02</td>
<td>0.97</td>
<td>0.08</td>
</tr>
<tr>
<td>MPSSS – Family</td>
<td>5.38</td>
<td>1.67</td>
<td>5.64</td>
<td>1.41</td>
<td>0.24</td>
</tr>
<tr>
<td>MPSSS – Friends</td>
<td>5.47</td>
<td>1.58</td>
<td>5.59</td>
<td>1.3</td>
<td>0.12</td>
</tr>
<tr>
<td>Constructive coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Active coping</td>
<td>5.34</td>
<td>1.56</td>
<td>5.55</td>
<td>1.43</td>
<td>0.21</td>
</tr>
<tr>
<td>- Planning</td>
<td>5.39</td>
<td>1.68</td>
<td>5.34</td>
<td>1.57</td>
<td>-0.05</td>
</tr>
<tr>
<td>- Positive reframing</td>
<td>5.42</td>
<td>1.78</td>
<td>5.41</td>
<td>1.65</td>
<td>-0.01</td>
</tr>
<tr>
<td>- Acceptance</td>
<td>5.69</td>
<td>1.66</td>
<td>5.76</td>
<td>1.46</td>
<td>0.07</td>
</tr>
<tr>
<td>- Humour</td>
<td>4.67</td>
<td>1.94</td>
<td>4.93</td>
<td>1.87</td>
<td>0.26</td>
</tr>
<tr>
<td>- Religion</td>
<td>3.55</td>
<td>1.89</td>
<td>3.69</td>
<td>2.00</td>
<td>0.14</td>
</tr>
<tr>
<td>- Using emotional support</td>
<td>5.43</td>
<td>1.72</td>
<td>5.36</td>
<td>1.74</td>
<td>-0.07</td>
</tr>
<tr>
<td>- Using instrumental support</td>
<td>5.50</td>
<td>1.71</td>
<td>5.65</td>
<td>1.53</td>
<td>0.15</td>
</tr>
<tr>
<td>- Self-distraction</td>
<td>5.75</td>
<td>1.66</td>
<td>5.82</td>
<td>1.49</td>
<td>0.07</td>
</tr>
<tr>
<td>Disengaged and externalising coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Behavioural disengagement</td>
<td>3.85</td>
<td>1.75</td>
<td>4.00</td>
<td>1.81</td>
<td>0.15</td>
</tr>
<tr>
<td>- Self-blame</td>
<td>4.70</td>
<td>1.87</td>
<td>4.86</td>
<td>1.87</td>
<td>0.16</td>
</tr>
<tr>
<td>- Substance use</td>
<td>2.74</td>
<td>1.60</td>
<td>3.17</td>
<td>1.86</td>
<td>0.42*</td>
</tr>
<tr>
<td>- Denial</td>
<td>3.67</td>
<td>1.80</td>
<td>3.30</td>
<td>1.65</td>
<td>-0.37*</td>
</tr>
<tr>
<td>- Venting</td>
<td>4.79</td>
<td>1.75</td>
<td>4.89</td>
<td>1.62</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Note. † Denotes scale is inversely scored. * Denotes difference between T1 and T2 scores to p<.05. *** Denotes difference to p<.001. Calculations were not made for the two coping styles as regression scores were used, centring means to 0 and standard deviations to 1.
At each time point participants were asked to respond to a number of questions about their relationship with their closest friend, who was not a sibling or romantic partner. Participants were asked to provide the initials of this friend. Based on the friends’ reported gender and initials, it was determined whether the same friend had been chosen across time points. Using these criteria, 24% of adolescents chose the same friend, while 14.9% definitively chose different friends. It was unclear amongst 61.2% of adolescents whether they had chosen the same friend, as the initials did not exactly correspond.

At T1, 87.6% of participants maintained gender-congruent close friendships, rising to 94.2% at T2. The mean length of friendship was 5.64 years at T1 (N = 112, SD = 4.03) and 5.87 years at T2 (N = 119, SD = 3.70). As shown in Table 4.3, adolescents generally rated their closest friendship highly across time points. These friendships were of moderately high IOS.

At both time points participants reported moderately high closeness with their friend (M at T1 (N = 120) = 1.65, SD = 0.69; M at T2 (N = 119) = 1.58, SD = 0.64).

Adolescents reported moderately high levels of perceived social support from their family and wider friendship network during the course of the study. Levels of perceived support overall and from an unspecified “special person” are omitted because this person was specified as the close friend at T2 only. In general, assessments of support and social relationships showed no significant change over time. Adolescents reported moderately high levels of perceived support from both family and friends. Longitudinally, adolescents showed a moderately-high relational-interdependent self-construal.

Resilience was consistently low across the longitudinal sample, with a small but non-significant decrease over time. Adolescents showed moderate levels of self-esteem and self-efficacy across its constituent components. Self-esteem was the only major assessed variable to show change over time (t(119) = -3.98, p<.001).

Within a disengaged and externalising coping style, there was a slight but significant increase in substance use (t(120) = -2.25, p = .03) and a marginally significant decrease in denial (t(120) = 2.02, p = .05). Coping behaviours which fell within a constructive coping style were relatively more stable across time. Self-distraction, active coping, and positive reframing of a situation remained fairly important, as did seeking emotional and instrumental support from others.
Creation of coping factor scores

Regression scores for (1) Constructive Coping and (2) Disengaged and Externalising Coping were generated using SPSS as exploratory factor analysis (EFA) indicated the same composition of coping sub-scales for coping styles at T1 and T2. Sub-scale composition was the same as in the cross-sectional sample (see Chapter 3). Two separate EFA were carried out across the entire adolescent sample: first at T1 (N = 121) and then at T2 (N = 121). Principal axis factoring extraction was performed using a direct oblimin rotation because it was hypothesised that coping behaviours would be interrelated.

Preliminary analyses assessed data suitability. The determinants (.004 at T1, .004 at T2), indicated no issues of singularity or multicollinearity. Kaisser-Meyer-Olkin values (.79 at T1, .79 at T2) indicated acceptable sample size. Bartlett’s test of sphericity ($p <$ .001) indicated that the correlation matrices were suitable for factor analysis.

The rotated solution revealed an acceptable 2-factor structure which cumulatively explained 47.82% of the total variance at T1 and 48.55% at T2. Factor 1, Constructive Coping, contributed 30.84% of the variance at T1 and 28.93% at T2. Factor 2, Disengaged and Externalising Coping, contributed 10.39% of the variance at T1 and 11.99% at T2. The 2-factor structure was retained as this structure reflected distinct coping styles which also converged with cross-sectional study findings.

The pattern matrix showed that positive reframing (.88 at T1, .67 at T2), active coping (.76 at T1, .71 at T2), planning (.67 at T1, .79 at T2), using instrumental support (.73 at T1, .63 at T2), using emotional support (.65 at T1, .71 at T2), acceptance (.62 at T1, .53 at T2), self-distraction (.50 at T1, .50 at T2), humour (.53 at T1, .46 at T2), and religion (.27 at T1, .30 at T2) loaded onto Constructive Coping. Disengaged and Externalising coping was composed of behavioural disengagement (1.0 at T1, .93 at T2), self-blame (.49 at T1, .52 at T2), denial (.49 at T1, .60 at T2), venting (.40 at T1, .47 at T2), and substance use (.20 at T1, .56 at T2).

Correlations

As hypothesized, T1 perceived close friendship quality was moderately associated with higher resilience at T2. Friendship at time 1 was also marginally associated with resilience at time 1 in the hypothesized direction. The significant cross-sectional relationship between friendship and resilience at T1 also held at T2.
Table 4.4.

*Intercorrelations between variables at T1 and T2.*

<table>
<thead>
<tr>
<th>Variables</th>
<th>FF T1</th>
<th>T2</th>
<th>RS T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-</td>
<td>.40***</td>
<td>.37***</td>
<td>.22*</td>
</tr>
<tr>
<td>T2</td>
<td>.40***</td>
<td>-</td>
<td>.20*</td>
<td>.27**</td>
</tr>
<tr>
<td>RS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.37***</td>
<td>.20*</td>
<td>-</td>
<td>.45***</td>
</tr>
<tr>
<td>T2</td>
<td>.22*</td>
<td>.27**</td>
<td>.45***</td>
<td>-</td>
</tr>
<tr>
<td>IOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.51***</td>
<td>.30**</td>
<td>.29**</td>
<td>.08</td>
</tr>
<tr>
<td>T2</td>
<td>.14</td>
<td>.31**</td>
<td>.17</td>
<td>-.11</td>
</tr>
<tr>
<td>RISC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.46***</td>
<td>.38***</td>
<td>.32***</td>
<td>.17</td>
</tr>
<tr>
<td>T2</td>
<td>.15</td>
<td>.40***</td>
<td>.13</td>
<td>.17</td>
</tr>
<tr>
<td>MPSSS Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.34***</td>
<td>.26**</td>
<td>.39***</td>
<td>.22*</td>
</tr>
<tr>
<td>T2</td>
<td>.18</td>
<td>.26**</td>
<td>.08</td>
<td>.24**</td>
</tr>
<tr>
<td>MPSSS Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.00</td>
<td>.12</td>
<td>.29***</td>
<td>.09</td>
</tr>
<tr>
<td>T2</td>
<td>-.04</td>
<td>.05</td>
<td>.10</td>
<td>.19*</td>
</tr>
<tr>
<td>SES†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.06</td>
<td>.10</td>
<td>-.38***</td>
<td>-.31*</td>
</tr>
<tr>
<td>T2</td>
<td>.07</td>
<td>.02</td>
<td>-.24**</td>
<td>-.45***</td>
</tr>
<tr>
<td>GSES Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.03</td>
<td>-.04</td>
<td>.44***</td>
<td>.37***</td>
</tr>
<tr>
<td>T2</td>
<td>-.05</td>
<td>.08</td>
<td>.34***</td>
<td>.40***</td>
</tr>
<tr>
<td>GSES Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.05</td>
<td>-.07</td>
<td>.58***</td>
<td>.30**</td>
</tr>
<tr>
<td>T2</td>
<td>-.03</td>
<td>.21*</td>
<td>.32***</td>
<td>.67***</td>
</tr>
<tr>
<td>GSES Initiative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.05</td>
<td>.05</td>
<td>.13</td>
<td>.25**</td>
</tr>
<tr>
<td>T2</td>
<td>-.08</td>
<td>.01</td>
<td>.15</td>
<td>.02</td>
</tr>
<tr>
<td>GSES Persistence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.07</td>
<td>-.04</td>
<td>.20*</td>
<td>.36**</td>
</tr>
<tr>
<td>T2</td>
<td>.00</td>
<td>-.06</td>
<td>.25**</td>
<td>.11</td>
</tr>
<tr>
<td>PSS†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.12</td>
<td>.09</td>
<td>-.34***</td>
<td>-.33***</td>
</tr>
<tr>
<td>T2</td>
<td>.14</td>
<td>.19*</td>
<td>-.13</td>
<td>-.33***</td>
</tr>
<tr>
<td>Constructive Coping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>.24**</td>
<td>.18*</td>
<td>.39***</td>
<td>.28**</td>
</tr>
<tr>
<td>T2</td>
<td>.26**</td>
<td>.23*</td>
<td>.33***</td>
<td>.52***</td>
</tr>
<tr>
<td>Disengaged and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>-.03</td>
<td>.02</td>
<td>-.23*</td>
<td>-.20*</td>
</tr>
<tr>
<td>Externalising Coping</td>
<td>T2</td>
<td>.16</td>
<td>.20*</td>
<td>.07</td>
</tr>
</tbody>
</table>

*Note.* ***Significant at the .001 level (2-tailed). **Significant at the .01 level (2-tailed). *Significant at the .05 level (2-tailed). † Scale is inversely coded.
Table 4 reports a series of bivariate correlations (N= 121) which were conducted between T1 friendship quality and each of the hypothesized mediators at T2: RISC, perceived stress, self-efficacy and its component constructs, self-esteem, a supportive friendship network, and coping styles. Longitudinal bivariate correlations were also conducted between friendship quality or resilience and the hypothesized moderators of IOS and family support. Emotional intelligence was not assessed at T1. T2 EI correlated significantly with T1 resilience ($r = .27, p < .01$) but not with T2 resilience ($r = .09, p = .33$), T1 friendship ($r = .01, p = .88$) or T2 friendship ($r = .04, p = .67$).

Friendship at T1 did not significantly relate to the hypothesized mediators at T2, with the notable exception of significant, moderate relationship with T2 engaged coping style. Inconsistent with the cross-sectional findings reported in chapter 3, T1 friendship was not significantly related to T1 disengaged and externalising coping or T1 self-efficacy and its components within the longitudinal sample. However, at T2 these relationships partially reappeared as T2 close friendship quality significantly correlated with T2 disengaged and externalising coping and T2 effort. As might be expected, T2 close friendship quality was associated with greater T1 friendship network support, RISC and IOS. Interestingly, it was also weakly associated with greater use of an engaged coping style at T1, but not with self-efficacy or self-esteem, suggesting that these variables do not contribute to developing more supporting friendships over time. By comparison, T2 resilience was positively associated with T1 self-efficacy, self-esteem, friendship network support, and coping style, suggesting a wider range of constructs feeding into the development of resilience. T2 resilience was also negatively associated with T1 perceived stress.

**Cross-lagged panel analysis**

A cross-lagged panel analysis (Figure 4.1) investigated a hypothesized causal relationship of perceived close friendship quality with psychological resilience. First friendship quality at T2 was regressed onto resilience at T1, controlling for friendship quality at T1, to rule out any causal impact of resilience upon friendship quality. T1 friendship quality predicted T2 friendship quality ($\beta = .37, p<.001$), whilst T1 resilience did not significantly predict T2 friendship quality when T1 friendship quality was controlled ($\beta = .06, p>.1$).
Next, analysis tested the hypothesis that friendship quality at T1 predicted resilience at T2, controlling for resilience at T1. Contrary to this hypothesis, T1 friendship quality did not predict T2 resilience when T1 resilience was controlled ($\beta = .06, p > .1$) whilst a predictive effect of prior resilience level was still observed ($\beta = .43, p < .001$). Observed power of above .99 for each regression analysis confirmed adequate sample size despite the lack of hypothesized effects. No mediation analyses were performed because T1 friendship quality did not significantly predict later resilience when earlier resilience was controlled.

**Longitudinal moderations**

A series of longitudinal moderated regression analyses assessed the separate hypothesized moderating effects of IOS, gender, age and selection of the same friend over time on the longitudinal relationship between close friendship quality and psychological resilience, controlling for the effects of resilience at T1. As in Chapter 3, a categorical variable was created coding participants as belonging to early ($N = 86$) or late ($N = 35$) adolescence (*Journal of Early Adolescence*, 2013). For each of the hypothesized moderating variables, RS scores at T1 were entered at Step 1. FF scores at T1 and the moderator were entered independently as variables in Step 2. A 2-level (yes/no) categorical variable was created coding whether participants had chosen the same friend as their closest across time points. In Step 3 an interaction variable of FF scores at T1 and the moderator was entered. Resilience scores at T2 were entered as a dependent variable. Analyses revealed no significant interaction with gender ($\beta = -.01, p > .1$), IOS at T1 ($\beta = .04, p > .1$), age at T1 ($\beta = -.04, p > .1$), or friendship selection ($\beta = .21, p > .1$).
Analysis of Variance

Contrary to hypotheses, regression analyses failed to reveal a significant longitudinal relationship between earlier close friendship quality and later resilience once earlier resilience was controlled. The complexity of resilience development over adolescence means, however, that this null result should be interpreted cautiously. Contextualising and interpreting these findings within the challenges of longitudinal resilience research, multivariate and univariate analyses of variance now explores aspects of resilience development within this sample which might help explain the lack of observed significant effects. Analysis first (1) compares the longitudinal development of resilience-promoting psychological resources in low- and moderate/high-baseline-resilient adolescents, hypothesizing from the literature that adolescents who were low-resilience at baseline would show weaker building of psychological resources and support systems. Analysis then (2) explored patterns of resource and support development amongst adolescents who either increased or decreased in psychological resilience over the year. It was hypothesized that adolescents demonstrating reduced resilience over time might exhibit lower levels of psychological resources, support and effective coping mechanisms as a chain of negative reactions took effect, whilst those who showed an increasing level of resilience might show an upward trend of building more psychological resources, support structures and coping mechanisms. Importantly, perceived close friendship quality is considered a resource within these analyses, reflecting the aim of contextualising this relationship within these adolescents’ wider resilience-promotion patterns.

Comparing adolescents of low- and moderate-/high-baseline resilience

This group of socioeconomically vulnerable adolescents demonstrated low mean resilience. Protective processes (such as the hypothesized friendship->resilience mechanism) may only be demonstrated in resilient young people. To address this, multivariate analysis of variance (MANOVA) examined whether there were statistical differences between baseline resilience groups (low N = 64, moderate/high = 53) on subsequent resources and support, without controlling for prior levels of resources and support (small sample sizes in individual cells did not permit such controls). The 14 support and resource measures assessed were: self-esteem, emotional intelligence, self-efficacy and its components, perceived stress, RISC, friendship network support, family support, IOS, perceived close friendship quality, constructive coping, and disengaged and externalising coping.
A significant difference between adolescents on the combined dependent variable ($F(12, 105) = 2.56$, Wilk’s lambda = .77, $p = .01$, partial $\eta^2 = .23$) supported the hypothesis that low-resilience adolescents would show subsequently lower psychological resources than their peers. Observed power was .97. Individual analyses using a Bonferroni adjustment revealed differences according to baseline groups in the following subsequent support and resources: self-esteem ($F(1,116) = 8.09$, $p = .01$, partial $\eta^2 = .07$), emotional intelligence ($F(1,116) = 6.28$, $p = .01$, partial $\eta^2 = .05$), general self-efficacy ($F(1,116) = 20.90$, $p < .001$, partial $\eta^2 = .15$), effort ($F(1,116) = 13.62$, $p < .001$, partial $\eta^2 = .11$), initiative ($F(1,116) = 5.37$, $p = .02$, partial $\eta^2 = .04$), persistence ($F(1,116) = 10.90$, $p = .00$, partial $\eta^2 = .09$), constructive coping style ($F(1,116) = 9.11$, $p = .00$, partial $\eta^2 = .07$), and a marginal difference in perceived stress ($F(1,116) = 3.57$, $p = .06$, partial $\eta^2 = .09$). Resilient adolescents showed significantly higher subsequent self-esteem ($\Delta M = 2.66$), emotional intelligence ($\Delta M = .36$), general self-efficacy ($\Delta M = 5.87$), effort ($\Delta M = 2.43$), initiative ($\Delta M = 1.27$), persistence ($\Delta M = 2.16$), and constructive coping ($\Delta M = .51$), and marginally lower in perceived stress ($\Delta M = 2.38$) than their low-resilience peers. Evidence therefore suggests that baseline-resilient adolescents subsequently showed significantly higher self-esteem, emotional intelligence, general self-efficacy and its components, and constructive coping than their baseline low-resilience peers, without controlling for prior levels of these resources. Interestingly, no differences in subsequent perceived close friendship quality, RISC or perceived social support from friends and family were observed.

**Comparing adolescents with increasing or decreasing resilience**

Psychosocial paths may have differed for adolescents on risk versus resilience trajectories, with adolescents who became more resilient showing different patterns of change in psychological resources and social support than their peers who decreased in resilience. Resilience promotion may reflect a cascade of interrelated effects (Masten & Cicchetti, 2010), but a cascade of positive effects need not mirror a cascade of negative effects.

A series of 2 x2 mixed ANOVA examined whether adolescent who had either increased (N = 51) or decreased (N = 70) in resilience showed significant changes in assessed psychological resources over time, to see whether the pattern of changes qualitatively differed.

No significant main effect of the assessed measure was detected between T1 and T2 scores of perceived close friendship quality ($F(1, 119) = .91$, $p = .34$, partial $\eta^2 = .01$), friendship network support ($F(1, 119) = 1.48$, $p = .23$, partial $\eta^2 = .01$), RISC ($F(1, 119) = 2.29$, $p = .13$,...
partial $\eta^2 = .02$), perceived stress ($F(1, 119) = .70, p = .41, \text{partial } \eta^2 = .01$), general self-efficacy ($F(1, 119) = 1.15, p = .29, \text{partial } \eta^2 = .01$), effort ($F(1, 119) = 2.68, p = .10, \text{partial } \eta^2 = .02$), initiative ($F(1, 119) = .05, p = .82, \text{partial } \eta^2 = .00$), persistence ($F(1, 119) = .05, p = .83, \text{partial } \eta^2 = .00$), constructive coping ($F(1, 119) = .89, p = .35, \text{partial } \eta^2 = .01$), or disengaged and externalising coping ($F(1, 119) = .05, p = .82, \text{partial } \eta^2 = .00$), indicating that these remained stable over the year across the sample. A significant main effect was observed for self-esteem ($F(1, 118) = 12.32, p = .001, \text{partial } \eta^2 = .10$) such that self-esteem decreased over time across the sample.

No main effect of trajectory direction (increasing versus decreasing resilience) was observed on perceived close friendship quality ($F(1, 119) = 2.07, p = .15, \text{partial } \eta^2 = .01$), friendship network support ($F(1, 119) = 1.48, p = .23, \text{partial } \eta^2 = .02$), RISC ($F(1, 119) = 1.51, p = .29, \text{partial } \eta^2 = .01$), self-esteem ($F(1, 118) = .19, p = .67, \text{partial } \eta^2 = .00$), perceived stress ($F(1, 119) = .75, p = .39, \text{partial } \eta^2 = .01$), general self-efficacy ($F(1, 119) = 2.19, p = .14, \text{partial } \eta^2 = .02$), effort ($F(1, 119) = .38, p = .54, \text{partial } \eta^2 = .00$), initiative ($F(1, 119) = .56, p = .46, \text{partial } \eta^2 = .01$), constructive coping ($F(1, 119) = 1.68, p = .20, \eta^2 = .01$) or disengaged and externalising coping ($F(1, 119) = .08, p = .79, \eta^2 = .00$), indicating that there was no simple significant difference on measure scores between adolescents who had decreased or increased in resilience when considering T1 and T2 together. Persistence showed a significant weak main effect from resilience trajectory persistence ($F(1, 119) = 4.10, p = .05, \text{partial } \eta^2 = .03$). Adolescents who had increased resilience showed slightly greater persistence than those who had decreased resilience ($\Delta \bar{x} = 1.10$).

Moving on to the interaction effects, which are of primary interest, interactions between scores over time and the direction of resilience trajectory were observed for self-esteem ($F(1, 118) = 14.40, p < .001, \text{partial } \eta^2 = .11$), constructive coping ($F(1, 119) = 10.77, p = .00, \text{partial } \eta^2 = .08$), perceived close friendship quality ($F(1, 119) = 8.75, p = .00, \text{partial } \eta^2 = .07$), friendship network support ($F(1, 119) = 8.17, p = .01, \text{partial } \eta^2 = .06$), general self-efficacy ($F(1, 119) = 5.94, p = .02, \text{partial } \eta^2 = .05$), effort ($F(1, 119) = 24.16, p < .001, \text{partial } \eta^2 = .17$), RISC ($F(1, 119) = 7.81, p = .01, \text{partial } \eta^2 = .06$), and PSS ($F(1, 119) = 6.32, p = .01, \text{partial } \eta^2 = .05$). No significant interactions were observed for disengaged and externalising coping ($F(1, 119) = .08, p = .79, \text{partial } \eta^2 = .00$), persistence ($F(1, 119) = .01, p = .91, \text{partial } \eta^2 = .00$), or initiative ($F(1, 119) = .13, p = .72, \text{partial } \eta^2 = .00$).

Close examination generally supported the assertion that patterns of resilience-promotion were qualitatively different to patterns of resilience-reduction, with greater emphasis on
building a supportive social network and identity in more resilient adolescents, a pivotal role for constructive coping and self-efficacy between the groups, and worsening self-esteem and perceived stress in adolescents who decreased in resilience. Adolescents who had increased in resilience showed increases at follow-up in perceived close friendship quality ($t(50) = -2.28, p = .03, \Delta M = .55$), friendship network support ($t(50) = -2.38, p = .02, \Delta M = .67$), RISC ($t(50) = -2.63, p = .01, \Delta M = .39$), constructive coping ($t(50) = -2.38, p = .02, \Delta M = .17$), general self-efficacy ($t(50) = -2.19, p = .03, \Delta M = 2.27$), and effort ($t(50) = -4.17, p < .001, \Delta M = 2.19$). Adolescents who had decreased in resilience showed a marginal decrease over time in perceived close friendship quality ($t(69) = 1.73, p = .09, \Delta M = .28$), significant decreases in constructive coping ($t(69) = 2.09, p = .04, \Delta M = .22$), self-esteem ($t(69) = -5.71, p < .001, \Delta M = 2.81$), effort ($t(69) = 2.59, p = .01, \Delta M = 1.09$) and increased perceived stress ($t(69) = -2.49, p = .02, \Delta M = 2.24$).

**Summary of key findings**

Contrary to hypotheses, earlier perceived close friendship quality did not significantly predict psychological resilience amongst socioeconomically vulnerable adolescents at one-year follow-up, despite a significant relationship between these constructs. Interestingly, this was the case regardless of earlier IOS or whether participants had maintained the same closest friend over the year, and across gender and year groups. Although perceived close friendship quality remained high in this longitudinal sample, resilience and self-esteem remained low and decreased over the year. A developmental perspective on resilience suggests that these findings may reflect a highly complex relationship between friendship support and resilience promotion. One explanation for the pattern of longitudinal findings may be that protective mechanisms operate differently according to initial levels of resilience. Additionally, greater understanding of adolescents’ resilience trajectory, and their wider development of psychological resources and support over time, was desirable given the overall decline in resilience over the year.

Accordingly, analyses examined the hypothesis that low-resilient adolescents would accumulate less support and psychological resources than their baseline-resilience peers, testing the specificity of protective mechanisms to different resilience levels. Analysis revealed lower subsequent psychological resources amongst low-resilience adolescents, but no difference between groups in subsequent perceived close friendship quality or perceived social support from friends and family. Baseline-resilient adolescents did,
however, showed significantly higher self-esteem, emotional intelligence, general self-efficacy and its components and constructive coping at follow-up than low-resilient peers.

Relatedly, analyses compared patterns of change in psychological resources and social support in adolescents who had either increased or decreased in resilience over the year. Patterns of resilience-promotion qualitatively differed to patterns of resilience-reduction, with greater emphasis on building a supportive social network and identity in more resilient adolescents, a critical and varied role for constructive coping and self-efficacy, and worsening self-esteem and perceived stress in adolescents who decreased in resilience. Although decreasing resilience was associated with weakening self-esteem, there was no converse increase in self-esteem for adolescents who had increased resilience. Resilience trajectory exhibited a differential effect on the use of constructive coping. Increasingly-resilient adolescents reported increasing constructive coping whilst decreasingly-resilient adolescents demonstrated less use of this coping style over time. Interestingly, there was no difference between the groups in changes in disengaged and externalising coping, nor did the decreasingly-resilient adolescents show poorer quality friendship networks. Findings regarding wider support were consistent with an interpretation of increasing relational protective effects, as increasingly-resilient adolescents showed not only greater perceived friendship quality but also increasing peer network support and RISC. Importantly, increasingly-resilient adolescents showed improved perceived close friendship quality whilst decreasingly-resilient adolescents reported worsening friendship quality.

**Discussion**

**Does a close supportive friendship promote resilience over time?**

Perceived close friendship quality was positively associated with psychological resilience in socioeconomically vulnerable adolescents at one-year follow-up, and within the two time points of this study. However, analyses did not detect a longitudinal protective effect of a single close friendship, as perceived close friendship quality did not predict subsequent resilience when earlier resilience was controlled. This was the case regardless of whether participants had maintained the same closest friend, and across gender and age groups. Results from the cross-lagged panel analysis suggest that this is not a causal relationship of resilience promoting better friendships. Furthermore, whilst adolescents who had declined in resilience over the year reported worsening close friendship quality, increasingly-resilient
adolescents reported improvements in the quality of their closest friendship as well as strengthening supportiveness from their wider peer network.

It is possible, of course, that a close supportive friendship is not a viable protective mechanism in the face of sustained socioeconomic vulnerability. Young people from low-income backgrounds may seek support from others who are similarly stressed, and consequently unable to provide support adequate to facilitate growth (Meyerson, Grant, Carter & Kilmer, 2011). Within peer networks, young people may undergo reinforcement of internalization problems or of externalisation problems with girls more susceptible to the former process, and boys to the latter (Bukowski & Adams, 2005). Such peer network processes may overwhelm the protective benefits of a single close friendship over time. However, the finding that gender did not moderate the longitudinal relationship between friendship and resilience lends evidence against this point. Another explanation for findings may be that perceptions of social relationships are systematically biased by participants, particularly less mature or emotionally competent adolescents who are unable or unwilling to realistically evaluate relationship quality. However, worsening friendship quality among decreasingly-resilient adolescents argues against a systematic appraisal bias.

Certain protective factors are particularly potent at different stages of development, with their impact not emerging until much later (Vanderbilt-Adriance & Shaw, 2008) or in light of relevant challenge. It is likely that relational processes of resilience operate at different timescales and with greater specificity than other types of mechanisms. Assessment intervals which are too brief may fail to detect a significant effect (Masten & Cicchetti, 2010), and although a year is considerable in the life experience of an adolescent, it may equally be considered insufficient for the development of resilience. Indeed, most adolescents showed declines in resilience at follow-up and the sample means across most measures were stable. Examination of resilience trajectories, however, showed a relational “upward spiral” amongst increasingly-resilient adolescents of supportive peer relationships and construction of the self in terms of those relationships. By contrast, although perceived quality of a single close friendship worsened for decreasingly-resilient adolescents, there was little empirical support for a “downward spiral” of intersecting risk and lower-quality relationships as neither friendship network support nor RISC worsened. The evidenced distinction between declining close friendship quality and stability in wider friendship network support in decreasingly-resilient adolescents argues against the dismissal of a close friendship as a theorized protective mechanism promoting resilience.
It is also likely that relational processes of resilience operate with greater domain-specificity than other processes. Adolescents may cope successfully in one context but ineffectively in another (Harvey & Delfabbro, 2004). Using multiple subjective measures or domain-specific assessment of resilience reveal more nuanced relationships between close friendship quality and adaptive processes. Perceived support incorporates various subjective qualities and meanings experienced by the adolescent receiving support, which may change over time, beyond the objective qualities of the support interactions themselves (Helgeson & Lopez, 2012). This is particularly poignant in light of the instability of many adolescent friendships. The positive long-term impacts of a single close friendship may be more applicable to specific resilience contexts such as interpersonal challenges (Helgeson & Lopez, 2010) or academic contexts (Morrison, Brown, D'Incau, O'Farrell & Furlong, 2006).

Consistent and durable global resilience may be quite rare, especially amongst higher-risk individuals (Vanderbilt-Adriance & Shaw, 2008). This sample was certainly high-risk with low psychological resilience. Analysis showed lower subsequent psychological resources amongst low-resilience adolescents than their baseline-resilient peers, but no difference between groups in subsequent relational resources despite increasingly-resilient young adolescents showing gains in these areas. This suggests selective adaptation did occur but that protective mechanisms may not have operated globally across risk level or domain.

Taken together with the findings in Chapter 3, the pattern of findings suggests a complex relationship between close adolescent friendships and resilience. Amongst socioeconomically vulnerable adolescents, the promotion of supportive peer relationships – particularly a single supportive close friendship – could be an important route for facilitating resilience, but the timeline and domain-specificity of longer-term effects may vary considerably for individual adolescents, friendships, challenges or contexts.

**The changeability of resilience**

Overall, participants' subjective assessments of resilience, perceived close friendship quality, wider social support, coping and other psychological resources was stable, with a notable exception of declining self-esteem. However, the majority of adolescents – even those who were highly resilient at baseline – declined in resilience, underscoring that resilience is not a linear and cumulative process for these young people.

Longitudinal studies of resilience generally find that resilience is not stable, fluctuating across time and domain, presenting challenges for the interpretation of longitudinal
findings. Few studies incorporate resilience trajectories into their analysis (Vanderbilt-Adriance & Shaw, 2008). In one exception, Obradovic et al. (2006) identified five patterns of enduring competence (low-declining, low-improving, middle-improving, middle-declining, and consistently high), showing different “pathways to adaptation” between groups with respect to both protective and risk factors. The findings presented here lend further support to the idea of differing pathways to adaptation. Patterns of resilience-promotion qualitatively differed to patterns of resilience-reduction, with greater emphasis on building a supportive social network and relational self-construal in more resilient adolescents, a critical and varied role for constructive coping and self-efficacy, and worsening self-esteem and perceived stress in decreasingly-resilient adolescents.

Resilience may be unstable, but results showed that it was certainly low within this sample. Adolescents may have been sufficiently challenged but may simply have not developed resilience, as reflected by 70% of participants decreasing in resilience over the year and the failure of many low-resilient adolescents to develop subsequent psychological resources in line with resilient peers. This is not unexpected given that resilient outcomes above 25% are rare in higher-risk samples (Vanderbilt-Adriance & Shaw, 2008). By comparison, resilience was lower than amongst adolescent mothers (Black & Ford-Gilboe, 2004) and high-risk inner-city adolescents (Hunter & Chandler, 1999) in the United States using the same measure. Socioeconomic vulnerability in the UK is a pervasive and persistent risk which possibly overshadows the immediate protective effects of a supportive close friendship, over and above individual adolescents’ additional un-assessed risk factors.

Protective mechanisms may not be consistently evident in such high-risk, low-resource contexts. When considering stress and psychological resources, findings generally paint a picture of increasing vulnerability. Adolescents showing decreasing resilience also exhibited increasingly less self-esteem, effort, constructive coping and higher perceived stress. Some protective routes are, however, observed in the development of general self-efficacy and the use of a constructive coping style amongst adolescents with increasing resilience.

**Limitations and implications**

In addition to the concerns noted previously, some key limitations must be acknowledged. It is a key challenge of resilience research to distinguish between the outcomes of resilience and its causes or antecedents, and one which is not easily addressed (Harvey & Delfabbro, 2004). The multivariate and univariate analyses of variance attempt to understand and
contextualise the longitudinal regression analyses, but this also presents a limitation of using as dependent measures variables which were previously conceptualised as hypothesised mediators and predictor variables. Evidence suggests that peer relationships attenuate associations between vulnerability (e.g., cognitive vulnerability) and outcomes (e.g., depressed affect) amongst at-risk boys and girls (Bukowski & Adams, 2005). The findings in the present study should be interpreted cautiously, and whilst continuing to conceptualise resilience as a process, rather than a discrete outcome. Furthermore, whilst attrition in this study was overwhelmingly due to institutional factors (namely a shortened term timetable at follow-up, loss of a school coordinator, and a survey administration which aimed to include all T1 participants but could not guarantee this), longitudinal retention of socioeconomically vulnerable young people is also relatively difficult due to increased challenges of greater life instability (Harvey & Delfabbro, 2004).

Masten (2005, p. 89) notes that “complex, dynamic, system-oriented models of how peers may be involved in the processes pertinent to specific psychopathology pathways are extraordinarily challenging to test in the real world of limited budgets and sample sizes, measures with modest reliability or validity, and difficulty tracking and retaining individuals, peers, families or schools over the long term.” Future research might address some of the questions posed by this study by incorporating domain-specific subjective measures of resilience as well as a measure of global subjective resilience and by incorporating additional time points. A pattern of one-month, six-month, one-year and three-year follow-ups might aid understanding of the limits and possibilities of the protective effects of a single close friendship in a context of ongoing development, evolving relationships and emerging challenges. The use of statistical techniques such as linear growth curve modelling, which require at least 3 assessments, would be useful in teasing out long-term effects. Emerging sophisticated dyadic analyses might enable further focus on the shared experienced friendship, rather than participants’ singular experience of this relationship, although this poses significant logistical and design challenges (Gable & Reis, 1999).

**Conclusions**

Perceived friendship quality related to later resilience, but not when earlier resilience was controlled. Further analyses revealed a complex picture of resilience development as many adolescents showed declines in resilience over time, although there was little evidence of a “downward spiral” of intersecting risk and lower-quality relationships. There did appear to be an “upward spiral” amongst increasingly-resilient adolescents consisting of supportive
peer relationships and construction of the self in terms of those relationships. Psychological adaptation in developing psychological resources was visible for baseline-resilient adolescents as they showed significantly higher self-esteem, general self-efficacy and its components, emotional intelligence and constructive coping at follow-up than baseline low-resilience peers, without controlling for prior levels of these resources. Interestingly, however, no differences in subsequent perceived friendship quality, social support or RISC were observed between baseline resilient adolescents and their low-resilient peers, suggesting that relational processes related to resilience may operate at different timescales or with greater specificity than other types of mechanisms. Resilience is clearly a multi-faceted, evolving construct within individuals. A dialectical approach to mixed methods allows researchers to sensitize to tensions between findings within and across studies, seeing these as invitations for dialogue and further exploration, such as how the different patterns of findings between the longitudinal and cross-sectional studies might highlight methodological, empirical and theoretical issues of time (Greene & Caracelli, 1997). Taken together, the findings of this chapter reveal a complex relationship between close friendship quality and resilience. Analyses allude to the long-term protective capabilities for supportive peer friendships, but further research will benefit understanding of the developmental contexts in which this resource is most powerfully crafted and expressed. Indeed, one way of applying the pragmatic paradigm underlying this thesis is to use the analytical framework underpinning the adolescent studies in Chapters 3 and 4 in a study of participants in a distinct developmental stage – in the case of this thesis, adults aged 35 to 55 years. Employing genuine dialogue between studies within the same research programme, this will enable investigation not only of the relationship between friendship and resilience at this later stage of life, but will generate findings which may in turn provide insight to some of the unanswered questions posed by the adolescent studies (Greene & Caracelli, 1997; Tashakkori & Teddlie, 1998). This is the focus of the next chapter.
CHAPTER 5

DO MIDDLE AGED ADULTS’ SUPPORTIVE FRIENDSHIPS PROMOTE RESILIENCE OVER TIME?

Introduction

Findings presented thus far have suggested supportive close friendship can be important in facilitating the development of psychological resilience amongst socioeconomically vulnerable adolescence. Yet resilience-promoting processes may unfold differently in later life (Masten & Wright, 2010; Lamond et al., 2008). The importance of peer relationships is a defining characteristic of adolescence, but less so of later adulthood. The qualitative attributes of close friendships also shift (Hartman & Stevens, 1997; 1999). Interpersonal relationships become more stable (Ong, Bergeman & Boker, 2009) and friendships grow more centred on support and companionship, with less focus on time spent together or retaining a sizable friendship network (Hartup & Stevens, 1999). Examining the relationship between such friendships and psychological resilience in adults, over time, may thus provide insight into both the fundamental and variant features of friendships’ protective qualities, and expand theoretical understandings of resilience in adulthood.

Promotion of resilience remains an important concern in adulthood. Resilience in middle aged adults is associated with physical and mental health outcomes such as better glycaemic control in diabetics (DeNisco, 2011), continued provision of caregiving at home by dementia caregivers versus institutionalisation (Gaugler, Kane & Newcomer, 2007), less depression in recent immigrants (Miller & Chandler, 2002), lower daily pain catastrophising controlling for physical intensity (Ong, Zautra & Reid, 2010), and decreased incidence of anxiety amongst breast cancer survivors (Scali et al., 2012).

Recent exposure to adversity may have negative short-term implications. However, over longer periods, prior experience with challenging circumstances and day-to-day hassles (Ong, Bergeman & Boker, 2009), may more greatly facilitate resilience than does a life lived without exposure to adversity (Scali et al., 2012; Seery, 2011). These circumstances present
turning points around which positive psychological adaptation may develop (Rutter, 1990). Bonanno (2004) suggests that adults typically experience potentially traumatic events in the context of otherwise “normal” circumstances, whilst challenge for adolescents may be more on-going. This exemplifies an important distinction in focus in the literature between adults’ responses to discrete traumas and young people’s experiences of sustained vulnerability. Most of these have been conducted with people exposed to potentially traumatic events such as natural disasters (Ungar, 2010b) rather than community samples or groups subject to sustained adversity, with some exceptions (e.g., Beutel et al., 2010; Campbell-Stills, Forde & Stein, 2009; Ong, Bergeman & Boker, 2009). The social and cultural dimensions of resilience expressed by adults experiencing prolonged, profound challenge need further investigation (Ungar, 2010b).

A focus on the subjective psychological resilience of adults drawn from the community shifts attention from adaptive responses to a particular risk factor towards adults’ experiences of how they may or may not be doing well. Attending to subjective resilience is important for capturing sociocultural dimensions of resilience and appreciating the idiosyncratic strengths and challenges of individuals’ life paths (Canvin, Martilla, Burstrom & Whitehead, 2009). The adaptive tasks of middle age are wide-ranging. They include physical illness and decline, caring for aging parents, negotiating public services, romantic relationships, parenting, career and employment (Beutel et al., 2010; Bonanno & Mancini, 2008; Canvin, Martilla, Burstrom & Whitehead, 2009; Masten & Wright, 2010; Rutter, 1990). Changes in concerns and challenge through life transitions may themselves prompt shifts in friendship qualities (Hartup & Stevens, 1997). As in adolescence, then, challenge – and opportunities for resilience – may be found across domains.

There are comparatively fewer studies of resilience in middle age than adolescence taking into account social and relational mechanisms. Through their life experience, adults may have already developed a repertoire of adaptive responses (Bonanno, 2005) and emotional complexity aiding resilience (Ong, Bergeman & Boker, 2009), whilst young people may still be in the early stages of learning what works for them. However, resilience is a continual process of adaptation rather than a final outcome which may be maintained indefinitely (e.g., Drapeau et al., 2007). As such, it is important to attend to the potentially shifting sands of resilience and protective processes throughout life. With changes in age and developmental stage, there are changes in community participation, institutional involvement, economic and political resources, and individual and collective strengths.
Community support is an important source of resilience amongst adults in socioeconomically vulnerable British households (Canvin, Martilla, Burstrom & Whitehead, 2009). As in adolescence, interpersonal relationships including friendships may transmit cultural norms and expectations facilitating or inhibiting adults’ protective resources (Ungar, 2010b). The flexible and varying roles adults may adopt through middle age, such as spouse, parent, worker and adult child, are important predictors of subjective well-being (Lu & Lin, 1997). Indeed, more positive views of one’s identity in friendship roles friendship identity meanings have been found to predict well-being more strongly than positive identity meanings derived from income or marital status (Siebert, Mutran & Reitzes, 1999). Friendship can also provide a valued compensation to missing intimate relationships such as romantic partnership (Hartup & Stevens, 1999). In adults, lack of social support from family and friends is one of the strongest predictors of post-traumatic stress disorder (Charuvastra & Cloitre, 2008). Middle aged British adults with higher social support before and during adversity showed increased incidence of resilience compared to those with lower social support (Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008). Social and relational mechanisms supporting resilience may therefore be expected to retain their value into middle age, but their effects may be different than in adolescence.

There is an absence of studies explicitly linking close friendships to resilience promotion within middle age, or examining the processes through which close friendships might facilitate such positive psychological adaptation. The literature lends promising indications, however, that many of the mechanisms which were proposed in Chapters 3 and 4 to mediate between a supportive close friendship and resilience in adolescence may also operate in adulthood. For example, effective coping, self-esteem and self-efficacy are generally accepted as important mechanisms underlying resilience throughout life (Richardson, 2002). In adults, engagement in emotional support-seeking predicts positive trends in overall adjustment whilst such trends are weaker when instrumental support is sought (Ong, Bergeman & Boker, 2009). Opportunities for engagement in self-esteem enhancing activities are important to resilience in socioeconomically vulnerable British adults (Canvin, Martilla, Burstrom & Whitehead, 2009). Resilience is positively associated with self-esteem in middle-aged men (Beutel et al., 2010). Greater resilience is associated with quicker recovery from daily stress (Ong, Bergeman & Boker, 2009), perhaps through generation of positive emotion (Ong, Bergeman, Bisconti & Wallace, 2006).
Friendship network qualities change across age and life transitions but remain significant (Hartup & Stevens, 1997; 1999; Wrzus, Hanel, Wagner & Neyer, 2013), suggesting that the potential role of a close friend to promote the supportiveness of a wider friendship network, itself an important aspect of resilience, remains salient (Canvin, Martilla, Burstrom & Whitehead, 2009; Charuvastra & Cloitre, 2008). The ways in which supportive intimate relationships in adult life might bolster positive self-constructs require further investigation (Rutter, 1990), perhaps by supposing the development of a relational interdependent self-construal viewing oneself in terms of these relationships (Cross, Bacon & Morris, 2000), itself linked to performance of friendship maintenance behaviours (Mattingly, Oswald & Clark, 2011). Mechanisms underpinning any protective relationship between a close supportive friendship and psychological resilience may not operate identically in adolescence and adulthood, however. For example, the association between resilience and stress reduction in adulthood (Ong, Bergeman & Boker, 2009), may mean that close friendship support is found to promote resilience through reducing perceived stress, unlike in the adolescent cohort where no such effect was detected. Similarly, the supposed habitual nature of adults’ adaptive responses to challenges (Bonanno, 2005) may mean there is little room for adults’ close friendships to facilitate adaptation and growth through supporting constructive coping, as was observed in the adolescent study.

As with the adolescent cohort, some contextual effects on the basis of gender and other contextual variables may be anticipated. Previous research has identified gender differences in both friendship qualities and resilience promotion. Older British women (aged 50 or above) are more likely to be resilient than older British men (Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008) Suggesting some gender differences in resilience might be expected in the present sample. Compared to men, women utilise greater self-help, accommodation and approach styles over time, which are generally conceptualised as adaptive strategies (Zuckerman & Gagne, 2003). Women are more likely to adopt a tend-and-befriend approach to stress (Taylor et al., 2000). Men attribute decreasing importance to friendships as they age (Beutel et al., 2010). In adults, more use of understanding and expression of emotion predicted better outcomes for women but poorer outcomes for men (Stanton, Danoff-Burg, Cameron & Ellis, 1994), though this finding is not always supported (Zuckerman & Gagne, 2003). Inclusion of the other of the self and the selection of the same friend at T1 and T2 may shed light on whether the impact of any observed protective effect depends upon the persistence of that friendship over time. Finally, adults’ friendships tend to be longer and more stable than adolescents’ (Hartup & Stevens, 1997). Assessment of
friendship length in years allows analysis to address this potentially very long span of friendship, including potential for such friendships to have been developed earlier in life.

**Introducing the present study**

There are different ways of examining potential commonalities and differences between age groups, and many points of difference between middle age and adolescence which could be highlighted, for example risk factors and protective resources. A pragmatic epistemological stance within an ideologically coherent mixed-methods programme suggests that design may be directed by the research question and the knowledge and experience available, acknowledging that there are multiple legitimate approaches to knowledge generation (Greene & Caracelli, 1997; Todd et al., 2004). One route forward, given the focus of this thesis in developing understanding about the salutogenic mechanisms of friendship in vulnerable young people, is to apply a longitudinal model of how friendships might promote adolescent resilience to a sample of adults drawn from the community enabling a conceptual comparison between resilience processes at different lifespan stages. This approach exploits the knowledge gained from the adolescent studies in Chapters 3 and 4 to direct research in this largely unexplored area. This chapter therefore presents a longitudinal analysis of adults aged 35 to 55 years at baseline, with a one-year follow-up, assessing whether and how a supportive close friendship might promote psychological resilience over time through mediating mechanisms previously identified as relevant to adolescent resilience promotion. This analysis aims to:

1. establish whether a supportive close friendship is associated with later resilience in a group of middle-aged adults drawn from a community sample, controlling for prior resilience, hypothesizing a significant predictive relationship that would indicate that a close support friendship is a protective mechanism facilitating the development of resilience over time;

2. test the hypothesized longitudinal mediational roles of self-esteem, coping, self-efficacy, a supportive friendship network, relational interdependent self-construal, perceived stress, and emotional intelligence, selected on the basis of their inclusion in the adolescent study and their expected significance to adult resilience processes, in order to identify mechanisms through which a close friendship might facilitate resilience in middle age;
(3) test hypothesized moderating roles of theoretically meaningful variables. These variables are: gender, IOS at T1, selection of the same close friend at T1 and T2, and friendship length. Moderating effects of gender were expected because of gender moderating effects on the adolescent model in Chapter 3. IOS, friend selection included to address whether the persistence of any observed protective effect was dependent upon the maintenance of that friendship over time. Friendship length was specifically included because of the potential for adult friendships to span a number of prior developmental stages;

(4) to contextualise longitudinal processes of resilience promotion. Firstly, analysis examines the longitudinal development of resilience-promoting psychological resources in low- and moderate/high-baseline-resilience adults, hypothesizing as per the adolescent study that adults who were low-resilience at baseline would show weaker building of psychological resources and support systems. Secondly, analysis explores trajectories of resilience resource and support development, hypothesizing that adults demonstrating reduced resilience over time might exhibit lower levels of psychological resources and support whilst those increasing in resilience might show an upward trend of building more psychological resources and support structures.

This chapter will therefore extend the current literature in two key ways. Firstly, the analysis is an important exercise in its own right to understanding the function and significance of this potential protective mechanism during this age, as the impact of a single supportive close friendship upon resilience promotion within middle age has yet to be addressed. Secondly, the line of analysis here enables important conceptual comparisons to be drawn against the significance of relational processes supporting resilience in adolescence and through the lifespan. In so doing, the research hopes to illuminate relational processes of resilience promotion within a later developmental stage, providing promising directions towards a lifespan understanding of positive psychological adaptation.

**Method**

**Ethics**

Ethical approval for the longitudinal adult study was obtained from the Institute of Psychological Sciences, University of Leeds (see Appendix 1) prior to beginning data collection. Informed consent was obtained from participants for their responses to be used
in research. At follow-up, participants were reminded of the anonymity of their responses, their ability to leave questions unanswered, and their right to withdraw from the study at any time without providing a reason. Email addresses or other preferred contact information were requested from participants in order to facilitate data collection at T2. These were stored separately from questionnaire responses to aid preservation of confidentiality. Further details of the ethical considerations running throughout this doctoral research are detailed in Chapter 2.

Design

A longitudinal correlational design employed regression analyses to assess a hypothesized relationship between perceived close friendship quality and psychological resilience over time and examine possible mechanisms underlying this relationship. Hypothesized mediators were: self-esteem, self-efficacy, RISC, perceived stress, a perceived supportive friendship network, and coping styles. Multiple regression analysis examined how the following hypothesized moderators might affect the longitudinal relationship between friendship and resilience: gender, IOS at T1, and the selection of the same friend at T1 and T2. Preliminary cross-sectional analysis sought to detect significant relationships between perceived close friendship quality and resilience, and explanatory pathways mediating the hypothesized positive relationship, at each time point. A cross-lagged panel analysis then tested a longitudinal model of how perceived close friendship quality might promote psychological resilience in adults over time. Longitudinal mediations aimed to detect significant explanatory pathways of any such protective effect. Multiple regression analyses explored the impact of moderating contextual variables of the hypothesized longitudinal relationship between friendship and resilience. Separate univariate and multivariate analyses of variance then examined the effects of baseline resilience (low/high) and resilience trajectory (increasing/decreasing) upon subsequent psychological resources and support, as with the longitudinal adolescent study.

Recruitment

A combination of purposive and convenience sampling using a number of recruitment sources were employed to obtain a sample as varied in socioeconomic status and social connectedness as possible within the pragmatic constraints of the project. Participants were recruited in person at Open Days at the Institute of Psychological Sciences and the School of Computer Sciences at the University of Leeds amongst parents of prospective
students, from a local charity promoting physical and mental health in a socioeconomically disadvantaged community, and from a weekly support group for socially isolated vulnerable adults. Participants who were recruited in person were provided with a self-addressed Freepost envelope to complete a paper-based questionnaire and/or a card advertising a web URL to complete the questionnaire online. Online invitations to participate were posted through email lists, forum posts or intranet announcements through the university recruitment pool, the Faculty of Medicine & Health, teacher’s union, local social services, schools and colleges participating in the Adolescent study, a project page on a social networking site, and an online hobby forum. One participant was recruited from college administration of the Adolescent questionnaire as she fell within the correct age range. At T1, web URLs were generated for participants recruited from the community and, separately, from the online forum. Email addresses or other provided contact information were used to invite participants to complete the T2 questionnaire. At T2, participants were asked how they had been initially recruited to the study.

**Participants**

In order to participate, respondents had to confirm they were between 35 and 55 years of age at T1; could speak English fluently; and reside within the UK. 185 adult participants (26 males, 155 females, 4 unknown) completed the Friendship and Resilience Questionnaire at T1. Of these, 99 (9 males, 90 females) completed the T2 Questionnaire. As with the adolescent questionnaire, records were examined for exclusion from the dataset. Reasons for discarding participant records at T2 included failure to complete at least 70% of the questionnaire or at least 50% of the Resilience Scale or McGill Friendship Questionnaire (10); duplicate responses, in which case the first record was used (6); and displaying outlying results (4). Participants provided project passwords (composed from the first 3 letters of their surname and their birthdate) at both T1 and T2 to aid record-matching. 75 adults (9 males, 66 females) were therefore retained for analysis. Participants were aged between 35 and 55 years at T1 ($M = 42.89, SD = 6.23$) and between 36 and 57 years at T2 ($M = 44.03, SD = 6.15$). Overall, 88.0% of the adults reported they were of White British descent and 8% were another White background. The remaining participants identified as Mixed/dual White and Black Caribbean background (1.3%), Mixed/dual White and Black African background (1.3%) and Mixed/dual White and Asian background (1.3%). Participants reported a range of recruitment sources. 30.7% of participants had been recruited via the online forum, 22.7% from the Faculty, 8.0% from Institute open days, 5.3%
from the recruitment pool, 1.3% from the adult support group, 17.3% could not remember how they had been recruited, and 14.7% reported an “other” recruitment source.

Materials

The measures used in this analysis were identical to those used in the Adolescent questionnaire. They were the same across time T1 and T2, with the exceptions given below. The Questionnaire at T2 was composed of 10 psychometric scales, 3 free-text items, 1 item on the importance of different mode of interaction, and 1 item on preferences for support-seeking. One item on utilised modes of interaction within the friendship was removed at T2. Ethnic background and recruitment source were assessed at T2 only. At each time point, measures on close friendship quality and support were counterbalanced with measures on other psychological variables.

Measures Unique to the Questionnaire. Participants at T2 rated the importance of interactions across a range of modalities to their friendship including face-to-face meeting, social networking sites, telephone, email, texting, and others. Assessed demographic information included age, gender, and length of friendship with the selected friend. Ethnic background information was collected at T2. Three free-text items followed up from those used at T1. These 3 free-text items concerned: (1) how their closest friend may have helped them through a difficult time in the last year; (2) how their friendship with their closest friend may have changed in the time they have known each other; and (3) whether their friendship has shaped who they are. Amendments from the adolescent into the adult version of the Friendship & Resilience Questionnaire are available in Appendix 5.

Psychometric Scales. Scale selection corresponded to that of the Adolescent questionnaire at both time points. Ten psychometric scales were employed at T2 as in the Adolescent version of the questionnaire. These were the McGill Friendship Function Questionnaire (Mendelson & Aboud, 1999), the Multi-dimensional Perceived Social Support Scale (MPSSS) (Zimet, Dahlem et al., 1988), the Relational Interdependent Self-Construal (RISC) Scale (Cross, Bacon et al., 2000), the Inclusion of the Other in the Self (IOS) scale (Aron, Aron et al. 1992), the Brief COPE (Carver, 1997), the Perceived Stress Scale (Cohen, Kamarck et al., 1983), the 12-item General Self-Efficacy Scale (Bosscher & Smit, 1998), the Rosenberg Self-
### Table 5.1.
**Intercorrelations and internal reliabilities of measures across T1 and T2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Internal Reliability</th>
<th></th>
<th>Longitudinal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \alpha ) (T1)</td>
<td>( N ) (T1)</td>
<td>( \alpha ) (T2)</td>
<td>( N ) (T2)</td>
</tr>
<tr>
<td>Resilience</td>
<td>.93</td>
<td>75</td>
<td>.93</td>
<td>75</td>
</tr>
<tr>
<td>FF Total</td>
<td>.97</td>
<td>73</td>
<td>.97</td>
<td>70</td>
</tr>
<tr>
<td>Self-esteem †</td>
<td>.91</td>
<td>75</td>
<td>.94</td>
<td>74</td>
</tr>
<tr>
<td>IOS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>General self-efficacy</td>
<td>.86</td>
<td>73</td>
<td>.90</td>
<td>74</td>
</tr>
<tr>
<td>- Effort</td>
<td>.80</td>
<td>74</td>
<td>.79</td>
<td>75</td>
</tr>
<tr>
<td>- Initiative</td>
<td>.82</td>
<td>74</td>
<td>.87</td>
<td>75</td>
</tr>
<tr>
<td>- Persistence</td>
<td>.81</td>
<td>75</td>
<td>.80</td>
<td>75</td>
</tr>
<tr>
<td>Perceived stress †</td>
<td>.87</td>
<td>75</td>
<td>.87</td>
<td>75</td>
</tr>
<tr>
<td>EI</td>
<td>-</td>
<td>-</td>
<td>.85</td>
<td>71</td>
</tr>
<tr>
<td>RISC</td>
<td>.80</td>
<td>74</td>
<td>.89</td>
<td>70</td>
</tr>
<tr>
<td>MPSSS– Total</td>
<td>.96</td>
<td>70</td>
<td>.93</td>
<td>70</td>
</tr>
<tr>
<td>- Family</td>
<td>.94</td>
<td>73</td>
<td>.94</td>
<td>74</td>
</tr>
<tr>
<td>- Friends</td>
<td>.96</td>
<td>72</td>
<td>.95</td>
<td>73</td>
</tr>
<tr>
<td>- Special Person</td>
<td>.96</td>
<td>74</td>
<td>.93</td>
<td>73</td>
</tr>
<tr>
<td>Engaged coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Active coping</td>
<td>.77</td>
<td>75</td>
<td>.77</td>
<td>75</td>
</tr>
<tr>
<td>- Planning</td>
<td>.68</td>
<td>75</td>
<td>.71</td>
<td>75</td>
</tr>
<tr>
<td>- Positive reframing</td>
<td>.85</td>
<td>75</td>
<td>.82</td>
<td>75</td>
</tr>
<tr>
<td>- Acceptance</td>
<td>.63</td>
<td>75</td>
<td>.47</td>
<td>75</td>
</tr>
<tr>
<td>- Humour</td>
<td>.86</td>
<td>75</td>
<td>.89</td>
<td>75</td>
</tr>
<tr>
<td>- Religion</td>
<td>.91</td>
<td>75</td>
<td>.91</td>
<td>75</td>
</tr>
<tr>
<td>- Using emotional support</td>
<td>.80</td>
<td>75</td>
<td>.75</td>
<td>75</td>
</tr>
<tr>
<td>- Using instrumental support</td>
<td>.78</td>
<td>75</td>
<td>.86</td>
<td>75</td>
</tr>
<tr>
<td>- Self-distraction</td>
<td>.65</td>
<td>75</td>
<td>.53</td>
<td>75</td>
</tr>
<tr>
<td>Disengaged and externalising coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Behavioural disengagement</td>
<td>.62</td>
<td>75</td>
<td>.79</td>
<td>75</td>
</tr>
<tr>
<td>- Self-blame</td>
<td>.88</td>
<td>75</td>
<td>.78</td>
<td>75</td>
</tr>
<tr>
<td>- Substance use</td>
<td>.94</td>
<td>75</td>
<td>.84</td>
<td>75</td>
</tr>
<tr>
<td>- Denial</td>
<td>.79</td>
<td>75</td>
<td>.30</td>
<td>75</td>
</tr>
<tr>
<td>- Venting</td>
<td>.66</td>
<td>75</td>
<td>.32</td>
<td>75</td>
</tr>
</tbody>
</table>
NB. ***Significant at the .001 level (2-tailed). **Significant at the .01 level (2-tailed).
*Significant at the .05 level (2-tailed). Longitudinal intercorrelation N = 75 except for self-esteem (N = 74).

Esteem Scale (Rosenberg, 1989), and the Resilience Scale (Wagnild, 2009). The Brief Emotional Intelligence Scale (BEIS-10) was included at T2 as in the Adolescent study (Davies et al, 2010). Because interest in family context was limited to adolescence stage, family support was measured but not included as a moderator. The abridged Social Support scale (Xu & Burleson, 2001) was not retained at T2 as it was dropped from the T2 adolescent questionnaire. Further details about these scales are available in Chapter 3. Consistent with the adolescent study, individual item scores were allowed to be missing from reliability analysis to obtain accurate reliability calculations. Substitution of missing item scores for individual participants’ sub-scale or scale mean scores (as appropriate) was then performed for use in further analyses (Schafer & Graham, 2002).

T1 and T2 internal reliability and longitudinal intercorrelation of each psychometric scale in the Questionnaire was assessed using the longitudinal dataset (N = 79) using listwise deletion. Table 5.1 shows Cronbach’s alpha and the corresponding longitudinal Pearson’s correlation for each scale at T1 and T2. Cronbach’s alpha was calculated using unstandardised scores and assessed against established guidelines (Field, 2005). Reliability of IOS was not calculated as it is a one-item measure. As with the adolescent sample, alphas were calculated for sub-scales of the Brief COPE as the scale measures a constellation of distinct coping behaviours rather than a unidimensional construct (Carver, 1997). Longitudinal intercorrelations of coping style are based on the sub-scale groupings derived from confirmatory factor analyses in Chapter 3. The intercorrelation and internal reliability for the MPSSS Special Person sub-scale were not calculated as the sub-scale was specified to apply for the close friend at T2 but was left unspecified at T1. MPSSS Total scores were therefore not correlated longitudinally. EI internal reliability at T1 and longitudinal intercorrelation are omitted because EI was only assessed at T2.

Measures generally showed good to excellent internal reliability, although denial, venting, and self-distraction sub-scales of the Brief COPE showed poor internal reliability. These were nonetheless initially retained to facilitate comparison with the adolescent analysis.
Using the final longitudinal dataset (N = 75), within-measure longitudinal correlations were conducted on all assessed variables. Assessed scales were significantly and generally adequately correlated across T1 and T2.

**Procedure**

Procedure varied slightly according to whether recruitment took place online or in person. At T1, recruitment at Open Days and social groups was accompanied by a presentation by the researcher. All participants received online or written information sheets which were largely identical across time points introducing the study and explaining ethical information. During in-person Open Day, online forum and adult social group recruitment, the researcher was available to clarify items as requested. Participants completing the survey online or by post did so anonymously without the assistance of the researcher, whilst participants who completed the survey in the physical presence (or, in the case of online forum, the potential digital presence) of the researcher did so without assistance unless clarification was requested. All T1 participants were invited to provide an email address or other contact information for T2 follow-up. Participants were provided with online or written debriefing sheets including contact information for support organisations and instructions on how to withdraw retroactively from the study (see Appendix 6).

**Analysis and Results**

**Descriptive statistics**

This section statistically describes adult participants’ close friendships. Paired-sample t-tests were used to assess demonstrable change over time, as reported in Table 5.2. Participants at T1 and T2 were asked to respond to a number of questions about their relationship with their closest friend. Participants were asked to provide the initials of this friend. Friends’ reported gender and initials were used to determine whether the same friend had been chosen across time points. Using these criteria, 66.7% of adults chose the same friend, while 24.0% definitively chose different friends. It was not clear amongst 9.3% of adults whether they had chosen the same friend. Participants were requested to complete the questionnaire concerning a close friend who was not a sibling or romantic partner based on the field of interest of the study. 78.7% of participants at T1 and 80.0% at T2 reported that the person they considered their closest friend was a sibling, whilst 57.3% of participants at T1 and 54.7% at T2 said their closest friend was a romantic partner.
Table 5.2.

*Means and standard deviations of assessed variables at T1 and T2*

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1 M</th>
<th>T1 SD</th>
<th>T2 M</th>
<th>T2 SD</th>
<th>Δ M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>138.11</td>
<td>18.96</td>
<td>137.68</td>
<td>20.33</td>
<td>-0.42</td>
</tr>
<tr>
<td>FF Total</td>
<td>7.75</td>
<td>1.03</td>
<td>7.55</td>
<td>1.14</td>
<td>-0.22*</td>
</tr>
<tr>
<td>Self-esteem†</td>
<td>19.35</td>
<td>5.31</td>
<td>19.30</td>
<td>5.96</td>
<td>0.04</td>
</tr>
<tr>
<td>IOS</td>
<td>4.03</td>
<td>1.55</td>
<td>3.79</td>
<td>1.53</td>
<td>-0.24</td>
</tr>
<tr>
<td>General self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Effort</td>
<td>17.57</td>
<td>3.23</td>
<td>18.51</td>
<td>3.02</td>
<td>0.94*</td>
</tr>
<tr>
<td>- Initiative</td>
<td>11.87</td>
<td>2.40</td>
<td>11.64</td>
<td>2.53</td>
<td>-0.23</td>
</tr>
<tr>
<td>- Persistence</td>
<td>15.68</td>
<td>2.98</td>
<td>15.37</td>
<td>3.15</td>
<td>-0.31</td>
</tr>
<tr>
<td>Perceived stress†</td>
<td>37.55</td>
<td>7.99</td>
<td>38.11</td>
<td>7.32</td>
<td>0.56</td>
</tr>
<tr>
<td>Emotional Intelligence†</td>
<td></td>
<td></td>
<td>2.15</td>
<td>0.53</td>
<td>-</td>
</tr>
<tr>
<td>RISC</td>
<td>4.80</td>
<td>1.01</td>
<td>4.94</td>
<td>0.95</td>
<td>0.04</td>
</tr>
<tr>
<td>MPSSS – Family</td>
<td>5.27</td>
<td>1.67</td>
<td>5.23</td>
<td>1.51</td>
<td>0.00</td>
</tr>
<tr>
<td>MPSSS – Friends</td>
<td>5.71</td>
<td>1.45</td>
<td>5.82</td>
<td>1.15</td>
<td>0.11</td>
</tr>
<tr>
<td>Constructive coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Active coping</td>
<td>6.65</td>
<td>1.27</td>
<td>6.48</td>
<td>1.20</td>
<td>-0.17</td>
</tr>
<tr>
<td>- Planning</td>
<td>6.60</td>
<td>1.10</td>
<td>6.71</td>
<td>1.31</td>
<td>0.11</td>
</tr>
<tr>
<td>- Positive reframing</td>
<td>6.07</td>
<td>1.47</td>
<td>6.05</td>
<td>1.50</td>
<td>-0.01</td>
</tr>
<tr>
<td>- Acceptance</td>
<td>6.31</td>
<td>1.17</td>
<td>6.00</td>
<td>1.20</td>
<td>-0.31</td>
</tr>
<tr>
<td>- Humour</td>
<td>5.20</td>
<td>1.64</td>
<td>5.00</td>
<td>1.85</td>
<td>-0.20</td>
</tr>
<tr>
<td>- Religion</td>
<td>3.33</td>
<td>1.91</td>
<td>3.45</td>
<td>1.88</td>
<td>0.09</td>
</tr>
<tr>
<td>- Using emotional support</td>
<td>6.13</td>
<td>1.45</td>
<td>5.95</td>
<td>1.34</td>
<td>-0.19</td>
</tr>
<tr>
<td>- Using instrumental support</td>
<td>6.03</td>
<td>1.35</td>
<td>6.00</td>
<td>1.30</td>
<td>-0.03</td>
</tr>
<tr>
<td>- Self-distraction</td>
<td>5.44</td>
<td>1.42</td>
<td>5.51</td>
<td>1.41</td>
<td>0.07</td>
</tr>
<tr>
<td>Disengaged and externalising coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Behavioural disengagement</td>
<td>3.21</td>
<td>1.28</td>
<td>2.99</td>
<td>1.28</td>
<td>-0.23</td>
</tr>
<tr>
<td>- Self-blame</td>
<td>5.15</td>
<td>1.86</td>
<td>5.9</td>
<td>1.60</td>
<td>-0.15</td>
</tr>
<tr>
<td>- Substance use</td>
<td>2.91</td>
<td>1.37</td>
<td>2.84</td>
<td>1.39</td>
<td>-0.07</td>
</tr>
<tr>
<td>- Denial</td>
<td>2.71</td>
<td>1.27</td>
<td>2.61</td>
<td>0.91</td>
<td>-0.09</td>
</tr>
<tr>
<td>- Venting</td>
<td>5.07</td>
<td>1.45</td>
<td>5.08</td>
<td>1.21</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Note. N = 75. † Denotes scale is inversely scored. * Denotes difference between T1 and T2 scores to $p<.05$. Calculations were not made for the two coping styles as regression scores were used, centring means to 0 and standard deviations to 1.*
85.3% of participants at both T1 and T2 reported a gender-congruent closest friendship. The mean length of friendship was 14.31 years at T1 (N = 75, SD = 9.65) and 15.36 years at T2 (N = 75, SD = 10.63). Friendships involved moderate self-other overlap assessed using inclusion of the other in the self as shown in Table 5.2. At both time points participants reported moderately high closeness with their friend (T1 M (N = 75) = 2.16, SD = 0.81; T2 M (N = 74) = 2.15, SD = 0.80). Participants at T1 reported spending a mean of 4.87 hours per week (N = 75, SD = 6.09) with their friend, and 4.14 hours (N = 74, SD = 5.40) at T2.

Perceived close friendship quality was high but significantly decreased over time (t(74) = 2.01, p = .05). Otherwise, perceived support showed no change. Perceived supportiveness of family and wider friendship network was moderately high at both time points.

Resilience was moderately-high in the adult sample. 41.3% reported high resilience at T1, 38.7% were moderately resilience and 20.0% were of low resilience. 40.0% of adults were highly resilient at T2, 44.0% were moderately resilience and 16.0% were of low resilience. 46.7% of adults had increased in resilience over time, 45.3% had decreased and 8.0% showed no change. As with the adolescents, assessed variables generally remained stable across the sample. Participants reported increases in effort (t(74) = -2.21, p = .03). Sample self-esteem was moderate. Constructive coping was primarily characterised by support-seeking and by active coping, planning and acceptance. Self-blame and venting were characteristic of disengaged and externalising coping.

**Creation of coping scores**

Confirmatory factor analysis using AMOS18 (Arbuckle, 2009) was conducted to confirm factor structures of Constructive Coping and Disengaged and Externalising Coping latent variables, using a hypothesized structure based on these factor structures in the adolescent sample to enable a conceptual comparison with adolescent findings.

Using T1 data, a CFA was conducted on a 2-level Constructive Coping factor (CC.1) comprising two lower-order factors: Social Support (indicated by using emotional support and using instrumental support) and Engaged Coping (indicated by positive reframing, active coping, planning, acceptance, self-distraction, humour and religion). Although good absolute model fit was indicated by the CMIN/DF ratio, humour, religion and self-distraction failed to load significantly onto Engaged Coping. A noteworthy alternative model (CC.2) was tested using 3 lower-level factors, moving humour, self-distraction and
religion into a single lower-order latent variable. Again, this model achieved good absolute fit and reasonable fit on relative indices. However, religion did not significantly load onto the lower-order latent variable and humour loaded marginally \((p = .08)\). A 2-level factor structure (CC.3) removing humour, religion and self-distraction entirely as indicators of Engaged Coping resulted in an acceptable factor solution with significant pathways. The two lower-level factors were significant correlated at \(p = .05\) and the model demonstrated excellent fit along absolute indices including a non-significant \(\chi^2\) value \((p = .32)\) and good fit along relative indices. Accordingly, this 2-level factor was retained for subsequent analysis. This model was then tested using T2 data (CC.4), yielding excellent fit on relative and absolute indices with a non-significant \(\chi^2\) value \((p = .39)\). A non-significant loading of instrumental support onto the latent variable was observed \((p=.15)\), likely due to a negative error variance of this indicator. An acceptable solution is to fix the standardized loading of the indicator to 1, which lowers the model degrees of freedom by 1 (Kenny, 2011). The desirability of using this CFA to generate regression scores for use in a longitudinal mediation analysis prioritized retention of the T1 factor solution, as T1 scores would be used in longitudinal mediation analyses. Model re-specification eliminating instrumental support would, furthermore, have yielded a single-indicator support-seeking latent variable. This solution was therefore adopted. The model was re-run setting the standardized loading of instrumental support to support-seeking t to 1, revealing excellent fit on relative and absolute fit indices with a non-significant \(\chi^2\) value \((p = .39)\). This model (CC.5) was retained for analysis.

Next, a CFA was conducted using T1 data on a 5-indicator Disengaged and Externalising Coping factor (DEC.1). Indicators were venting, behavioural disengagement, substance use, denial and self-blame. The model achieved excellent fit according to relative and absolute indices. However, venting failed to load significantly to the latent variable \((p = .61)\). A 4-indicator model, removing “venting,” was subsequently tested. This model (DEC.2) showed excellent fit on relative and absolute indices with a non-significant \(\chi^2\) value \((p = .69)\), and all regression paths significant. Accordingly, this factor was retained for subsequent analysis. A CFA using T2 data on this model revealed excellent fit along relative and absolute indices with a non-significant \(\chi^2\) value \((p = .46)\), although “substance use” failed to load significantly to the latent variable \((p = 1.0)\). In order to maintain a conceptual comparison across time points and cohorts, this model (DEC.2) was nevertheless retained at T2.
Table 5.3.

*Confirmatory factor analyses of longitudinal adult model latent variables*

<table>
<thead>
<tr>
<th>Iteration</th>
<th>Latent Variable Model Name</th>
<th>CMIN/ DF</th>
<th>RMSEA</th>
<th>CFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC.1</td>
<td>Constructive Coping at T1 (Adolescent model)</td>
<td>1.71</td>
<td>1.0</td>
<td>.87</td>
<td>.87</td>
<td>.77</td>
<td>82.58</td>
</tr>
<tr>
<td>CC.2</td>
<td>Constructive Coping at T1 (Alternative model)</td>
<td>1.36</td>
<td>.07</td>
<td>.94</td>
<td>.91</td>
<td>.84</td>
<td>74.69</td>
</tr>
<tr>
<td>CC.3†</td>
<td>Constructive Coping at T1 (Adult model)</td>
<td>1.16</td>
<td>.05</td>
<td>.99</td>
<td>.96</td>
<td>.90</td>
<td>35.28</td>
</tr>
<tr>
<td>CC.4</td>
<td>Constructive Coping at T2 (Adult model)</td>
<td>1.06</td>
<td>.03</td>
<td>1.0</td>
<td>.97</td>
<td>.91</td>
<td>34.44</td>
</tr>
<tr>
<td>CC.5†</td>
<td>Constructive Coping at T2 (Adult model)</td>
<td>1.05</td>
<td>.03</td>
<td>1.0</td>
<td>.96</td>
<td>.91</td>
<td>33.49</td>
</tr>
<tr>
<td>DEC.1</td>
<td>Disengaged and Externalising Coping at T1 (Adolescent model)</td>
<td>0.47</td>
<td>.00</td>
<td>1.0</td>
<td>.99</td>
<td>.96</td>
<td>22.37</td>
</tr>
<tr>
<td>DEC.2†</td>
<td>Disengaged and Externalising Coping at T1 (Adult model)</td>
<td>0.38</td>
<td>.00</td>
<td>1.0</td>
<td>1.0</td>
<td>.98</td>
<td>16.75</td>
</tr>
<tr>
<td>DEC.2†</td>
<td>Disengaged and Externalising Coping at T2 (Adult model)</td>
<td>0.46</td>
<td>.00</td>
<td>1.0</td>
<td>.99</td>
<td>.97</td>
<td>16.92</td>
</tr>
</tbody>
</table>

Note: † Denotes the latent variable models retained for subsequent analyses.

The factor structures developed through the CFA were then used to derive regression scores for each of the 2 coping factors at T1 and T2, employing a principal components analysis (PCA) in SPSS/PASW. PCA is appropriate when there is a strong theoretical framework directing the extraction, as opposed to detection, of factors (Tabachnick & Fidell, 2006). The present analysis aimed to extract factors which could be conceptually compared to adolescents’ coping styles, whose underlying structures had been confirmed using CFA and which used for subsequent regression, univariate and multivariate analyses.

**Check for selective attrition**

To check for selective attrition, a multivariate analysis of variance (MANOVA) compared scores on the following T1 variables for participants who participated at both time points with participants who had only participated at T1: perceived close friendship quality,
resilience, IOS, total perceived social support, RISC, perceived stress, general self-efficacy, self-esteem, constructive coping and disengaged and externalising coping.

A marginally non-significant difference on the combined dependent variable was detected ($F(10, 172) = 1.79$, Wilk’s lambda = .91, $p = .07$, partial $\eta^2 = .09$) with an observed power of .82. Analysis revealed a significant difference at T1 between follow-up participants’ and non-participants’ perceived close friendship quality ($F(1,181) = 4.50$, $p = .04$, partial $\eta^2 = .02$), resilience ($F(1,181) = 5.45$, $p = .02$, partial $\eta^2 = .03$), total perceived social support ($F(1,181) = 3.88$, $p = .05$, partial $\eta^2 = .02$) and constructive coping ($F(1,181) = 10.38$, $p < .01$, partial $\eta^2 = .05$). Subsequent non-participants reported lower initial perceived close friendship quality ($\Delta M = 0.41$), resilience ($\Delta M = 7.53$), total perceived social support ($\Delta M = 0.41$), and constructive coping ($\Delta M = 0.474$). Analysis tentatively suggests that selective attrition played some role in subsequent findings as T1 participants who were more socially isolated, less resilient and less constructive copers were marginally less likely to follow up.

**Correlations**

Bivariate cross-sectional correlations using pairwise deletion (N = 75, except T2 self-esteem and T2 EI, N = 74) were performed to explore significant relationships between all assessed variables at T1 (Table 5.4) and T2 (Table 5.5): close friendship quality, resilience, IOS, perceived social support from family, friends, and overall, self-esteem, self-efficacy and its components (effort, initiative and persistence), perceived stress, RISC, constructive coping and disengaged and externalising coping. EI was included in the analysis at T2.

Contrary to hypotheses, perceived close friendship quality was not significantly associated with resilience at T1. Greater perceived close friendship quality was associated only with higher IOS, a relational-interdependent self-construal, greater friendship network and overall perceived support – although not family support – and constructive coping. By contrast, resilience was significantly associated with both support and personal resources. Significantly positive relationships were detected between resilience and greater self-esteem, greater self-efficacy and its components, more constructive coping, and less perceived stress and disengaged and externalising coping. Resilience was also positively associated with IOS and greater overall perceived and family support. At T1, then, the impact of a close friendship appears distinctly limited to the realm of social relationships, whilst resilience is associated with a web of both relational and individual psychological resources.
Table 5.4.

Cross-sectional intercorrelations of measures in the Friendship and Resilience Questionnaire at T1

<table>
<thead>
<tr>
<th></th>
<th>RS</th>
<th>IOS</th>
<th>MPSSS Total</th>
<th>MPSSS Family</th>
<th>MPSSS Friends</th>
<th>SES*</th>
<th>GSES Total</th>
<th>GSES Effort</th>
<th>GSES Initiative</th>
<th>GSES Persistence</th>
<th>PSS</th>
<th>RISC</th>
<th>CC</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF</td>
<td>.16</td>
<td>.49***</td>
<td>.41***</td>
<td>.20</td>
<td>.59***</td>
<td>-.15</td>
<td>.08</td>
<td>-.05</td>
<td>.13</td>
<td>-.08</td>
<td>.39**</td>
<td>.39**</td>
<td>-.22</td>
<td></td>
</tr>
<tr>
<td>RS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPSSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSES Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSES Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSES Initiative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSES Persistence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RISC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Indicators with *** denotes significance at p < .001, ** denotes significance at p < .01, * denotes significance at p < .05.

**Constructive Coping**

**Externalising Coping**

**FF** indicates Friendship, **IOS** indicates Interpersonal Oriented Style, **MPSSS** indicates Multidimensional Perceived Support Scale, **SES** indicates Self-Esteem, **GSES** indicates General Self-Efficacy, **PSS** indicates Perceived Stress, **RISC** indicates Resilience, **CC** indicates Constructive Coping, **DEC** indicates Defeat Coping.
Table 5.5.
Cross-sectional intercorrelations of measures in the Friendship and Resilience Questionnaire at T2

<table>
<thead>
<tr>
<th></th>
<th>RS</th>
<th>IOS</th>
<th>MPSSS Total</th>
<th>MPSSS Family</th>
<th>MPSSS Friends</th>
<th>SES†</th>
<th>GSES Total</th>
<th>GSES Effort</th>
<th>GSES Initiative</th>
<th>GSES Persistence</th>
<th>PSS</th>
<th>RISC</th>
<th>CC</th>
<th>DEC</th>
<th>EI†</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF</td>
<td>.45***</td>
<td>.41***</td>
<td>.71***</td>
<td>.29**</td>
<td>.68***</td>
<td>- .28**</td>
<td>.40***</td>
<td>.28**</td>
<td>.34**</td>
<td>.41***</td>
<td>- .23*</td>
<td>.35**</td>
<td>.46***</td>
<td>- .26*</td>
<td>.43***</td>
</tr>
<tr>
<td>RS</td>
<td>-</td>
<td>.16</td>
<td>.49***</td>
<td>.35**</td>
<td>.41***</td>
<td>- .63***</td>
<td>.75***</td>
<td>.62***</td>
<td>.48***</td>
<td>.80***</td>
<td>- .55***</td>
<td>.06</td>
<td>.57***</td>
<td>- .58***</td>
<td>-</td>
</tr>
<tr>
<td>IOS</td>
<td>-</td>
<td>-</td>
<td>.42***</td>
<td>.18</td>
<td>.40***</td>
<td>- .08</td>
<td>.09</td>
<td>.09</td>
<td>.05</td>
<td>.10</td>
<td>.06</td>
<td>.21</td>
<td>.10</td>
<td>- .18</td>
<td>- .23*</td>
</tr>
<tr>
<td>MPSSS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.78***</td>
<td>.85***</td>
<td>- .29*</td>
<td>.40***</td>
<td>.29*</td>
<td>.33**</td>
<td>.41***</td>
<td>- .19</td>
<td>.50***</td>
<td>.56***</td>
<td>- .29*</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- .30**</td>
<td>.30**</td>
<td>.28*</td>
<td>.15</td>
<td>.34**</td>
<td>- .19</td>
<td>.46***</td>
<td>.49***</td>
<td>- .24*</td>
<td>- .31**</td>
</tr>
<tr>
<td>Family</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- .30**</td>
<td>.30**</td>
<td>.28*</td>
<td>.15</td>
<td>.34**</td>
<td>- .19</td>
<td>.46***</td>
<td>.49***</td>
<td>- .24*</td>
<td>- .31**</td>
</tr>
<tr>
<td>MPSSS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- .56***</td>
<td>- .40***</td>
<td>- .41***</td>
<td>- .63***</td>
<td>.36**</td>
<td>.03</td>
<td>- .38**</td>
<td>.44***</td>
<td>.42***</td>
</tr>
<tr>
<td>Friends</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SES†</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- .56***</td>
<td>- .40***</td>
<td>- .41***</td>
<td>- .63***</td>
<td>.36**</td>
<td>.03</td>
<td>- .38**</td>
<td>.44***</td>
<td>.42***</td>
</tr>
<tr>
<td>GSES</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>- .56***</td>
<td>- .40***</td>
<td>- .41***</td>
<td>- .63***</td>
<td>.36**</td>
<td>.03</td>
<td>- .38**</td>
<td>.44***</td>
<td>.42***</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GSES Effort</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GSES</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Initiative</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GSES Persistence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PSS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RISC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constructive Coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Externalising Coping</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EI†</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**
- † Indicates significance levels: **p < .05**, ***p < .001**.
Findings were more complex at T2. Perceived close friendship quality was positively and significantly associated with greater resilience, as hypothesized. As well as relating to assessed social support variables including family support, friendship quality also linked to an array of support and psychological resources including self-esteem, general self-efficacy and its components, constructive coping, emotional intelligence and, negatively, with perceived stress and disengaged and externalising coping. Resilience was significantly associated with all variables except for RISC and IOS, in expected directions. T2 findings therefore showed a distinct pattern of relationships to T1, as perceived close friendship quality was more pervasively associated with other perceived supportive relationships and psychological resources at T2. The contradictory cross-sectional findings lend mixed support to the suggestions that close friendships are associated with resilience and that this relationship might be partially explained by the suggested explanatory pathways.

**Cross-sectional mediations**

To determine which mediating variables might be included in a model of how perceived close friendship quality might predict adult resilience, a series of simple linear cross-sectional bootstrapping mediations were performed on T1 and T2 data, separately. Analysis used standardized scores, 5000 resamples and 95% bias-corrected intervals (Preacher & Hayes, 2008). A confidence interval which does not contain zero indicates a significant mediating effect. T1 perceived close friendship quality was input as a predictor, the T1 mediator score was input as a mediator, and T1 resilience was input as an outcome. This process was repeated for T2 scores.

The total effect of perceived close friendship quality upon resilience ($c$) was 0.15 ($p<.1$) at T1 and 0.44 ($p<.001$) at T2. Close friendship quality was therefore associated with resilience only at T2. Examination of the 95% bias-corrected confidence intervals indicated significant cross-sectional mediating effects at T1 of constructive coping (direct effect of friendship upon resilience ($c' = .09, p>.1$) and at T2 of perceived stress ($c' = .32, p<.01$), general self-efficacy ($c' = .17, p=.03$) and its components initiative ($c' = .31, p<.01$) and...
persistence ((c') = .14, p=.05), self-esteem ((c') = .30, p<.001), constructive coping ((c') = .23, p=.02), disengaged and externalising coping ((c') = .30, p<.001) and emotional intelligence ((c') = .19, p=.03). Total indirect effect sizes as indicated by the point estimates showed that persistence and general self-efficacy were the most powerful mediators of the relationship between friendship and resilience, followed by emotional intelligence, constructive coping, self-esteem, reduced disengaged and externalising coping, initiative and mitigation of perceived stress.

Table 5.6.

Cross-sectional bootstrapping results for mediators of predictive relationship of perceived close friendship quality upon resilience at T1 and T2

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Point estimate</th>
<th>Lower</th>
<th>Upper</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Friendship Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.07</td>
<td>0.07</td>
<td>-0.22</td>
<td>0.04</td>
<td>-0.10</td>
</tr>
<tr>
<td>RISC</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.14</td>
<td>0.06</td>
<td>-0.15</td>
</tr>
<tr>
<td>Perceived Stress*</td>
<td>0.04</td>
<td>0.10</td>
<td>-0.06</td>
<td>0.18</td>
<td>0.17</td>
</tr>
<tr>
<td>Self-Efficacy (General)*</td>
<td>0.06</td>
<td>0.26</td>
<td>-0.13</td>
<td>0.28</td>
<td>0.07</td>
</tr>
<tr>
<td>- Self-Efficacy (Effort)</td>
<td>-0.01</td>
<td>0.14</td>
<td>-0.13</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>- Self-Efficacy (Initiative)*</td>
<td>0.07</td>
<td>0.12</td>
<td>-0.06</td>
<td>0.23</td>
<td>0.02</td>
</tr>
<tr>
<td>- Self-Efficacy (Persistence)*</td>
<td>0.10</td>
<td>0.29</td>
<td>-0.09</td>
<td>0.34</td>
<td>0.12</td>
</tr>
<tr>
<td>Self-Esteem*</td>
<td>0.10</td>
<td>0.16</td>
<td>-0.06</td>
<td>0.30</td>
<td>0.01</td>
</tr>
<tr>
<td>Constructive Coping † *</td>
<td>0.22</td>
<td>0.19</td>
<td>0.07</td>
<td>0.40</td>
<td>0.08</td>
</tr>
<tr>
<td>Disengaged and Externalising Coping*</td>
<td>0.11</td>
<td>0.12</td>
<td>-0.01</td>
<td>0.28</td>
<td>0.02</td>
</tr>
<tr>
<td>Emotional Intelligence*</td>
<td>-</td>
<td>0.23</td>
<td>-</td>
<td>-</td>
<td>0.13</td>
</tr>
</tbody>
</table>

NB N = 75 at T1, N = 73 at T2, † denotes significant mediation at T1, * denotes significant mediation at T2

Cross-lagged panel analysis

Moving from the cross-sectional datasets towards the detection of longitudinal effects, a cross-lagged panel analysis (Fig. 1) was conducted to investigate a hypothesized causal relationship of perceived close friendship quality with psychological resilience.
First friendship quality at T2 was regressed onto resilience at T1, controlling for friendship quality at T1. Whilst a marginally significance impact of resilience was detected ($\beta = .16$, $p=.09$), friendship quality at T1 predicted quality at T2 ($\beta = .60$, $p<.001$). Next, analysis tested the hypothesized prediction of T1 friendship on T2 resilience, controlling for resilience at T1. Although there was an effect of prior resilience levels ($\beta = .66$, $p<.001$), friendship quality significantly and moderately predicted later resilience ($\beta = .19$, $p=.03$).

Overall statistical power for each regression equation was sufficient at above .99. Whilst resilience and friendship quality are interlinked, findings suggest that friendship quality significantly promotes development of psychological resilience amongst adults.

**Longitudinal mediations**

On the basis of observing a longitudinal protective function of perceived close friendship quality on resilience, a series of longitudinal bootstrapping mediations, reported in Table 5.7, were conducted to detect the longitudinal pathways through which this relationship may operate. The following variables were hypothesized to mediate between perceived close friendship quality and subsequent resilience, controlling for earlier resilience and earlier levels of the hypothesized mediator: a supportive friendship network, RISC, perceived stress, self-efficacy and its components (effort, initiative and persistence), self-esteem, constructive coping and disengaged and externalising coping.

Analyses used standardized scores, 5000 resamples and 95% bias-corrected intervals (Preacher & Hayes, 2008). A confidence interval which does not contain zero indicates a significant mediational effect. T1 perceived close friendship quality was input as a predictor.
and T2 resilience was input as an outcome. The T2 mediator score was input as a mediator, and 2 covariates were included: T1 resilience, and T1 mediator score.

Examination of the 95% bias-corrected confidence intervals indicated that, lending only partial support to hypotheses, the predictive relationship of perceived close friendship quality upon resilience was not significantly mediated by any of the hypothesized mediators, except marginally by constructive coping ($c' = .11$, $p = .14$), as the lower-bound CI sits at zero. The total effect of perceived close friendship quality upon resilience ($c$) was $\.15$ ($p = .05$). Constructive coping therefore marginally mediated the relationship between perceived close friendship quality upon subsequent resilience, controlling for earlier resilience and constructive coping. No subsequent path or structural model analysis was undertaken as no other hypothesized mediator showed a significant or marginal effect, and multiple cross-sectional mediation pathways had only been observed at T2.

Table 5.7.

**Bootstrapping results for mediators of longitudinal predictive relationship of perceived close friendship quality upon resilience**

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Point estimate</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Friendship Network</td>
<td>0.05</td>
<td>-0.03</td>
<td>0.18</td>
</tr>
<tr>
<td>RISC</td>
<td>-0.00</td>
<td>-0.05</td>
<td>0.03</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.12</td>
</tr>
<tr>
<td>Self-Efficacy (General)</td>
<td>0.07</td>
<td>-0.01</td>
<td>0.19</td>
</tr>
<tr>
<td>- Self-Efficacy (Effort)</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.09</td>
</tr>
<tr>
<td>- Self-Efficacy (Initiative)</td>
<td>0.03</td>
<td>-0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>- Self-Efficacy (Persistence)</td>
<td>0.09</td>
<td>-0.01</td>
<td>0.21</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.04</td>
<td>-0.05</td>
<td>0.22</td>
</tr>
<tr>
<td>Constructive Coping*</td>
<td>0.04</td>
<td>0.00</td>
<td>0.13</td>
</tr>
<tr>
<td>Externalising Coping</td>
<td>0.04</td>
<td>-0.01</td>
<td>0.15</td>
</tr>
</tbody>
</table>

NB N = 75, * denotes significant mediation.
Longitudinal moderation

In order to detect theoretically-meaningful contextual effects, a series of longitudinal moderated regression analyses assessed the separate hypothesized moderating effects of gender, IOS at T1, friendship length (in years) and the selection of the same friend at T1 and T2 on the longitudinal relationship between close friendship quality and psychological resilience, controlling for the effects of resilience at T1. For each of the hypothesized moderating variables, RS scores at T1 were entered at Step 1. FF scores at T1 and the moderator were entered independently as variables in Step 2. A 2-level (yes/no) categorical variable was created coding whether participants had chosen the same friend as their closest across time points. In Step 3 an interaction variable of FF scores at T1 and the moderator was entered. Resilience scores at T2 were entered as a dependent variable. Analyses revealed no significant interaction with IOS at T1 (β = .10, p > .1), gender (β = .62, p = .06), friendship length (β = .23, p > .1) or selection of the same closest friend (β = .11, p > .1), controlling for baseline resilience.

Effect of baseline resilience

Adolescent findings in Chapter 4 suggested that protective processes may only be selectively demonstrated by baseline resilience. Analysis showed that resilient adolescents showed subsequently greater self-esteem, emotional intelligence, self-efficacy and constructive coping at follow-up than their less-resilient peers. However, disengaged and externalising coping, perceived close friendship quality and perceived support from friends and family did not differ between higher- and lower-resilience adolescents. Adults who were low-resilience at baseline might therefore show weaker patterns of psychological resources and support systems over time than adults who were high-resilience at baseline. As with the adolescents, MANOVA examined statistical differences between baseline resilience groups (low N = 15, moderate/high = 60) on subsequent resources and support, without controlling for prior levels of resources and support (small sample sizes in individual cells did not permit these controls). The 14 support and resource measures assessed were: self-esteem, emotional intelligence, self-efficacy and its components, perceived stress, RISC, friendship network support, family support, IOS, perceived close friendship quality, constructive coping, and disengaged and externalising coping.
The hypothesis that low-resilience adults would show subsequently lower psychological resources than their peers was supported by a MANOVA (N = 73) with an observed power of .98 revealing significant difference between adults on the combined dependent variable (F (13, 59) = 2.91, Wilk's lambda = .61, p < .01, partial η² = .39). Individual analyses using a Bonferroni adjustment revealed differences according to baseline groups for each of the assessed subsequent support and resources except RISC: IOS (F (1,71) = 7.67, p = .01, partial η² = .10), perceived close friendship quality (F (1,71) = 8.45, p = .01, partial η² = .12), perceived stress (F (1,71) = 9.27, p =<.01, partial η² = .12), effort (F (1,71) = 10.50, p < .01, partial η² = .13), initiative (F (1,71) = 5.39, p = .02, partial η² = .07), persistence (F (1,71) = 19.60, p <.001, partial η² = .22), general self-efficacy (F (1,71) = 15.96, p <.001, partial η² = .18), self-esteem (F (1,71) = 11.73, p <.01, partial η² = .14), emotional intelligence (F (1,71) = 11.96, p <.01, partial η² = .14), perceived family support (F (1,71) = 5.91, p = .02, partial η² = .08), friendship network support (F (1,71) = 9.22, p <.01, partial η² = .12), constructive coping (F (1,71) = 16.41, p <.001, partial η² = .19), and disengaged and externalising coping (F (1,71) =18.83, p <.001, partial η² = .21). Resilient adults showed significantly higher subsequent IOS (Δ M = 1.21), perceived close friendship quality (Δ M =.95), RISC (Δ M =.42), effort (Δ M = 2.73), initiative (Δ M = 1.70), persistence (Δ M = 3.75), general self-efficacy (Δ M =8.17), self-esteem (Δ M = -5.70), emotional intelligence (Δ M = .51), perceived family support (Δ M = 1.04), friendship network support (Δ M = .99) and constructive coping (Δ M = 1.10) than their low-resilient peers. They also demonstrated less disengaged and externalising coping (Δ M = -1.17) and lower perceived stress (Δ M = -6.15)

**Resilience trajectories**

As examined with adolescents in Chapter 4, psychosocial paths may have differed for adults on risk versus resilience trajectories, with more resilient adults showing different patterns of change in psychological resources and social support than their peers who decreased in resilience. A series of 2 x2 mixed ANOVA examined whether adults who had either increased (N = 35) or decreased (N = 24) in resilience over one year showed significant changes in assessed psychological resources over time, to compare resilience trajectories. Participants showing no change in resilience at follow-up (N = 6) were omitted from the present analysis because of low sample size. Emotional intelligence was not assessed as it was only included at T2.

No significant main effect of the assessed measure was detected between T1 and T2 scores of perceived close friendship quality (F (1, 67) = 3.67, p=.06, partial η² = .05), friendship
network support ($F(1, 67) = 0.56, p = .46, \text{partial } \eta^2 = .01$), RISC ($F(1, 67) = 0.18, p = .67, \text{partial } \eta^2 = .00$), perceived stress ($F(1, 67) = 0.25, p = .62, \text{partial } \eta^2 = .00$), general self-efficacy ($F(1, 67) = 0.40, p = .53, \text{partial } \eta^2 = .01$), initiative ($F(1, 67) = .30, p = .58, \text{partial } \eta^2 = .01$), persistence ($F(1, 67) = 1.51, p = .22, \text{partial } \eta^2 = .02$), self-esteem ($F(1, 67) = 0.05, p = .82, \text{partial } \eta^2 = .00$), constructive coping ($F(1, 67) = 0.09, p = .76, \text{partial } \eta^2 = .00$) and disengaged and externalising coping ($F(1, 67) = 0.06, p = .81, \text{partial } \eta^2 = .00$), indicating that these variables remained stable across the sample over the year. A significant main effect was observed for effort ($F(1, 67) = 4.40, p = .04, \text{partial } \eta^2 = .06$) as effort increased over time across the sample.

No main effect of trajectory direction (increasing versus decreasing resilience) was observed on perceived close friendship quality ($F(1, 67) = 0.76, p = .39, \text{partial } \eta^2 = .01$), friendship network support ($F(1, 67) = 0.11, p = .75, \text{partial } \eta^2 = .01$), RISC ($F(1, 67) = 0.76, p = .39, \text{partial } \eta^2 = .01$), perceived stress ($F(1, 67) = 0.28, p = .60, \text{partial } \eta^2 = .00$), general self-efficacy ($F(1, 67) = 0.77, p = .38, \text{partial } \eta^2 = .01$), effort ($F(1, 67) = 0.61, p = .44, \text{partial } \eta^2 = .01$), initiative ($F(1, 67) = 0.32, p = .58, \text{partial } \eta^2 = .01$), persistence ($F(1, 67) = 0.82, p = .37, \text{partial } \eta^2 = .01$), self-esteem ($F(1, 67) = 2.05, p = .16, \text{partial } \eta^2 = .03$), constructive coping ($F(1, 67) = 0.01, p = .94, \text{partial } \eta^2 = .00$) or disengaged and externalising coping ($F(1, 67) = 1.34, p = .25, \text{partial } \eta^2 = .02$), indicating that there was no significant difference on variable scores between adults who had decreased or increased in resilience when considering T1 and T2 together.

Turning towards the interaction effects, which are of primary interest, significant interactions between scores over time and the direction of resilience trajectory were observed for persistence ($F(1, 67) = 5.33, p = .02, \text{partial } \eta^2 = .07$), self-esteem ($F(1, 67) = 7.11, p = .01, \text{partial } \eta^2 = .10$) and constructive coping ($F(1, 67) = 5.03, p = .03, \text{partial } \eta^2 = .07$). Adults who had shown a decreased in resilience over time also showed significantly less self-esteem over time ($t(32) = 2.00, p = .05, \Delta M = 4.49$) whilst adults who had increased in resilience showed increases in persistence ($t(34) = 2.73, p = .01, \Delta M = 1.06$) and constructive coping ($t(34) = 2.02, p = .05, \Delta M = 0.26$) over time. No significant interactions were observed for perceived close friendship quality ($F(1, 67) = 3.18, p = .08, \text{partial } \eta^2 = .05$), friendship network support ($F(1, 67) = 0.05, p = .83, \text{partial } \eta^2 = .00$), RISC ($F(1, 67) = 0.01, p = .93, \text{partial } \eta^2 = .00$), perceived stress ($F(1, 67) = 3.04, p = .09, \text{partial } \eta^2 = .04$), general self-efficacy ($F(1, 67) = 1.64, p = .21, \text{partial } \eta^2 = .02$), effort ($F(1, 67) = 0.18, p = .67, \text{partial } \eta^2 = .00$), initiative ($F(1, 67) = 2.95, p = .09, \text{partial } \eta^2 = .04$) or disengaged
and externalising coping \( F (1, 67) = 1.61, p = .21, \text{ partial } \eta^2 = .02 \). Patterns of resilience-promotion were somewhat different qualitatively to patterns of resilience-reduction, as decreases in resilience were associated with decreased self-esteem but increases were linked to greater persistence and constructive coping.

**Discussion**

In a novel study examining the impact of close friendships upon resilience and protective processes using middle-aged adults, the findings presented here provide promising support for the assertion that a supportive close friendship acts as a protective mechanism promoting psychological resilience within this age group. Controlling for prior resilience, perceived close friendship quality was found to significantly predict greater subsequent resilience after one year. Evidence suggested that this significant protective relationship was mediated by the facilitation of constructive coping. It is, however, worth noting that a somewhat different pattern emerged in the Time 2 cross-sectional analysis. Specifically, partial mediation effects were detected for general self-efficacy and its components initiative and persistence, self-esteem, constructive coping, emotional intelligence, and reduced stress and disengaged and externalising coping. Participants generally reported high perceived close friendship quality and moderately-high resilience. Adults who were resilient at Time 1 showed a consistent pattern of greater subsequent psychological resources and support, with the exception of RISC, than their less-resilient peers. Resilience trajectory had limited impact on other psychological and support resources. However, increasingly-resilient adults showed increases in constructive coping and persistence, whilst decreasingly-resilient adults showed worsening self-esteem over time.

This study presents a novel and valuable addition to the literature by identifying a supportive close friendship as a protective mechanisms promoting resilience in mid-life and identifying constructive coping as a way in which such friendships exert their adaptive effects. The focus upon the impact of social support upon resilience within mid-life adds to previous research examining the impact of earlier social relationships upon functioning later on in life (e.g., Baril, Julien, Chartrand & Dubé, 2009; Obradovic, Burt & Masten, 2010) and addresses developing a lifespan perspective on resilience (Bonanno, 2004; Rutter, 1999). Friendships in mid-life become characterised by general support and companionship in mid-life and take on different behaviour forms than in adolescence (Hartup & Stevens,
This discussion will primarily consider the adult findings on their own account, whilst a more integrative conceptual comparison is presented in Chapter 7.

Constructive coping was identified as the most powerful route through which long-term change in resilience was effected, consistent with patterns observed in the adolescent study and previous research noting the importance of coping for resilience (e.g., Campbell-Sills, Cohan & Stein, 2006; Clauss-Ehlers, 2008). Friends provide support, companionship, and opportunities to enact coping responses such as positive reframing of a situation or engaging in a diverting activity when faced with a challenging situation. As suggested by longitudinal, but also cross-sectional, findings in this chapter, short-term and long-term constructive coping may be an important mechanism for adaptation when self-concept and personality characteristics associated with resilience are fairly stable, as in adulthood (Diehl, Jacobs & Hastings, 2006). Unlike in the adolescent sample, disengaged and externalising coping mediated the protective effect of a close friendship only in the Time 2 cross-sectional analysis. Particularly given the adults’ friendships general long-term stability (Hartup & Stevens, 1997), it is likely that friends are partners in performing the habitual adaptive coping responses which have been adopted by adulthood, including, perhaps, short-term use of disengaging behaviours such as substance use or denial (Bonanno, 2005). A significant meditational effect of self-esteem on the relationship between perceived close friendship quality and resilience was similarly found at Time 2 only, potentially suggesting a complex but promising role for friendships to impact self-esteem in light of the association between self-esteem and resilience in this age group (Beutel et al., 2010). This may have been better detected using more assessment points or different time intervals.

Turning to interpretation of the longitudinal pathways through which close friendship impacted resilience, it is notable that whilst a direct protective effect of close friendship upon resilience was observed, the only assessed variable found to partially explain this longitudinal relationship was constructive coping. Taken with the presence of additional mediational effects at T2 only, and the limited range of resources and support associated with changes in resilience over time, the present findings pose intriguing questions about the nature, duration and persistence of explanatory pathways. The protective effect of friendship upon resilience perhaps captures the incremental but cumulative effect of many fragmented, diffuse pathways. As this community sample lacked a shared risk factor, it may be that friendship support targeted different subjective risks in different ways. The mechanisms through which close friendship support promotes resilience may also be
different to those presently measured. Supported by the finding that friendship support promotes resilience through constructive coping responses, the impact of friendship support may be for a shorter duration than was assessed for resources such as self-esteem and emotional intelligence and may more explicitly target immediate perceived stressors. The cross-sectional significance of reduced perceived stress suggests friendship mechanisms may involve more immediate, proximal effects such as increasing positive emotions associated with resilience (Ong, Bergeman, Bisconti & Wallace, 2010) and providing companionship (Hartup & Stevens, 1999). Talking through a negative event with a supportive friend can even have physical benefits, enabling a level of relaxation sufficient to positively benefit systolic blood pressure (Holt-Lunstad, Uchino, Smith & Hicks, 2007).

The adult cohort demonstrated moderately-high resilience both at baseline and follow-up. The characteristic concerns of mid-life across a number of potentially challenging domains (Beutel et al., 2010) present a variety of potential turning points along which resilience may be developed (Rutter, 1990) and consequently a number of pathways through which protective mechanisms may operate. However, the potential for numerous encounters with challenge may be balanced against generally stable functioning compared to adolescence, even following exposure to potential trauma (Bonanno & Mancini, 2008). Indeed, mean resilience was stable across this cohort, although individual changes in resilience were observed. In line with Bonanno’s (2004) suggestion that return to normative function largely defines adult resilience, it is possible that, having been resilient at baseline, there was little room for friendships to impact further upward adaptation through mechanisms other than constructive coping, especially those closely related to the self, such as self-esteem, self-efficacy and emotional intelligence. As opposed to adolescents, adults may be stable in the representations of their self-concepts within different social relationships and over time, which is associated with greater authenticity and self-esteem (Diehl, Jacobs & Hastings, 2006). The stability of adult self-concept may partially explain the temporal restriction of significant mediating effects of emotional intelligence, self-efficacy and self-esteem. That less-resilient adults showed categorically less psychological and support resources than their more-resilient peers might arguably suggest that adult resilience should be conceptualised a personality trait (Skodol, 2010). However, although trajectories were clearer than in the adolescent sample, there was still evidence of fluctuating adaptation. The significant impact of the perceived close friendship support – a relational resource – and the significant relationships between resilience and other assessed support variables lends evidence against a personality-based interpretation.
Whilst this study focused on subjectively assessed resilience processes, some measure of the degree and type of perceived adversity experienced by participants would aid contextualisation of findings and perhaps reveal differences between individuals who had experienced more or less challenging lives, or whose lives had featured different vulnerabilities. Alternative studies might examine functioning before and after a challenging life event (Bonanno, 2005). Given the impact of prior encounters with adversity upon later functioning (e.g., Seery, 2011), including initiation of developmental cascades impacting subsequent functioning in a variety of domains (Masten & Wright, 2010), such research might also assess subjective prior childhood or lifetime adversity. A refined version of the present study might include an item querying whether participants had encountered a significantly challenging event or adversity within the last year, and ask participants to subjectively assess its severity, type and qualities. As friendships are particularly important during developmental and normative life transitions (Hartup & Stevens, 1999; Wrzus, Hanel, Wagner & Neyer, 2013), future research with a community sample of mid-life adults might aim to more capture friendship support during specified developmental or normative challenges, such as the dissolution of a romantic relationship or whilst caring for ill family members.

Limitations

This study must largely be positioned as exploratory, rather than definitive, for a number of reasons. Participants were largely white, restricting generalizability to the wider British middle aged adult population. Interestingly, previous research has suggested that resilience significantly decreases as men move onwards from their thirties (Beutel et al., 2010). The predominance of women in this study and marginal moderating effect of gender on the significant protective effect of close friendship should encourage further research with men. Gender differences observed in the adolescent study could not be investigated here due to insufficient power. Non-white participants and male participants were retained to ensure maximal statistical power and because the research questions were not focused upon determining differences based on gender or ethnicity. Yet differences in women’s and men’s friendships would be expected (Hartup & Stevens, 1997; 1999).

Finally, although efforts were made to retain participants over time, marginal selected attrition – particularly of socially isolated adults – did occur and was likely problematic. The distinction between correlational, mediational and confirmatory factor analytic cross-sectional effects at the two assessed time points suggests that the detected marginally-
significant selective attrition observed might have meaningfully impacted the findings. The reported decrease in mean perceived close friendship quality over time indicates that participants are unlikely to have re-appraised their close friendships as better quality in light of having examined this relationship through questionnaire completion at Time 1. Instead, adults who were more resilient, used more constructive coping and reported more supportive social relationships at baseline were more likely to participate at Time 2. Retained participants may have experienced affirmation of their social relationships or resilience through questionnaire completion or may have been more motivated to participate because of their satisfaction with these life domains. It may also be that the more socially isolated adults who were deliberately sought were, because of their isolation, less likely to take part at follow-up. This does not invalidate the present findings, but encourages circumspection regarding the conclusions, particularly in light of the observed differences between findings at the two assessed time points. Future studies might oversample and more systematically maintain participant engagement over time.
CHAPTER 6

THE EXPERIENCE OF SUPPORTIVE CLOSE FRIENDSHIPS AND
PSYCHOLOGICAL RESILIENCE

Introduction

Earlier chapters have revealed the surprisingly complex relationship between adolescents’ close friendships and subjective resilience. Understanding how friendships may meaningfully promote resilience is made more difficult by the paucity of studies of supportive friendships from young people’s subjective perspectives. There are intriguingly few qualitative explorations of friendship in the psychological literature, despite the centrality of this type of relationship to many young people’s lives. An exploration of how adolescents themselves experience their close friendships, and how they experience what researchers have termed ‘resilience’, may integrate vulnerable young people’s perspectives into research discourses which have been largely formulated on their behalf. This chapter therefore explores how young people experience their supportive close friendships, and how they perceive these friendships as moving them towards resilience.

Understanding of resilience may be limited by excluding the voices of vulnerable people, including adolescents. This may perpetuate disempowerment; overlook resilience processes which challenge or lie outside of dominant academic discourses; and minimize the significance of subjectively meaningful or culturally-specific outcomes (Canvin, Martilla, Burstrom, & Whitehead, 2009). Research is largely formulated by adults; an adult-centric perspective on youth strengths may overlook potential protective mechanisms (Cheon, 2008) such as supportive peer relationships. What young people feel is supportive about their friendships may differ to adults’ recognised views of friendship support. Striving to look at friendships afresh may bolster theoretical understandings of supportive relationship and challenge underlying assumptions, such as how coping manifests in friendships.

Qualitative approaches are particularly valuable for resilience research as they specifically address perceived shortcomings in accounting for sociocultural context and ensuring meaningful outcome variables (Ungar, 2003). However, few resilience theories methodologically incorporate subjective experience, despite the potential to inform...
creative, sensitive definitions of resilience and protective mechanisms. Qualitative approaches may highlight how young people find meaning in challenging experiences, such as by becoming courageous – a finding which may then drive conceptualisation of effective coping (Haase, Heiney, Ruccione & Stutzer, 1999). Retrospective phenomenological accounts have underscored the experience of achieving turning points catalysing personal growth (Shepherd, Reynolds & Moran, 2010).

A qualitative approach may redress the paradoxical absence of peer friendships from most frameworks of resilience-development, even as they are a compelling contour of general adolescent life and feature as a supportive force within subjective accounts (Hauser 1999; Stanton-Salazar, 2005). Even otherwise-comprehensive psychosocial research of young people’s experienced risk and resilience (e.g., Ungar & Liebenberg, 2009) attends curiously little to close friendships. A dual focus on friendship and resilience aids development of a relational perspective of resilience embedded within a web of interlinked social and community factors interacting with individuals’ strengths to promote positive adaptation. A qualitative approach is therefore not only a compelling project in its own right, but within a pragmatic mixed-method programme of research it sits alongside statistical research to dialectically expand the field of enquiry, complement and extend quantitative studies, and open up new questions which can be generated only by exploring subjectivity (Bryman, 2006; Greene, Caracelli & Graham, 1989). A thematic phenomenological approach to how friendship and resilience are experienced invites fresh perspectives on what support is, enabling researchers to push beyond existing conceptualisations. Phenomenological psychology’s focus on the lived experience supports a fresh look into resilience which temporarily sets aside existing theories and explanations to attend to how challenge is subjectively meaningful (Wertz, 2011).

The study reported in this chapter sought to understand how supportive close friendships and resilience are experienced by socio-economically vulnerable adolescents. A thematic phenomenological approach is used to address two interlinked research questions:

1. How do vulnerable UK adolescents experience supportive close friendships?
2. How do participants experience resilience through these close friendships?

The research aims to produce a rich experiential account of friendship and resilience, prioritizing the meaning of these concepts for vulnerable adolescents’ lives-as-lived. It uses an unusual combination of two qualitative methods (Frost et al., 2010), exploits the
flexibility of thematic analysis (Braun & Clarke, 2006) and rich philosophical foundations of phenomenology (Wertz et al., 2011). Such an approach aims to engage in fresh understandings of social support, illuminate and explore previously unexamined protective processes, and expand the landscape of resilience research to more strongly incorporate the lived experiences of young people.

Method

Ethics

Ethical approval was obtained from the Institute of Psychological Sciences, University of Leeds (see Appendix 1). Participants were assured of anonymity in publications and presentations arising from the research, anonymity of data within the research team (except in the event of a child protection concern), and the ability to leave any question unanswered or withdraw from the study at any time, without providing a reason, by stopping the interview or retrospectively contacting the researcher or school coordinator.

Because of the sensitive nature of the study and in the absence of British Psychological Society guidelines on conducting qualitative research with young people on sensitive topics, a number of measures were employed to minimise risks to participants. Legal advice was sought from the University of Leeds to clarify obligations in the event of an emergent child protection issue or disclosure of illegal activity during interview. As detailed in Chapter 2, a policy of disclosure to child protection authorities in the event of suspicion of imminent harm was adopted, although no such instances arose. This policy was discussed with school coordinators prior to project commencement and was included within documents provided to participants and parents. Participants were reminded of the boundaries of disclosure before the interview. At recruitment, school coordinators were asked to inform the researcher if they felt the participant should not be interviewed (e.g. if the adolescent was under the care of mental health professionals). No such concerns were voiced. During the interview, the researcher observed for visible distress. Adolescents each received a £5 shopping voucher in appreciation at completion of the interview.

Participant selection and recruitment

Although attempts were made to recruit across the five educational institutions of the T1 statistical sample, only two secondary schools and one college participated. One secondary school withdrew due to timetable pressures as recruitment fell within an atypically short
term. One college’s school coordinator withdrew due to her time commitments. Figure 6.1 shows the timeline for the survey and interviews. Interviews were conducted approximately one year from T1 administration of the Friendship and Resilience Survey.

Figure 6.1. Participant recruitment timeline

Participants were purposively sampled from the T1 survey sample (N=409) to include adolescents of (1) varying levels of subjective resilience according to Resilience Scale scores (Wagnild, 2009); (2) varying levels of perceived close friendship quality according to McGill Friendship Function Questionnaire scores (Mendselson & Aboud, 1999); (3) both genders; (4) a range of ages; (5) participating institution; and (6) a range of experiences as indicated by responses to open-ended questions concerning friendship support on the Friendship and Resilience Questionnaire. The open-ended questions on the Questionnaire used to guide purposive sampling were: (1) how their close friend may or may not have helped the participant with a difficult time in the last year; (2) how the participant felt about herself when with her close friend; and (3) whether the participant thought his friend had shaped who he is, and if so, how (see Appendix 2).

The process of participant selection was both systematic and pragmatic. Participants who did not complete any of the open-ended questions were first removed, as they were arguably not engaged to a level facilitating phenomenological research (Moustakas, 1994). Participants were then sorted by school. The next stage of the selection process was most important. Participants’ reports of difficult experiences were assessed for expressiveness, openness and variety. Focus upon participants’ subjective experiences gave primary importance to the significance and challenge of a difficult time to the participant, as described by their textual responses. Some challenges might be experienced by many young people, whilst others were arguably more extraordinary, such as exposure to criminal activity. Participants were rated as moderate or high research interest based upon
their responses. High-interest participants were then classified by resilience and perceived close friendship quality, aiming for a mix of males and females. This process generated a list of 5-7 high-interest adolescents at each participating institution.

School coordinators then identified the selected adolescents based upon project passwords which contained the first 3 letters of participants’ last name and their date and month of birth. Coordinators were not informed as to why individual adolescents had been selected in order to protect the confidentiality of participants’ data. Selected adolescents received invitations to interview through the school coordinator who subsequently collected consent forms from participants and, when participants were below 16 years old, from parents.

**Materials**

*Interview development and piloting.* A semi-structured interview schedule was developed and piloted prior to use with study participants. A 31-year old female was interviewed to explore the general structure of the interview schedule before moving to young people. Two key changes were to invite participants to bring in an object significant to their closest friendship in order to ground interviews in the lived experience of that friendship, and to end the interview with an affirmation of participants’ strengths if the session ended on a negative note. A 14-year old female was then recruited via a colleague and interviewed with parental consent. Key changes following this second pilot interview were specification of prompts to help participants talk precisely about their friend – for example, asking about the last time a friend was kind if “kind” was used as a descriptor. Prompts were developed to aid participants in describing their experience of friendship support – for example, how it felt to hear what a friend had said.

*The research interview.* A series of open-ended questions explored how participants viewed their closest friendship and how their closest friend may have supported them through a difficult time within the past year (see Appendix 7 for the full interview schedule including prompts). Given phenomenology’s concern with participants’ subjective experiences, the interview focused around events which the participant *themselves* felt to be distressing. This could be a fairly extraordinary event (i.e. abuse) or more common troubles (i.e. peer relationship difficulties). Similarly, closeness and supportiveness was construed by the participant and not defined within the interview by the researcher.

In line with semi-structured interview techniques, question phrasing and order were adapted within each individual interview to reflect participants’ language, experiences and
narrative flow. Questions therefore reflect a guide rather than a precise list used in practice. Participants were encouraged to provide examples of feelings and situations, giving as much detail as comfortable. In general, the interview first explored the participant’s closest friendship and then addressed an experience of a difficult time through which that friend may have provided support. The researcher had access to participants’ responses to free-text questions to prompt recollection if required but these were not used in any of the interviews. The primary interview questions are as follows.

**Understanding participants’ close friendships.** Five questions covered participants’ experiences of their closest friendship. These were:

1. *Can you tell me about the object you’ve brought?*
2. *I’ll ask you to talk about your friendship with your closest friend. Who would you like to talk about? What is he/she like?*
3. *How do you feel about yourself when you are with your friend?*
4. *What do you value about your friend/your friendship?*
5. *What have you learned from your friend/your friendship?*

In order to ground these young peoples’ accounts, participants were encouraged to bring an object reminding them of their closest friend. Four participants brought in objects. Most said they had forgotten to bring an object. When no object was provided the interview began with question 2, which aimed to understand adolescents’ perspectives on supportive friendships and ease the participant into the interview. Question 3 aimed to facilitate understanding of the self within a supportive relationship. Question 4 aimed to illuminate what adolescents appreciate about their closest friendship. Question 5 allowed participants to reflect on how they may have changed through the friendship.

**Experiencing a difficult time.** Three questions addressed participants’ experience of a self-selected difficult time. The phrasing “difficult time” was chosen to evoke subjective feelings of challenge, sensitizing towards the psychological construct of “risk” but leaving the definition of risk to the participant. Language such as “getting through,” “dealing with” or “helping with” a difficult time aimed to evoke subjective feelings of coping, adaptation or transformation, sensitizing towards psychological constructs of “support” and “resilience” but again prioritizing participant meanings.

6. *Can you tell me about a difficult time in your life that your close friend helped you deal with?*
(7) What did you learn through your friend’s support?

(8) What did you learn from going through that difficult time?

These questions guided an account of a close friend’s support through a difficult time. Question 6 asked participants to identify a difficult time, focusing on how they felt rather than event details. This question aimed to describe specific instances of support from adolescents’ perspectives. Question 7 allowed participants to reflect on what they found helpful, giving subjective meaning to friendship support. Question 8 explored how participants might have changed following a difficult time, approaching an experiential view of developing resilience.

Final questions. Question 9 asked: Is there anything else you think I should know to better understand what we’ve talked about? This closing question ensured that participants had an opportunity to relate their experience as fully as they wished. It often gave rise to summative thoughts on what constituted a good friendship.

Data generation

Individual semi-structured interviews took place in a private room at the participants’ educational institution during regular hours. Signed consent forms from the adolescent (and parent, if applicable) were collected before beginning. Ethical considerations for the study were reiterated. These included anonymity, non-disclosure of identifying information outside the research team unless disclosure was necessary for child protection reasons, and the right to skip questions and withdraw from the study without providing a reason.

Interviews were digitally audio-recorded and lasted between 24 and 52 minutes. After interview, participants were offered a further opportunity to ask questions and given a £5 shopping voucher. Debriefing sheets with contact information and support organisation details were provided (see Appendix 8). Field notes were made by the researcher immediately following each interview to facilitate reflective practice. These notes included the researcher’s emotional experiences within the interview, feelings towards participants, notes on body language, striking phrases and emerging analytical ideas. Audio recordings were transcribed using conventions appropriate to a phenomenological study, adapted from those used by Hugh-Jones and Madill (2009; see Appendix 9). A transcription team was used comprising professional transcribers and a trained assistant who each signed confidentiality agreements (see Appendix 10). Transcripts were checked and anonymised
by the researcher. These transcripts formed the basis of the analysis materials (see Appendix 11 for a sample transcript extract).

**Participants**

Table 6.1 contains anonymised information on the 14 adolescents aged 12 to 20 years old who participated in the interview study (mean age = 14.36 at T1 of the survey study). Pseudonyms are used to protect the identities of participants and their friends. All participants were of White British or White Irish descent, except Elena (White Other) and Amrita (British Asian). Six participants were male and 8 were female. At T1 of the survey study, 8 participants were low resilience, 4 showed moderate resilience, and 2 reported high resilience according to Resilience Scale scores (Wagnild, 2009). Three participants rated their closest friendship as low quality, 3 as moderate quality, and 8 as of high quality according to survey norms on the McGill Friendship Function Questionnaire (Mendelson & Aboud, 1999). T2 scores are provided for the seven participants who participated at the one-year questionnaire follow-up.

In interviews, participants discussed a variety of problems they felt to be distressing: these ranged from difficulties with peer and romantic relationships, to body image concerns, to hospitalisations of family members, unexpected pregnancy and instances of abuse. Four participants brought objects to the interview to open questioning about their closest friend: Anne (a photograph of her and Paula as young children), Tara (a recent photograph of her and Eva at a sleepover), Helena (a photograph of matching birthday presents) and Rachel (a piece of jewellery given to her by Penelope). Seven of the participants chose a different closest friend in interview than at T1 of the questionnaire study. Of those, three selected the close friend named at interview as their closest friend at T2.

**Analytical procedure**

An empirical phenomenological approach to thematic analysis (see Chapter 2) was used to analyse the interview transcripts. Analysis explored two interlinked research questions:

1) How do vulnerable UK adolescents experience supportive close friendships?
2) How do participants experience resilience through these close friendships?
### Table 6.1.

**Participant descriptions**

<table>
<thead>
<tr>
<th>School</th>
<th>Participant</th>
<th>Friend(s)</th>
<th>Closest Friend at T1 (T2)</th>
<th>Age at T1</th>
<th>Resilience at T1 (T2)</th>
<th>FF Score T1 (T2)</th>
<th>Problems Discussed at Interview</th>
<th>Interview Length (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>Sam</td>
<td>Ian</td>
<td>No (-)</td>
<td>14</td>
<td>Moderate (-)</td>
<td>Moderate (-)</td>
<td>Exam anxiety; trouble with other teens.</td>
<td>29:50</td>
</tr>
<tr>
<td>School A</td>
<td>Richard</td>
<td>Jacob</td>
<td>No (Yes)</td>
<td>12</td>
<td>Moderate (Low)</td>
<td>High (Moderate)</td>
<td>Arguments with other teens; anger problems.</td>
<td>28:35</td>
</tr>
<tr>
<td>School A</td>
<td>Oliver</td>
<td>Harry</td>
<td>No (Yes)</td>
<td>12</td>
<td>High (Moderate)</td>
<td>High (Low)</td>
<td>Dissolution of parents’ relationship.</td>
<td>31:11</td>
</tr>
<tr>
<td>School A</td>
<td>Anne</td>
<td>Paula</td>
<td>No (No)</td>
<td>11</td>
<td>Low (Moderate)</td>
<td>Moderate (High)</td>
<td>Bullying and peer relationship difficulties.</td>
<td>25:15</td>
</tr>
<tr>
<td>School A</td>
<td>Kevin</td>
<td>Joshua</td>
<td>No (Yes)</td>
<td>14</td>
<td>Low (Low)</td>
<td>Low (Moderate)</td>
<td>Child protection incident with sibling.</td>
<td>38:15</td>
</tr>
<tr>
<td>School A</td>
<td>Tara</td>
<td>Eva</td>
<td>Yes (Yes)</td>
<td>11</td>
<td>Low (Low)</td>
<td>Low (High)</td>
<td>Bereavement anniversary; abuse of sibling.</td>
<td>24:53</td>
</tr>
<tr>
<td>School B</td>
<td>Helena</td>
<td>Olivia</td>
<td>Yes (Yes)</td>
<td>14</td>
<td>Low (Low)</td>
<td>High (Moderate)</td>
<td>Peer relationship difficulties; body image.</td>
<td>29:23</td>
</tr>
<tr>
<td>School B</td>
<td>Amrita</td>
<td>Asiya and Leila</td>
<td>Yes (-)</td>
<td>18</td>
<td>Low (-)</td>
<td>High (-)</td>
<td>Death of parent; concern for friend.</td>
<td>37:15</td>
</tr>
<tr>
<td>School B</td>
<td>Elizabeth</td>
<td>Ruth</td>
<td>Yes (Yes)</td>
<td>14</td>
<td>Low (Moderate)</td>
<td>High (High)</td>
<td>Parent hospitalisation.</td>
<td>38:59</td>
</tr>
<tr>
<td>School B</td>
<td>Thomas</td>
<td>Rob</td>
<td>No (-)</td>
<td>14</td>
<td>Low (-)</td>
<td>High (-)</td>
<td>Romantic and peer relationship difficulties.</td>
<td>34:02</td>
</tr>
<tr>
<td>School B</td>
<td>Rob</td>
<td>Thomas</td>
<td>No (-)</td>
<td>14</td>
<td>High (-)</td>
<td>High (-)</td>
<td>Peer relationship difficulties.</td>
<td>31:34</td>
</tr>
<tr>
<td>School B</td>
<td>Rachael</td>
<td>Penelope</td>
<td>Yes (-)</td>
<td>15</td>
<td>Moderate (-)</td>
<td>High (-)</td>
<td>Sibling hospitalisation; disagreement between friends.</td>
<td>31:51</td>
</tr>
<tr>
<td>College A</td>
<td>Molly</td>
<td>Gina</td>
<td>Yes (-)</td>
<td>19</td>
<td>Moderate (-)</td>
<td>Moderate (-)</td>
<td>Teenage pregnancy and parenthood.</td>
<td>52:22</td>
</tr>
<tr>
<td>College A</td>
<td>Elena</td>
<td>Olga</td>
<td>Yes (-)</td>
<td>19</td>
<td>Low (-)</td>
<td>Low (-)</td>
<td>Relationship difficulties.</td>
<td>28:44</td>
</tr>
</tbody>
</table>
The analytical process iteratively moved between text and analytical interpretation (Finlay 2008); employing immersion in experiential accounts, absorption in texts, critically interrogating interpretation, discussions with colleagues, reflexively engaging with content and relating to extant research literatures. Evolving ideas were discussed with the lead supervisor throughout. Over time, phenomenology of space came to frame the work.

In the first stage of the analysis, transcripts were open-coded (Braun & Clarke, 2006) to generate meaning-based codes related to experiences of friendship and subjective resilience. Codes reflected participants’ thoughts, feelings, emotions, interpretations, and bodily sensations, keeping closely to the data. Whenever appropriate, initial codes maintained the evocative language of participants.

Next, brief sketches were drawn of each participant’s experiences. These attended to each participant’s holistic account, presenting features of friendships and difficult experiences. For each participant, developing themes were noted which were phenomenologically rich, appeared in other accounts, or were identified by the participant as meaningful. This stage used a combination of close readings of the data and a shift towards more conceptual exploration driven by thematic phenomenological methods. Although existing theories of resilience guided sensitivity towards expressions of positive psychological adaptation (e.g., the importance of effective coping skills), an open phenomenological mind-set encouraged naïve exploration of idiosyncratic experiential contours of resilience (Finlay, 2008). A list of experiential themes was generated for each participant.

Working theme descriptions were then developed between and across accounts including identification of relevant participants for each working theme. Eight themes were identified: experience of time, extension of family unit, embodied emotion, feeling impact of the self on the other, experienced space, characterisation and crystallization of self, and a feeling of “being there.” Analysis considered how themes related to the research questions and to each other. Interest turned to “space” as a supraordinate theme underpinning other dimensions of participants’ experiences. Working theme descriptions suggested that participants differentially characterised spaces, especially in terms of experiencing perceived control. Some friendships were felt to open up physical and emotional space. It was striking how participants played out friendships in physical spaces, as well as “meta”-physical ones. It became increasingly compelling to view these participants as intersubjectively experiencing space: moving the self bodily and figuratively through space, and experiencing space relationally, as more than a neutral ground.
Space was consequently explored as a supraordinate theme. Transcripts were revisited to code for spatial metaphors in emotions, self, thoughts and relationships; and meaningful mentions of physical spaces against which friendships, resilience and risk were situated. Spatial descriptions and metaphors are characteristic of linguistic descriptions of self and relationship, contributing to (and expressing) an experience of space which depends upon an interrelationship between linguistic, cultural and perceptual factors (Pollio, Fagan, Graves, & Levasseur, 2005). Analysis began to draw upon phenomenological concepts of space as a component of the lifeworld (Ashworth, 2003) and Bakhtinian (1981) ideas of chronotope (the character of space-time) and heterochronicity (multiplicity of space-times). Previously independent themes such as embodied experience could be incorporated into a spatial theme. In English, space tends to be talked about and experienced along dialogical dimensions defined by occlusion and passage; distance and direction; containment and boundary; and vertical hierarchy (Pollio, Fagan, Graves, & Levasseur, 2005). Spatial thematising identified five experientially-distinct physical places important to participants: home, community, a friend’s home, school, and official spaces. “Official spaces” (e.g., hospital) were dropped in later analysis because they were less relevant for a focus upon friendship experiences, although they highlighted how adolescents experienced some spaces as oppressive, chaotic, silencing and disempowering.

Spatial themes were organised according to the distinct physical places and codes were analysed for phenomenological content. Phenomenological imaginative variation (Wertz, 2011) explored questions such as how a house was experienced as distinctly home-like. Approaching the limits of how, for example, a house as experienced as a home, drew attention to ways in which such spaces became challenging or uninhabitable, and ways in which movement through other spaces appeared to responsive to experiences in other spaces. A separate but interlinked analytical thread simultaneously explored the phenomenological meaning of close friendships in these physical contexts, such as how “closeness” was experienced in school. These interlinked analytical strands focusing on spatiality and social relationship aided focus on how the experiences of physical spaces and relational spaces shared many common features, such as promoting a sense of security.

The final stage of analysis thrust these spaces into the lifeworld, and explored these physical and relational spaces from a predominantly phenomenological perspective: for example, prioritizing “dwelling” as a thematic signifier, and then exploring how this applied to a physical home through analysis of thematic codes and imaginative variation. More
than previous stages of analysis, this engaged a phenomenological concern with identifying insightful essential and typical aspects of experience (Wertz, 2011). Finally, analysis was revisited in an iterative process of relating findings to relevant psychological theory: of resilience, but also of critical or phenomenological experiences of space (e.g. Foucaultian surveillance or Heideggerian dwelling) and theories of relational intersubjectivity.

Analysis was also revisited in light of suggested criteria for qualitative research, such as verisimilitude; rich complexity, meaning and context (Halliday, 2005); multiple layering of accounts and interpretations (Hammersley, 2008); reflexivity (Shaw, 2010); and transparency of analysis (Elliot, Fischer & Rennie, 1999). An empirical phenomenological perspective furthermore prioritised faithfulness of the description in conveying lived experience; achieving a sense of phenomenological essences; and approaching accounts with empathy, openness and freshness (Wertz, 2011). A reflective journal was kept throughout to aid reflective practice alongside supervisory notes and discussions (Shaw, 2010). Early entries focused on emotional reactions evoked by accounts and participants; and preliminary thoughts as to their experiences. Later entries focused upon thematic development; sketching analytical structures; noting meaningful readings; interconnections with other research areas; critical reflections on links between the analysis and my own experiences; and concerns of maintaining immediacy of participants’ voice in reporting.

Analysis

Overview of the analysis

A thematic phenomenological analysis showed the importance of spaces in shaping adolescents’ experiences of challenge, friendships, and movement towards resilience. As shown in Table 6.2, analyses identified four key spaces of these adolescents’ lifeworlds: (1) dwelling; (2) refuge; (3) playground; and (4) path. These spaces are differentiated through characteristic existential challenges of: (1) knowing and being known; (2) safety and security; (3) discovering and practicing the self; and (4) developing meaningful autonomy. For these participants experiencing socioeconomic vulnerability and attending educational institutions, experientially-defined spaces often correspond to objectively-recognisable structures. These are (1) home (dwelling); (2) a close friend’s home (refuge); (3) school (playground); and (4) community (path). However, reflecting the gnoema-gnoesis duality underpinning phenomenology (distinguishing an object from one’s subjective experience of an object) such structures need not retain their neat physical distinctions in the
experiential spaces of the lifeworld. Participants experience these spaces as yearnings towards their characteristic feelings or essences. These feelings are also experienced through different types of closeness with a supportive friend, such that a friend may also be experienced as a dwelling, refuge, playground or path.

This analysis aims to “map” – conceptually define – these spaces. Presentation alternates between adolescents’ experiences of lived physical spaces (home, a friend’s home, school and community) and their intersubjective experiences of supportive close friendship.

Table 6.2.

Identified lifeworld places and physical and relational experiences

<table>
<thead>
<tr>
<th>Lifeworld Space</th>
<th>Experienced As</th>
<th>Key Challenge</th>
<th>Physical Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling</td>
<td>Inhabiting</td>
<td>Knowing and being known</td>
<td>Home</td>
</tr>
<tr>
<td>Refuge</td>
<td>Escape; Sojourn (Active rest)</td>
<td>Safety and security</td>
<td>Friend’s Home</td>
</tr>
<tr>
<td>Playground</td>
<td>Existential play</td>
<td>Discovering and practicing the self</td>
<td>School</td>
</tr>
<tr>
<td>Path</td>
<td>Mastery</td>
<td>Developing meaningful autonomy</td>
<td>Community</td>
</tr>
</tbody>
</table>

The Places of the Lifeworld

Dwelling and disruption in the home

These participants’ essential experience of home is as a dwelling. This is troubled by the lived realities of many participants’ homes, however, as difficult times are reflected by and enacted through disjunctions between a need for a place to dwell and a situated inability of the home to meet this need. This challenge is most potently experienced as a threat to participants’ feeling of knowing and being known by other persons within the home, realised as yearning and distress. Participants vary in the ways and extent to which they inhabit home as a dwelling, experiencing a secure feeling of sojourn through active rest and comfortable expression.
Home may be experienced as a reliable source of nurturance and restoration where adolescents can recover from physical and emotional stresses, as when Molly “…was pregnant and moody and hormonal and I didn’t really, tired all the time so I didn’t want to go out.” This nurturance contains potential for comfortably unconstrained future movement as “my parents did expect me to go back to college and go to university.” Ensnconced within a supportive family, fulfilling parents’ perceived expectations is challenging but ultimately encouraging. Her immediate needs for rest and sustenance are met within a perceived foundation for supported future movement in self-realisation.

Home may be experienced as sustenance even when characterised by hierarchical negotiation between co-inhabitants. Contrasting with the “tension” and unrelenting arguments of her friend’s home, Amrita says of her own:

my youngest [brother] he’s sort of got problems and...my mum might tell him off and they might have arguments...and then my older brother will give him a lecture and then it just turns into arguments stuff like that but it doesn’t always happen.

Arguments, for Amrita, are experienced as heightened communication within a strong family unit: disagreements are time-bounded, reflecting a family working together to hear, know and support each other. Home as a stable place of intimate, expressive concern is not fundamentally challenged.

Recognised routine helps embody the safety provided by the family. For many, daily routine – what Helena laughingly calls the “same same I like get up I go to school I come home I do some homework” – underlies a sense of insulation from difficult times, which may be taken for granted until disturbed. Shifts in domestic routine may portend change. Rachael marks the start of a difficult time: “my mum rang me up...just to tell me that I wouldn’t, to tell me er that the door would be locked cause I didn’t have a key that’s literally why she rang me.” Here, space literally and figuratively demarcates experience as Rachael is barred access to the comforting predictability of home. Routine is experienced through family members’ embodied positions in the home (being there, being absent, or occupying specific rooms); adolescents tended to notice family members’ locations being amiss. Oliver and Tara each recount sensing disruption during uncharacteristic visits or unusual occupation of rooms, and distantly heard arguments, experienced as distress from afar, with adolescents neither able to fully hear nor have their feeling heard.

Feeling unknown within the home may be experienced as a yearning for self-expression through free, purposeful movement within space that feels like one’s own. Kevin
experiences arguments as competition over usable space as “every day...there’s always something to argue about” between siblings who blur boundaries between shared and private rooms. Explaining his difficulties in going to his mum for support, Richard says:

She said “just calm, ah just, it will be all right...go downstairs and watch some telly.”
But instead I said I was off out and then I went down to Jacob’s...When I speak to me mum we always speak upstairs so that it’s quiet but, I always like get sweaty.

Although he confides in his mum, her response and his physical discomfort are experienced as confining; a failure to acknowledge his feelings, embodied experience and preferred ways of coping. Richard and Kevin appear silenced, crowded out of homes which do not sufficiently accommodate expression or security. Unlike Amrita who experiences disagreements within her home as supportive, Kevin and Richard each experiences his home as lacking space for himself, restricting felt ownership and the ability to comfortably, expressively inhabit the space.

Although security sometimes had physical connotations for participants like Kevin, experiencing home as a protective bulwark, security within the accounts is primarily experienced as relational and personal. Home provides a foundation without which it is extraordinarily difficult to be genuinely heard and understood. The violation of home as dwelling can be powerfully distressing, as indicated when Oliver explains the “atmosphere” at home when his parents’ relationship was dissolving:

you saw no love between them for ages and there were always atmosphere...it’s always like all sad in t’ house...so it felt heartbroken ‘cos like...you’re sat there like that just wondering what to do and then, you look at your mum and she’s like all sloped down and then you look at your dad and he’s sloped down and you’re like, “where did my life go wrong” and you’re like ((sighs)) you just think life’s not worth living no more but ((sighs)) what I’d say is I’d say live life to the max, you’ve got you’ve got a lot ahead of you, ups and downs

A thick, pernicious “atmosphere” of sadness penetrates Oliver’s home, created by the emotional disconnect between his parents. A dwelling is transformed into a place where relationships are inauthentic and empty. Looking at his parents, reading defeat into their postures, Oliver perceives this emptiness with a powerful despair which threatens the very meaning of his life – without a dwelling, without love at home, he feels lost, disconnected and purposeless. Ultimately, he affirms for himself that this time will pass and positive experiences wait. Oliver’s account underlays a fundamental desire to experience home as a stable foundation for knowing and being known.
Friend as dwelling: Authentically knowing and being known

A dwelling type of closeness with a friend is experienced as being known and interwoven within the fabric of home. Close friends provide relational spaces to be fundamentally and authentically understood. The vulnerability of exposing one’s physical or metaphysical dwelling may come with a sense of self as held and supported by the friend, enabling the freedom of being deeply known. Entry into one’s home can both symbolize and facilitate an exposure of self, as indicated in Rob’s account of inviting his friend Thomas into his home:

This is the longest I’ve stayed in a place... [I value] the fact that he’s always there for me and I can I can go to his house and we can relax or he can come to my house...I’ve moved a lot so I’ve never really got really close to that many people... so I don’t, everything stays in here.

In Rob’s experience, constant movement has precluded a chance to establish a physical, spatial relationship comfortably over an extended period. This felt rootlessness and changeability has impacted his experience of friendship, moving the centre of friendships to the self, not the intersubjective space wherein others may be entrusted as confidantes to his vulnerabilities. Inviting Thomas to his home becomes an opening-up of the self, where Rob’s experiences may be shared and an expectation of roots – longevity of friendship – may be built.

Friends’ access to participants’ homes quickly exposes them to the vulnerability of experienced truths about family relationships, which may support an experience of developing trust that later enables participants to confide in friends about any family difficulties. For many participants, close friends are often those who come visit their homes. Younger participants, such as Anne, especially value sleepovers, which situate friendships within the home and indicate prioritized time together.

Indeed, a friend may become ensconced within family relationships, as when Helena says of her close friend, “she’ll call our house and if no one answers she’ll call again and again and she’ll just leave some funny messages like hello [surnames] why are you not answering your phone?” Helena experiences her close friendship as a comfortable and natural extension of her friend into the home, integrating the two families. Friends’ shaping of the contours of home life is elsewhere evident in accounts as friends come over before school to play or to walk to school together.

Close friends may provide support by restoring a disrupted sense of dwelling within the physical home. Rachael describes her friend helping her through a sibling’s hospitalisation:
My parents would spend time at the hospital (pause) and I you know I get back from school and there’d be no one at home shed like spend a evening with me... We’d just make some, make some tea, just sort of, yeah have some food just a normal evening just try and make it as normal as possible... just to make it (laughs) make it not seem as, you know as bad

Her friend’s presence at home and their continuation of domestic routines grounds Rachael, keeping her roots in the pre-hospitalisation reality by restoring a sense of routine normalcy. The integrity of home-as-dwelling is maintained, rather than being a reminder of unfolding trauma, restoring the rupture of time when she had been barred access to home. Similarly, Molly’s friend Gina supports her to develop the autonomy to make her own home following her decision to keep an unplanned baby:

We wanted to get our own place...[she’d] sit down and do the maths with me, work out what I needed...if I was like “oh no I don’t really feel like [going out] she’d be like “all right well I’ll come round to your house then.” And she’d just come and cheer me up...

Molly experiences Gina’s friendship as maintaining the nurturing environment of her current home and as helping her to create her own dwelling with her partner and expected child. Gina’s willingness to situate their friendship at home is experienced as accommodating her vulnerability. For Oliver, confiding in his friend Harry enables him to make sense of the atmosphere at home:

I said “it’s less of an atmosphere in here. My mum and dad have split up.”...I always like feel comfy in the house but when my dad were there I didn’t. So [Harry]...went “well are you glad your dad’s gone?” So I said “yeah and no”, I said “yeah because there’s no atmosphere, and no because he’s my dad at the end of the day.”

This extract show’s Oliver’s yearning to experience the home as a place of felt security, evident as his desires fail to match felt realities and attempts to reconcile his home as a dwelling. With Harry, he is able to voice his conflicting yearnings for a relationship with his father and with feeling comfortable in his home, whose atmosphere had become untenably oppressive - uninhabitable. For some of these participants, then, having developed a felt sense of security and openness as they permit close friends to engage with intimate family relationships and personal vulnerabilities, experience their close friendships as relational dwellings where they may be authentically known.
Creating a refuge in a friend’s home

For some participants, the friend’s home was experienced as a valued refuge providing escape from difficult times elsewhere, especially challenges emerging from home life as the home became existentially uninhabitable. Part of the value of entry into friends’ home-spaces is constructed through a sense of the friend’s vulnerability in making their own lives available for inspection. The experience of a friend’s home may be particularly in dialogue with one’s own home life, as disruption in the home prompts the need to seek security elsewhere.

Several participants reflected extensively upon their friend’s family relationships and homes. Amrita highlights key distinctions between her and Asiya’s home, where “there seems to always be stuff going on…her older brother seems to be a bit more, harsher with her.” Amrita experiences Asiya’s home as unrelentingly volatile and problematic, highlighting boundaries between the families and reinforcing Amrita’s interpretations of her own home as a place of familial concern. This experience of comparing home with a friend’s home is situated within the process of knowing and being known.

Unlike Amrita, many participants’ friends’ homes were experienced as a valued refuge, particularly when their own homes were places of challenge or distress. Boys, especially, spoke of their friends’ homes in this way. A friend’s home could be a place of escape for participants such as Oliver:

   I went “eh mum I’m off to Harry’s” and she went “what for?” So I went “to calm me down”, so she went “no you’re not, you’re staying in,” so I went, “mum, if you like love me then you’ll let me to Harry’s because you won’t want the atmosphere back in the house would you?” So she went “all right then.” She went “I want you back for nine thought,” so I went “all right then.” So I went up to Harry’s and I went “Harry I can’t, I hate when what’s happened” he went “what?” So I went “my mum and dad have just split up”...he cheered me up let me just say that.

Oliver’s immediate response to the break-up of his parents’ relationship is a desire to flee, achieving a meaningful pause from the heavy atmosphere at home. At Harry’s, he can vent silenced feelings, seek relief and restore well-being. The creation of a time-boundaried, permitted escape through negotiating permission with his mum is experienced as an extension of parental care.

Flight, then, may be experienced as an active coping response. Access to a friend’s home could be experienced as empowering, as in Richard’s account:
If I’m like angry or summat at my house, I always say oh it my fault...I go down to Jacob’s... ‘cos he’s always there and he’s always calm so he helps me out [mm] and tells me what to do...I don’t like turning to mums and parents [mm] so I just always go down to his house...I just don’t like saying stuff like what happened to me or why I’m upset because, it makes me still feel like a kid, well a little kid

For Richard, choosing to go Jacob’s is part of the experience of learning to deal with problems autonomously, gaining strength through emotional expression. Jacob’s support is perceived as more empowering than parental support, as it is not imbued with childish constraints. A respite in Jacob’s house breaks the spell of Richard’s self-blame, granting entry to an empowering emotional space. Jacob’s home – and Jacob’s physical presence – is experienced as a reliable source of calm and nourishment, such that he “can go to his house and everything will be alright again after a while.”

A friend’s home may, then, be experienced as a safe space to reveal silenced or hidden depths of feeling when home becomes acutely uninhabitable. However, as in Kevin’s account, a feeling of refuge may be experienced without a sense of crisis. He describes how, at Josh’s, he can pursue interests restricted at home:

I can do stuff with him which I can’t do at home, I can cook, whatever I want ((pause)) well, at night when everyone’s asleep anyway, but er. Yeah, we can cook something to eat we can play on games which I don’t get to do often [at home]...I can watch films...bring my stuff round to his and just write [mm] if he feels like trying to do the same or anything.

Far from the stifling instability of his own home, Kevin values his Josh’s home as “more relaxed”. He may act with relative freedom, expressing creativity and competency outside constraining familial negotiations. The oppressing depersonalisation of his own home is suspended at Josh’s house, where there is room for him to be, where “being” is an active, expressive experience. In Josh’s home, he may truly – if temporarily – inhabit his space.

For many of these adolescents, the homes of close friends are experienced as a refuge from distress and constraints which render other spaces – particularly their own home – uninhabitable. Flight to a friend’s home becomes a liberating act. Security may involve restoration as hidden layers of emotional experience are safely revealed. It may not grapple directly with acute hurts, but instead be experienced as carving out room to be – to move freely amidst a shifting or confining background. There is a felt sense of being within, whilst the world with its troubles is held without. Hurts may be salved and constraints
released within a temporary but reliable protective space where silence may be safely transformed into voice.

**Friend as refuge: Feeling safe and secure**

Experiences of friends’ homes were emblematic of – and facilitated development of – an experience of closeness as a reliable relief from distress. For many participants, their position in the friend’s home-space represents and reflects perceived intimacy. A friend becomes a person to whom they may flee when troubles overwhelm, and with whom they may craft a temporary but fulfilling world safe from outside harm.

Many participants marked the beginning of their close friendship with gaining entry to friends’ homes. For example, Kevin noted a turn in his friendship “when I could start going over to his” and Anne values the regular visits and planned sleepovers which characterise her closest friendship. As with other types of spaces, for younger participants especially (but not exclusively) this time together forms a foundation for a physical closeness which may prefigure a more intersubjective experience or may be simply appreciated for itself.

The experience of friend as refuge is tied to feeling that the friend is reliable and accessible. Richard says “we’ve got closer because we live near each other now, and can go down to each other’s house.” Here, physical proximity promotes experienced closeness because of easy availability– and, importantly, Richard’s own ease in physically negotiating access to the friendship through safe, independent movement to his friend’s house.

Similarly, asked what he most values about his closest friendship, Rob says “the fact that he’s always there for me and...I can go to his house and we can relax or he can come to my house.” For Rob, the intersubjective dimension of closeness is both metaphorically symbolised and externally facilitated by reliable, “factual” mutual entrance to each other’s homes, enabling him to “relax.” Relaxation – letting go, achieving relief – is supported by a sense that this is a safe physical and emotional space to let down one’s guard:

> Thomas helped by on a really bad day he decided that I was going to come round, we were going to watch some violent moves and eat pizza. And that is rare for Thomas cuz he doesn’t usually let people round, he’s kind of a, secluded kind of guy. But...I was massively, I was massively pleased and I thanked him like 20 times.

The spatial metaphor of “seclusion” highlights Rob’s view of Thomas as emotionally guarded and contained. This casts heightened potency and richer meaning to their encounter: in extending an invitation, Thomas invites Rob into his emotional space.
Deceptively simple acts of companionship – playing video games and eating pizza – are experienced in this context as deepening of an emergent bond between the two friends. The value which Rob knows Thomas places on his privacy, indicated by his gratefulness, lends these simple acts heightened meaning; the extremity of Rob’s distress is implicitly acknowledged by Thomas in bringing Rob into the self-protective space of his home. Rob experiences his entrance into his friend’s home as a deepening of their friendship, reflecting a lowering of Thomas’s emotional guard. Part of the value of entry into friends’ home-spaces is constructed through friends’ vulnerability in having made their own lives available for inspection – as they themselves engage in knowing and being known. Other participants also spoke of being “let into” their friends’ houses, reflecting a sense of being allowed into their friends’ emotional space and indicating a complex, evolving interrelationship between physical co-presence and relational bonds.

As these adolescents begin to infuse relational meaning into their presence in their friend’s home, they may experience prolonged, repeated visits to their friend’s home as entry into another family, especially if, as in many accounts, there is play with the friend’s family. This may be experienced as blending their friend’s home with their own home-life. Says Helena:

If I’m just hanging out at her house...I’ll feel (pause) at home I guess cause of I’m round there so much I know it really well and ern, I dunno just, happy ((laughs)) it’s hard to pick out words

In being around Olivia’s house, Helena begins to see herself interwoven within the fabric of that landscape. Feeling part of that space imparts comfort, competence and belongingness. The unspoken, taken-for-granted experiences hinted at in this extract (“it’s hard to pick out words”) indicate that this feels a natural, built-in part of her life. Participants begin to feel “at home” in their friend’s home, interacting with members of their friend’s family, and experiencing the friend’s home as an extension of their own home-space.

Not all friends’ homes are hospitable to an experience of refuge. For example, Molly characterises her friend Gina’s home primarily as a place of negotiation and contention over Gina’s competence:

The house was messy when they came round...it’s not dirty and since she’s 20 with a baby you would be able to forgive like quite a dirty house wouldn’t you? Especially since she’s like going to college and a single parent...

Her account speaks to a perceived link between Gina’s home as reflecting interior experience. Defending Gina’s home means defending her life choices and acknowledging
the magnitude of her struggle to balance motherhood and education; a struggle which Molly believes Gina is managing even if this is doubted by external scrutinizers. Molly’s account situates the secure centre of their friendship within her own home, not Gina’s.

A sense of escape may conflate the physical entity of the friend’s home with the relational experience of escapism into a close friendship. Says Rob:

I don’t hang out with [Karen] that often so she’s not a place to escape, she’s just a person to talk to. Whereas Thomas offers the perfect place to escape.

Thomas’s home and friendship is not only experienced physically through availability of access but also as a totality of another experiential world. Although talking through a problem is valued, support is also experienced as a totality of immersion into another “place”, free from concern. If Rob cannot actually escape the daily experienced reality of his problems, he may temporarily set them aside with Thomas to create another world; one which exists only within their relationship. The value of just being together in a safe, secure space is echoed in Kevin’s account: “I can sometime bring my stuff round to [Josh’s house] and just write.” For Kevin, being able to “just” exist in his friend’s home is a valuable escape – his friendship is a place where he is accepted and understood, not accountable to others’ demands, free to safely express himself.

Friendship as an escape is powerfully experienced in many of these accounts; particularly when other spaces, such as home, become uninhabitable. Friendships become refuges which may be reliably accessed, and where the worries of daily life cannot penetrate. As friends open themselves to being known and interweave experiences, even deceptively simple acts such as playing video games take on heightened intimacy. The suspension of daily cares creates a safe, immersive world where young people may just be. This world is one mutually crafted by the friendship – not necessarily through words, but through engagement in activity and peaceful co-presence.

The constancy of change: School as playground

For most participants, the experience of school is underpinned by feelings that social rules and relationships are inherently uncertain, even as close friendships are perceived as immune to shifts in wider social ecology. Competing senses of time impart a sense of continual transition which shapes friendships, and must be mastered. Ever-shifting rules, allegiances and identities support a sense of play, whether menacing or light-hearted, made more potent by the distant surveillance of educators and peers.
As school cohorts, young people go through developmental stages roughly together. As Tara says: “[my mum doesn’t know about] stuff at the school like boys ((laughs)) like body changes and stuff, but Eva does ‘cos she’s my age...” Moving through puberty together, for Tara, imparts a conspiratorial closeness separating peer friendships from other relationships. Adolescents simultaneously experience moving forward through the lifespan (including transitions from primary to secondary school); the fairly regular, recurrent structure of the school day; and the evolving, adult-determined cycle of the school year. These times move concurrently, but at different paces.

Particularly when younger, friendships are grounded against the constant (re-)negotiation of social rules. Kevin is “tossed about” between groups whilst Anne says, “people in this school like they’re your friend one day, and the next day they’re not, so you know you don’t really know.” For some young people, school friendships are characterized by instability. Proximity to students with whom one doesn’t get along with imparts vulnerability. Rules are hidden and malleable, if knowable at all, speaking to a visceral experience of school social groups as tribal, fickle and unlawful.

Key to the experience of playground, therefore, is learning to handle transition and change. Speaking about a rift with his friendship group, Thomas says, “I, to a degree brought it on myself not being able to adapt to the new, to the high school...we sort of stopped, I’ve sort of drifted away from that crowd.” The shift to a new school invites redefinition of old social rules. For Thomas, this forced adaptation is discomforting. Growth is experienced as becoming “better with change.” For some adolescents, the sociality of the playground demands strict attention to the rules of the game, balancing ambiguity with constancy.

At the same time, the inherent renewal of school life lessens the menace of tribal play. Thomas says of re-forming a friendship group, “it's again refreshing because...it’s sort of renewing something kind of older.” His extract hints at a perceived resilience of friendships themselves: shared history grounds the group as it matures through challenge. The recurrence of the school day, term times and new years lightens the consequences of instability by providing continual opportunities for reinvention and by providing a grounding routine for adolescents’ daily lives.

Particularly at key transition points, relationships become imbued with new meanings and enter new stages. Amrita recalls “when you leave secondary school how you talk to everybody and everyone’s your friend, but it’s like once you leave, there’s only a few
people that you really stay in close touch with…but when we see each other it’s...like we only met each other yesterday.” In contrast to the openness of secondary school friendships, Amrita experiences the transition to college as paring down relationships to only those deserving active care. Yet her friendship with Leila is imbued with a palpable sense of continuation; transcending space and distorting time. Transitions may encourage some friendships to end or diverge whilst others strengthen, coalesce and evolve.

The uncertainty and unpredictability of the school space provides, on the one hand, thrilling possibilities for challenge and experimentation within a relatively secure environment; and on the other, threatening feelings of lawlessness and tribalism which may be overwhelming for many young people but which serves as challenge to be encountered. The omnipresence “other” – fellow students and educators – lend a sense of hidden, shifting structure to this play. Even as school is strongly characterised by experiences of change, the routines of the school day and the promise of future school experiences serve as a constant, which may be particularly valuable when other spaces are intolerably tumultuous and which impart a felt sense of constancy and reliability.

**A friend in the playground: Supporting through experiential play and risk**

The juxtaposition between constancy and change which characterises the experience of school supports a feeling of existential play and supported risk-taking, with guidance available from the removed but ubiquitous presence of educators. At school, there is room for growth and opportunity: adolescents are supervised by adults who create a structure and rules but otherwise leave them to sort out the “play” of relationship, self and identity themselves. Young people seize experiential spaces, and value friends who are able to see their innermost selves.

Many school friendships may begin through the happenstance of being in the same form or afterschool club, appearing from an external perspective to be friendships of convenience. However, many young people spoke of seizing opportunities to direct these friendships: walking to lessons (Sam), requesting to share form (Helena), eating lunch (Amrita), working together (Kevin), or finding each other outside of school (Elena, Rachael). Circumstantial meetings may alternatively be experienced as fated (Thomas). Within the structured school environment, participants may exert autonomy to spend time together, creating a free experiential space within the physical school grounds.
Particularly for younger participants, when freedom is a limited commodity within a structured day, the decision to spend time together indicates closeness. Oliver says: “At least I’ve got a mate that can smile and make me happy on a morning, like if I see him then it makes me happy because I know that he’s my mate and I’m going to see him.” For Oliver, the reassurance of feeling that his friend will unfailingly be there for him at school lends a joyous security to his day. Similarly, Tara says: “we were always together in school...we’ll always stay close and it don’t like fade...like fall apart because I won’t see her enough so she might like, get a new best friend ((laughs)). For Tara, the constant renewal of seeing her friend daily ensures fidelity and secures persistence into the future. This recurrent time spent together, creating a space between friends in a largely adult-constructed environment, promotes feelings of indeterminate constancy.

Closeness with an individual friend is foregrounded, for many participants, against how this friendship relates to their other relationships. Thomas says, “everyone else was pretty much against me...he was there basically, just, supporting me.” A friend’s support through the uncertainty of others’ changing allegiances eases the hurt of change. For some adolescents, like Anne, having a close friend outside of school is thus important: “cos we’re not in the same school, there’s not like rumours going round...so we have no reason to fall out...our friendship’s like stronger.” She sees her close friendship as resistant to the contagion of a poisonous school atmosphere. Under the watchful eyes of other students, young people may negotiate boundaries between groups and evaluate the riskiness of disclosures. Underpinning these varying experiences is a sense that a close friendship is immune to the vagaries of the jungle-like wider social network, lightening threats.

School and year transitions may also mark experienced shifts in one’s self. Says Rachael:

> Especially in the last few years I just sort of come out and been like I don’t really care you know, come out of my shell...there’s no point caring what people think anymore ((laughs))...we had forms and...we were all really close in that group and we’d all stay together, like, the whole time, then we got split up...

A spatial metaphor of emergence describes liberation of an interior, hidden self, situating the emergence with form change. The physical manipulation of space removes the “shell” of others’ perceived judgements to create room for new intra- and inter-personal opportunities, Rachael says: “I definitely used to feel that I was in her shadow when I was younger.” The split of her social group enables emergence from her friend’s shade. In shifting the physical configuration of friendships, transitions may be experienced as opening up new light for dormant aspects of self, and as creating a new prism of
relationships through which external judgements are cast. Whilst the instability of school may be challenging, it creates opportunity for reinvention of self and relationship.

In this context of continual change, it is paramount to experience friends as seeing one’s true self, able to grow and explore emerging identities together. Elizabeth says, “I think we’ve just changed but we’ve kind of changed together”. Having known her friend over many years enables Elizabeth to trace the evolution of their selves – change has been a constant, but has woven them closer. She says, “I feel that I can act myself around her…I think she acts her complete self around me too.” Being able to share her complete self with Ruth entails relating to the multiplicity of identities she has accumulated over the years, and the core experience of self which lies beneath. The constancy of a friend’s presence through years of change and development may aid a feeling of knowing each other deeply, as in other participants’ accounts, such as Amrita, Kevin and Rob.

Perceived constancy may be invaluable to adolescents amidst problems at home, as Elizabeth says:

I knew if I come to school, Ruth would be there to help me because, as I said, she’s in nearly all of my lessons. So I didn’t feel ‘oh I’ve got to go to school now, I wish I was at home’, I knew ‘right, Ruth’s going to be at school so she’s going to be able to help me’ so….I’ve known her for so long, it felt really good to know that she was taking care of that part of it because I had so much pressure at home….I spent most of my time in school…it was nice to have her there with me.

The expectation of Ruth’s presence turns school into a valuable source of stability when Elizabeth’s life has been turned upside down. Having companionship through the day imparts a sense of available aid in the event of faltering. This reassurance allows Elizabeth to tear herself away from home where there is nothing between her and her pain. She may instead escape into the comforting enacted routine of the school day, further reinforced as Ruth liaises with the school. Many years of knowing each other, through the changes of school, help Ruth balance between soothing attentiveness and normalising distance.

Closeness within the playground entails the creation of autonomous experiential places within physical grounds, crafting intimacy within a public context. School is often where friends share secrets and problems, facilitating coping. Tara says, “I was a bit sad and I was in her lesson all day and she just cheered me up and told me loads of funny stuff and just made me smile.” Distraction here involves the active creation of a light-hearted emotional space, not just a removal of attention from lessons. School enables physical presence of her friend, and within its walls she may be transported from her cares. Amrita says, “we went
outside together and we were walking round the school on the playground...it was nice just to walk and talk yeah at our own pace like yeah.” Amrita values being able to walk freely outside, asserting a more soothing rhythm of life and creating a safe emotional space within the school. Friends may carve out private spaces and times within the school, seizing the proximal space from immediate adult supervision with teachers in the background.

The creation a physical or experiential space protected from the watchful eyes of others may be negotiated with teachers, reflecting their distal availability. Amrita says:

I think it got all a bit too much for me and I sort of ended up crying and stuff in [our] class and...she asked the teacher...if we could go out the class and we went out and we sort of like...we just walked around outside school just me and her cause it was really quiet everyone was in lessons and we just talked and she were like telling me it was ok, and not to get like you know, upset and she will be here for me and stuff like that...in that classroom...everyone was close and like most of the class were my friends and...they were all there asking me you alright...but I dunno I just didn’t feel like just sitting there with everyone just staring at me like so I just had to go out and talk to someone and she was there for me

Amrita experiences the wrenching intrusion of grief into the comfortingly quotidian school space. As an intermediary, Leila negotiates an intimately supportive realm of “just me and her”. Time is suspended in the quiet togetherness, outside lessons. Leila’s intercession with their teacher breaks paralysis; creating an opportunity to care for Amrita within the distant presence of educators and other students, and reasserting autonomy through physical movement. The watchfulness of others, including fellow students, is simultaneously supportive and threateningly analytical. Educators’ surveillance is depicted within these accounts as largely responsive to adolescents’ needs to negotiate “independent” space. In this instance, the negotiation is legitimate, but it is reasonable to imagine instances where the creation of intimate spaces is perceived by educators as disruptive.

Experiencing a friend as a playground involves a simultaneous sense of constancy and transition, as friends strive towards an indeterminate reliability amongst a background of continual experimentation. Adolescents support each other through challenges encountered within and without the school gates whilst being protected by the inherent regularity, and available adult guidance. In moving together through the playground of school, close friends use multi-faceted support to develop sophisticated relationships, exercise experiential autonomy and navigate a geography of turbulent change. They are able to playfully craft shifting experiential spaces which allow conversation between one intimate self and another.
Creating paths in the community

Community is experienced by these adolescents as requiring negotiation in the absence of the guidance offered at home (by family), their friend’s home (by the friend's family) or school (by educators). The expansive existential freedom shaping one’s own experienced boundaries is grounded against perceptions of these spaces as challenging to body and self. Concerns with felt challenge interrelate with opportunities for comparatively heightened experiences of embodied emotion as participants navigate different physical environments, sculpting the boundaries and contours of their community. Coping within these spaces is experienced as redefining boundaries of the lived geography to reflect emerging felt mastery and expressive self-hood.

Community spaces are characterised by tension between constricting challenge and opening exploration. The community includes much opportunity for physical play, facilitating bonding through “a bit of a laugh together” (Sam). In other spaces, participants’ movements are comparatively more restricted by adults’ agendas and physical structures, conferring a stronger sense of embodied freedom to community spaces than other types.

However, community may be perceived as the lurking ground of actual or imagined confrontations. Several participants spoke of perceived menace from bullies and offenders. Imagining a prowling figure after a criminal incident, Kevin says, “I suppose it was the idea that I saw someone out the window. (Pause) I mean I think that’d creep anyone out.” For Kevin and others, threats constrict spaces, restricting the geography of security as physical danger intrudes into the landscape of experience. Perceived boundaries are heightened along pivotal points such as windows and gardens.

Moving away from the experience of community risk, accounts also showed how the relationships of a young person’s life shape the geography of their community. Community spaces may incorporate the spectres of lost or changed relationships such as a non-custodial parent or an ex-partner. Oliver, for example, must adjust to changes in his lived geography as his father leaves the family home. Another example is Elena’s account of a party held by a mutual friend shortly after a break-up:

I didn’t want to go there, I wanted to, to be somewhere else...I didn’t want to talk about what’s happened there because I was really upset... Because we split up and he went for that party, I thought you know she’s helping him...
The party is experienced by Elena as challenging physical boundaries by thrusting an unwanted interpersonal confrontation towards her. Unlike a friend’s home, where she might be shielded from upset, the party situates public negotiation of relational allegiances, inducing vulnerability and distress. Challenge is experienced here as territorial negotiation between Elena, her ex and her friend, where physical presence is experienced as denoting deeper emotional relationships.

Coping may therefore involve a sense of renegotiating the emotional landscape of the community. This may be through confrontation, but may also involve coming to terms with the absence of another from the community landscape. Elena says about her ex: “he now moved to a different town and that, I think that’s a major thing that helped me to forget about him”. Her ex’s physical absence re-shapes her lived geography as one which omits the spectre of this past relationship, enabling her to move on.

Community is generally experienced as independent from the guidance of adults, who make few appearances in accounts of these spaces. With such renegotiation of boundaries taking place outside the direction of adults, community may become a space through which an adult self is developed and practiced. Richard recounts a dispute near the shops:

…I just sat down on the kerb near t’road and then Jacob came out of his house because we were down near his, and then sat with me and then just said “just ignore him” so, I sat up and then went back home and then I went down to Jacob’s. And it were ‘cos of him why, I got back up…I were thinking there’s no point in being [my step-brother’s] mate…Jacob told me to just be his mate, it was only one day, so. I got up, went to my house, went back down to Jacob’s…the next day me and Mark were mates again. All ‘cos…of Jacob, he helped us.

Richard’s friendships are grounded through movement through the neighbourhood. Richard’s immediate geography interacts with powerful emotion as he moves from challenge to felt resolution. Feeling his step-brother’s anger, Richard physically freezes his space and sits, creating a holding place where he is safe to process feelings. Jacob sits with Richard in this protective holding space, supporting Richard to regain the strength to “get back up” and re-enter the community. Jacob, furthermore, formulates transition to the less-fraught environment of his house, creating a path to a refuge. For Richard, experiencing security from Jacob’s perceived availability for support amidst overwhelming anger in a community populated by bullies, community spaces are where he may develop a self able to deal with problems.
Indeed, for many participants friends may prompt and accompany a restorative relocation through the community. Richard repeatedly mentions taking walks alone or with Jacob:

We’re always in a quiet place to speak ‘cos we just walk about...because we’re in breeze as well ‘cos we’re walking about outside but I ha- when I speak to me mum we always speak upstairs so that it’s quiet but, I always like get sweaty

Walking provides Richard with a calming, quiet space to absorb difficult thoughts and emotions, giving an opportunity to process these with Jacob. The breeze is experienced with a dissipation of anger, whilst walking opens up new physical boundaries. This stands in contrast to the constricting physical discomfort (e.g. sweating) he experiences when seeking support at home: an embodied experience which, interestingly, forms part of the physical manifestations of anger.

Mastering movement through community may be experienced as a particularly grounded, embodied type of coping which interrelates with emotional and relational experience. Oliver recounts how shortly after his parents’ break-up, “my dad left...and went to his normal house so I was sad then.” When Oliver informs his friend Harry of his father’s departure, Harry suggests a bike ride:

O: I tried to forget about it but it kept going over in my head and then Henry, he...just went “Oliver just forget about it? Just clear everything out of your mind and just go down that hill”, ‘cos the hill it were about, you know like paths are like that, it went like that did the path ((whoosh))...so Harry went “just clear your mind and go down that hill as fast as you can...”

Int: How did it feel going down the hill?

O: ...It cleared my mind, about it. I like, went to the top, cleared my mind and then just pedalled as fast as I can, and I like forgot about it, and thought about going down there and, though like (pause) Harry because I were just staring into space...I had my eyes closed, opened them, I were going into the grass so I turned onto the path again, going proper fast, I hit the ramp, I’ve gone like that, I’ve broke the board, ‘cos I went so far, I gone flying up, off the ground, I’m like that aaahh and then I’ve landed on grass. [Mhm] But it were good that day.

Oliver’s embodied interaction with his physical environment imbues this extract with an enlivening immediacy and agency which contrasts to the suffocatingly listless, wistful tone of his experience of home. The bike ride forges a much-needed route away from home’s “atmosphere”, focusing Oliver’s energy into release through shared physical activity. For Oliver, physical space adopts meaningful experiential significance as playful exploration creates new territories through which he can escape grief. Harry not only accompanies him,
but encourages even more physical thrill by focusing Oliver on immediate physical sensation, supporting an exhilarated “good”-ness which (quite literally) elevates him above the challenge of his family problems.

Experiencing freedom of physical movement throughout one’s geography was an important aspect of well-being in some accounts. When asked what it meant to him to get through a particular traumatizing incident, Kevin says: “I suppose I feel I can do...a lot more things in life. Do more with friends...I still don’t go out much though...I’m more of the indoor person but you can do the odd few times.” Kevin may prefer the more retired life, yet feeling strong enough to venture outside and engage with friendships out in the community – to shift his experience out into the unknown – is intrinsic to his experience of having survived a difficult time.

Participants experience community spaces through varying degrees of interpersonal, and even physical, challenge. The resolution of challenge in the absence of guiding adults, within spaces adopting rich cultural significations and interpersonal meanings, becomes a key concern for these adolescents. Self and friendship are borne partially through encounters with community spaces; in drawing their own paths through the community, young people may experience meaningful purpose, exploratory discovery, and emergence of self through the mastery of the lived geography.

**Making a path together with a friend**

Close friendship may be experienced by adolescents as a joint forging of path, as young people support each other towards a sense of meaningful purpose, exploratory discovery, and emergence of self through encounters within community spaces. Participants’ close friendships are enacted through and within the community spaces they encounter. These include relatively unstructured, immediate spaces of neighbourhood streets, and places for socialisation and leisure such as community centres, parks, clubs and shops. Experience of increasing closeness within a friendship is shaped by choices to socialise within community spaces imbued with cultural, developmental and personal meanings. Friendships may provide felt security in negotiating challenge, whilst helping to sculpt the emerging self.

The happenstance of co-proximity featured in many accounts. Friendships often serendipitously developed when young people moved into the same street or school-friends bonded over a community project. Repeated, prolonged opportunities for shared activities may lay the foundation for a stimulating, joyful friendship to grow. Accounts
revealed, however, that closeness was more than passively sharing space. Although chance may align two friends, adolescents perceive their friendships as shaped by choices to spend meaningful time together and deepening meanings of social encounters in the community.

Physical play and exploration within the community enables intense interaction which can strengthen a friendship, as in Oliver’s account: “he started playing [football] and we get to know...stuff about each other and now we know a lot about each other”. Closeness, here, is experienced as mutual disclosure threaded through shared experiences of sport. Compared to other spaces, the community facilitates heightened, varied expressions of embodiment which may play upon physical challenge to promote a particularly embodied flavour of emotional closeness less subject to adult supervision than other spaces.

One space mentioned by many younger participants is the shared journey to school. For Sam, walking to school together indicated closeness within his friendship: “he always talks to me all the time...on the way to school”. In (quite literally) forging a path between home and school, this transition space lends an opportunity for regular interaction free from the otherwise fairly constant surveillance of parents and educators. This early decision to spend a rare bit of unsupervised time with a particular friend imbues an aspect of daily routine with heightened poignancy.

Autonomous choices to spend time together become more compelling as the distinct spaces of socialisation take on developmental and cultural meaning. Helena says:

.....at the same time we’re like complete opposites...I went off and cycled the coast to coast and Olivia went to a music festival ((laughs)) and it kinda showed how, like she’ll, she’s a lot more, girly in ways...

The choices of spaces Helena and her friend separately pursue signify distinctions in their emerging adult selves: Helena more of an adventurer, whilst Olivia enacts more typical practices of young femininity. Although Helena sees herself and Olivia as quite different, these selves are nonetheless experienced as coming together to make an expansive and multi-faceted friendship. Other participants spoke of enacting their friendship through spaces: building bicycles at a community centre, shopping in town, exploring a local park.

Places enable certain activities and circumscribe others, guiding the direction of life’s experiences. This imbues community spaces with rich developmental, cultural and interpersonal meanings contextualising challenges for many participants. Molly recalls being pregnant as a teen whilst her friends went out clubbing:
I didn’t want to go out to a club looking like massive with a baby and everybody would be staring at me. So like all my friends sort of just drifted away.

In a highly embodied way, Molly anticipates feeling out of place amongst her friends, outside the conventions of a club. The meaning of her place in life is uncoupled from the meanings of a club. Friends “drifted” away, capturing a felt sense of natural divergence of paths. Perhaps wistfully, she accepts this transition as her friends’ experiences orientate towards clubbing, and its attendant lifestyle, whilst her life centres elsewhere. Clubs mark an important perceived transition to adulthood which Molly must negotiate, as her pregnancy situates the club a site of interpersonal challenge.

Relatively free from perceived supervision, with spaces textured by cultural and developmental meanings, community spaces are where many of these adolescents begin to practice an adult, problem-solving self in the company of a close friend. Amrita and her friend discuss problems “when we meet up in town...we might just talk about it while we’re walking around town or just sat down at lunch...” Exploring together is not simply a bonding activity, but situates a school friendship to a chosen, public sphere and carves out valuable free space to engage in meaningful conversation.

In community spaces, adolescents may experience felt security from their friendship as they begin to negotiate bodily and interpersonal challenges away from the guidance of entrusted adults. Richard says: “I felt happy because, there were someone there with me so that I didn’t get too angry or summat and to like calm me down when we went into the garden”. He experiences his friend’s presence as protection against overwhelming anger, strengthening his ability to cope. For some participants, such as Anne, situating a friendship as outside of school provides valued security: “it’s like stronger you know, because, like, cos we’re not in the same school, there’s not like rumours going round you know about each other so, we have no reason to fall out...” Insulated from the pernicious effects of a turbulent school environment, Anne’s friendship stands safely separate. The perceived constancy and support creates a sense of safety and freedom.

Analysis therefore suggests that as community spaces are imbued with cultural and developmental meanings, reflecting important transitions and emerging adult self-hood, friendship closeness is experienced as masterful movement through such spaces, including support in negotiating their challenges. Adolescents utilise increasing degrees of felt autonomy to select and share the community spaces grounding their friendships. Ultimately, the boundaries of community spaces are perceived by adolescents as primarily
shaped by self and by close friendships, not by adults or institutions. This not only relates to experiences of increasing closeness and shapes the evolving character of a friendship, but (re-) defines the experiential topography of these adolescents’ communities.

Summary of analytical findings

Analysis suggests that the lifeworld of vulnerable adolescents is characterised by essential experiential places: spatial ways of relating to the world and to self, which variably correspond to actual physical geographies and, relatedly, to feelings of closeness within a friendship. Friendship is posited to be a metaphorical and relational “space” underpinned by phenomenological essences of closeness. Relationship and geography define each other in tension through the experience of the self: in the lifeworld, friendship is inseparable from the geography through which it is enacted, and geography inextricably shaped by the friendship sculpting its contours and boundaries. The four identified types of experienced spaces underlying friendship and resilience in the accounts are now summarised in turn.

Dwelling is characterised by a feeling of knowing and being known within a space (or relationship) which is comfortably, safely and predictably inhabited. The routines of co-inhabitants are familiar and understandable, reflecting secure relationships. Participants are able to feel heard within a dwelling, with warm and supportive responses. Participants feel engaged as they are able to express their self within and through the dwelling. They experience a sense of authenticity with their co-inhabitants – and with themselves – as their self is understood and accepted. Dwelling entails feelings of comfortable movement within the structure, but also a feeling of sojourn, or active rest.

Refuge is characterised by a feeling of having reached, through movement, a place of safety and security in which to pause and regain strength. This movement is experienced as escape. Safety is felt to be protection or relief from temporary or enduring distress. Security is experienced as a perceived reliability of accessibility and fortitude, available when other spaces become uninhabitable, or other relationships become unbearable. As with dwelling, there are feelings of comfort, acceptance and understanding, although authenticity is not essential to the experience of refuge.

Playground is characterised by a sense of existential play and supported risk-taking in which the self explores various options and guises for identity, sociality and body against a backdrop of games and shifting rules. Adult guidance, supervision and surveillance are perceived as being immediately or distantly available. The evolving nature of the
playground itself, the interplay between the different players and the variability of adults’ inclusion lend the playground an undercurrent of unpredictability which provides, on the one hand, feelings of menace, lawlessness and tribalism which must be survived and mastered; and on the other, exhilarating possibility, bonding and experimentation through which the emergent self is discovered and practised. The balance of these aspects is felt to be a coherent yet evolving sense of self, with room for change, complexity and difference.

Path is characterised by a sense of mastery, developing meaningful autonomy in which participants reshape their lived geography by manipulating their boundaries, populations and meanings. A path is a route through which uncharted wilderness becomes domesticized: the creation of meaning where there was none. It is imbued by a sense of encounter: path purposefully defines a landscape, while being simultaneously defined by the contours within which it is situated. This involves territorializing spaces which were meaningless (i.e. outside of or irrelevant to experience) until they become meaningful to the self through engagement and challenge. Participants sculpt abstract, impersonal or hostile space into known geographies through encounters with evolving personal, social and cultural meaning. New spaces may be carved as significant relationships and meanings are bounded to new, different or evolving spaces through purposeful manipulation. This domestication is informed by a desire to enact a profoundly competent, authentic self which encounters challenges and is felt to resolve these. Path most speaks to movement: feeling free and capable to make the lived geography reflect the evolving self. Paths are experienced with a sense of meaningful purpose, exploratory discovery, and emergence of self through the mastery of the lived geography.

Discussion

Experiential cartography: Spaces of the lifeworld and characteristic challenges

A thematic phenomenological analysis showed the importance of spaces as shaping adolescents’ experiences of friendships and of their experiences of challenge and support. Although the central importance of an experience of lived geographies was unexpected in the present research, spatiality has previously been identified as a key constituent of the lifeworld. A person’s experience of the geography of their daily life goes beyond that of bodily position or mental representations of place to incorporate relationships with spaces which are not generally conceptualised within traditional psychology (Ashworth, 2003). Phenomenology considers space an experiential subject with which the self relates
intersubjectively, not simply a mere backdrop for physical movement. The present analysis shows that spaces reflect evolving dynamics of key relationships; they oppress and constrict, protect and empower. They assume cultural and developmental meanings, being expressions of self and body whilst serving as the tools through which self and body practice. Adolescents engage in active, complex relationships with spaces, shaping them and being moulded by them in enduring interplay.

Importantly, other theorists have previously problematized space. Literary theorist Mikhail Bakhtin (Morson & Emerson, 1990) developed the concept of chronotope: the fused interconnections of space and time which form an active context for a narrative and delineate possibilities for both plot development and the realisation of protagonists’ subjectivities. As well as characterising literary genres by their distinctive chronotopes, Bakhtin argued that human experience is characterised by heterochronicity: dynamic interactions between distinct, often-simultaneous senses of time-space. (The term “heterochronic” indicates Bakthin’s preoccupation with literary time over space.) For example, an adolescent concurrently experiences immediate, regular and recurrent bodily functions (e.g., urination); extended, cyclical and seasonal times (e.g. sleep cycles, school terms); arbitrarily constructed social times (e.g., the school day); the developmental lifespan (e.g., puberty, transition from secondary school); etc. Bakhtin proposed a dialogical interrelationship between times as they compete, dispute and agree with each other – speaking to each other in dialogue. Events may themselves encompass multiple times: for example, menstruation marks onset of puberty, recurs monthly, and is associated with social constructions such as entry into womanhood.

These dialogical principles also apply to space (Morson & Emerson, 1990): as the universe is heterochronic, it is also “heterospatial” as multiple spaces are experienced in dialogical complexity. A Bakhtinian framework sees the human experience of time-space as varying in its textural qualities, setting an active background for lived experience such that plot (life narrative and relationships) and personhood (self-realisation) are constrained by qualities of the time-space. In the present analysis, the concept of heterospatiality captures the dialogical tension between and within dimensions of spatial experience, challenging participants. As shown, this serves as an energetic mechanism for growth as participants strive to move towards meaningful habitation of a multiplicity of places, fulfilling important emotional needs through friendships which are themselves shaped by the spaces through
which they are enacted. From a resilience perspective, complex, multiple challenges simultaneously creates opportunities for the development of meaningful strengths.

Two interrelated theorizations are now proposed and discussed. I firstly posit the experience of a supportive close friendship as a feeling of indeterminate, supportive “being-there”. I then move on to discuss the four identified spaces of the lifeworld and to theorise a spatial phenomenology of adolescent resilience, envisioning a challenge-based journey encompassing movement and stasis; self-sufficiency and relationship; and meaningful tension between movement and destination.

Close friendship as a feeling of “being there”

Running throughout these accounts was the idea that friendships are inherently spatialised. The significance of space is an unexpected and important finding given the relative preference given within psychological research to the impact of time: for example, developmental progression, or the enduring impact of relational characteristics.

The enactment of friendships through various spaces exemplifies what Reckwitz (2012) has termed a praxeological view of affective spaces. Reckwitz argues that spaces, interconnected with affect, hold social practices and as such are an integral constituent of sociality. Here, in spaces such as the community, friendships “play” out in spaces which enable various activities, hold specific developmental meanings and offer divergent paths for self-expression. For example, a dance club becomes an artefact of an exhilaratingly carefree lifestyle from which a young pregnant woman feels excluded. A close friend’s offer to meet at home is then more than a logistical negotiation; it becomes an act of comfort. An invitation to a community space may be experienced as an encounter with a possible self, and a cipher through which a friendship evolves significance.

The present analysis argues that friendships are enacted through and within different experiential spaces and physical geographies which ground the character of friendship and attendant support. A close supportive friendship is conceptualised as an experience of friendship where an adolescent: (1) authentically knows, and is known by, their friend; (2) feels safe and secure; (3) can engage in experiential play and supported risk-taking; and (4) is supported in developing meaningful autonomy over a previously meaningless or hostile lived geography. These feelings may be achieved through seemingly different enactments of support, themselves shaped by the geographies through which experience is realised.
In theorizing what it means to experience a supportive close friendship, analysis suggests that when an adolescent has an enduring felt sense of a confluence of these dimensions within the friendship, they experience their friend as “being-there”, even in the absence of physical presence. Interlinking with an intersubjective view of space, “being-there” is conceptualised as a recognisable sense that the friend feels like a meaningful combination of dwelling, escape, playground and path. “Being-there” (compared to, say, being-here or being-with) encompasses a multiplicity of spaces which are experientially constructed by the adolescent, retaining a sense of flexibility, present-ness, potential and indeterminacy, such that an adolescent is confident that the friendship will be realised when needed. “There” is a space imbued with potential, and is interconnected with one’s sense of self.

The present analysis gives experiential weight to the metaphorical and figurative language of distance and proximity which is common to relational talk (Pollio, Fagan, Graves, & Levasseur, 2005). Interweaving the friendship to the lived geography of the self confers a feeling of spatial indeterminacy to close friendship: transcending boundaries, and potentially always “there” to be called upon. For example, feelings that neighbourhood friends are nearby and perceived to be available for potential support become an important component of closeness. The indeterminacy of “being-there” is echoed in Herman’s (1996) view of the polyphonic self as continually unfinished and open, in never-ending dialogue between constituent voices. A polyphonic view of self follows from a Bakhtinian premise of dialogicality in constructing the self as a multiplicity of relatively autonomous “I-positions” which speak to each other in heterogeneous, discontinuous and oppositional voices (Hermans, 1996).

A four-fold conceptualisation of closeness as “being-there” simultaneously invites a polyphonic view of relationship. Distinct yet interlinked characters of relationship function as a plurality: independently responding to each other, with none prioritized over another, coming together to form a coherent experience much as the constituent elements of an orchestra play against each other to coalesce into melody. The present analysis similarly takes a critical perspective towards relationships by suggesting that a single friendship can be experienced as a multiplicity of qualitatively distinct relationships which are metaphorically and subjectively embodied as the spaces of dwelling, refuge, playground and path. Distinct yet intertwining strands of closeness are each valued as meaningful entries to the chambers of relationship with a fellow human being. Individuals may prioritize or prefer different flavours of closeness at various junctions of their lives, but
analysis suggests that each type of closeness holds the potential to carry profoundly
meaningful relationships and to characterise significant forms of support.

**Vulnerable adolescents’ experienced spaces**

Analysis shows that adolescents’ experiences of vulnerability and resilience are shaped by
the spaces through which they engage with the world. Adolescents subjectively inhabit a
“heterospacial” world in which multiple spaces are experienced simultaneously in dialogue.
Different physical places are powerfully experienced through essential phenomenological
characteristics which actively ground lived experience. This analysis identified home, a
friend’s home, school and the community as qualitatively different, yet inter-related spaces
grounding vulnerable adolescents’ experiences of friendship and resilience.

This analysis suggests that adolescents fundamentally experience their homes as dwellings:
inhabiting their home, knowing and being known by it, ensconced within a comfortable and
responsive space which is simultaneously freeing because it accepts them in all their
authentic expression. Heidegger (1971) argued that a purposeful, nurturing staying –
dwelling – is the characteristic state of humankind’s being upon the earth. Dwelling here
means “staying with” or actively remaining a space – preserving, sparing and cultivating
space to bring forth “its’ essential being, its presencing” and feel a reassuring sense of
shelter (Heidegger, 1971, pp. 148-149). Heideggerian dwelling may be considered with
relation to these adolescents’ experiences as the place in which the self may “presence” or
be known. Jacobson (2009) argues that the process of learning-to-dwell is a characteristic
of experience inasmuch as the experienced state of dwelling is: dwelling, or being-at-home,
is an essential way of being towards which humans actively strive. This is an individuating
journey, as people learn how best they may practice dwelling, incorporating ambivalence
between openness and closedness to the world outside the home to form a sense of “place
of and for the self”, including the body (Jacobson, 2009, pp. 357).

Indeed, these accounts are rife with participants striving to feel at home. Perceived
ruptures within the home environment (e.g., family member illness, parents arguing, and
family financial problems) are amongst the most frequent stressors for urban adolescents
(Vera et al., 2012). The current analysis shows that such stressors may be spatially realised,
as disruption in the home disorders young peoples’ experiences of dwelling, potentially
rendering home uninhabitable. At home, adolescents engage co-inhabitants in a complex
interplay of watching and being watched. The tense juxtaposition between the closeness of
co-habitation and the distance of emotional guardedness or absence creates distortions in adolescents’ essential view of their home – and fundamental relationships – as dwelling.

These adolescents’ experience of refuge appeared strongly tied to their experience of dwelling; to an extent, refuge may be conceptualised as the creation of a temporary dwelling. The defining importance of the existential need to dwell suggests that when a feeling of dwelling is threatened, the capacity to craft a sense of refuge is a way of coping. Refuge entails a sense of unassailability, wherein the protective fortress of the refuge space holds the self securely enough to enable strength-building. Coping theorists highlight the benefits of short-term self-distraction and denial whilst acknowledging the dangers of maintaining this escapism long-term (Coifman, Bonanno, Ray & Gross, 2007; Frydenberg, 1997). The temporal evolution of such disengaging methods of coping is not well-understood, but the present analysis suggests that we may conceptualise disengagement not only as an absence or withdrawal; disengagement may be an escape towards an active rest, or sojourn, whose experienced purpose is to shore up resources supporting meaningful later engagement. The term “disengagement” denotes a sense of fleeing from, but these adolescents’ experiences suggests that this act incorporates a sense of fleeing to.

As adolescents observe and are observed by their families at home, surveillance is similarly bidirectional between teachers and students in schools (Webb, McCaughtry, & MacDonald, 2004). Touching upon Foucaultian ideas of the potency of surveillance in prescribing social norms and perpetuating oppression, the power relations inherent to spaces and relationships such as school and teaching may be experienced as empowering as well as controlling – a watchful, encouraging eye or a dominating overseer making visible all interiority and publicly admonishing transgressions (Webb, McCaughtry, & MacDonald, 2004). An important aspect of friendship closeness within school is therefore to create “spaces” for expression outside the gaze of educators and other students. This may be labelled as subversive or challenging if done without educators’ sanction, but the perceived availability of such spaces appears important to participants in providing room for meaningful friendships to grow and for challenges in other domains to be addressed.

Within these accounts, adults are generally nearby and may even facilitate the creation of these spaces-within-spaces by, say, granting permission to leave class with a friend. Friends may be emissaries between adolescents and teachers. The relational space of friendship provides daily relief in school, whilst the scarcity of “free” time-space lends heightened poignancy to young people’s choice of with whom they spend it.
The relationship between time and space is especially strong within the school, with school spaces characterised as a heterochrony by a particularly complex multiplicity of interlayered, interactive times (Bakhtin, 1981). Adolescents experience going forward through the lifespan whilst experiencing the fairly regular, recurrent structure of the school day and evolving, adult-set cycle of the school year. School is felt to be a regular, but not static, background to developmental change. The co-existence of these different times – which may operate at tension – frame the experience of school as both evolving yet unchanging, insecure yet stable, and lend a piquancy of multidimensional tension to other key dimensions of school, such as experiences of self and identity, and experiences of closeness within a friendship. School acts as particularly potent lens and locus through which self and friendship evolve through time.

The relationship between playground and path speaks to a developmentally-salient concern with establishing identities salient for early adulthood involving competence, authenticity and integration of self (Shulman, Feldman, Blatt, Cohen & Mahler, 2005). School-as-playground and community-as-path may share senses of open experimentation of identity and relationship. However, path has an element of moving towards adulthood which takes this beyond playground. Adolescents’ experience of path entails making the community one’s own: outside of adult surveillance, shaping the community geography to one’s evolving sense of self, encountering and resolving challenges. For adolescents, community is the space most about growing up. It is also the space that most speaks to the movement aspect of resilience: feeling free and capable to move through the community.

Analysis of adolescents’ experiences of community suggest that salutogenic communities may be conceptualised as ones which have space for meaningful adolescent engagement and expression, which preferably feature opportunities for young people to direct activities, deepen relationships, develop skills and practice autonomous coping within a supportive environment. Previous research indicates that supportive communities promote tangible social and educational benefits for young people. Better youth mental health outcomes, social behaviour and academic achievement are associated with neighbourhoods featuring more perceived social cohesion, social control, adult employment and less neighbourhood violence (Gershoff & Aber, 2006; Leventhal & Brooks-Gunn, 2000). Yet even in communities higher in violence with minimal opportunities for structured activities, adolescent community involvement is associated with better academic outcomes (Francois, Overstreet & Cunningham, 2012).
A spatial theory of resilience processes

Whilst existing theories generally conceptualise adaptation as occurring through time, this analysis argues that resilience, for vulnerable adolescents, is a chronotopic experience: a journey (deliberate or not) inherently rooted in space as well as time. Obscuring the spatial element of resilience overlooks a key contour to young people’s experiences. This section expounds a theoretical framework situating experiential spaces – reflecting both physical geographies and interpersonal relationships – as the sites of challenge, the ground through which enduring strengths develop, and the resting places in which strengths are enjoyed. The meaning of spaces to adolescents is more than metaphor. Spatial language highlights the importance of embodiment to experience and evocatively captures subjective experiences of self and relationship (Pollio, Fagan, Graves, & Levasseur, 2005). The framework therefore speaks both to the phenomenological essences of subjective resilience and to the capacity of encounters with physical spaces to literally ground mechanisms of risk and protection.

Within a spatial experiential framework, resilience may be conceptualised as developing a meaningful sense, within the socially-embedded self, of experienced dwelling, refuge, playground and path, in light of perceived challenge. This involves an experience of cartography as spaces are explored and inhabited; sculptural landscaping as spaces are crafted and developed; and of movement-stasis amongst spaces. A spatial conceptualisation of resilience for socioeconomically vulnerable adolescents, then, involves a felt sense of freedom of movement between the experienced geographies of the self (including freedom to stay); and through existential challenges presented by risk and through which resilience may form. As experience is intrinsically related to social encounters, resilience is also tied to relationships with significant others along this journey. This may be visually described in a lifeworld topography (Figure 6.2), in which the following qualities are meaningfully present, and evolve over time through experienced challenge:

1. **Key spaces are present and inhabited.** The adolescent develops an intersubjective sense of dwelling, refuge, playground and path. He or she has access to the felt sense of these spaces through the self, physical geographies and key relationships.

2. **Boundaries are present and clearly drawn, yet moveable and flexible.** The interrelationships between the spaces balance delineated boundaries between, and coherent integration across, topographical features.
(3) *Spaces are sculptural.* The map shows “height” of challenge, simultaneously encompassing risk and opportunity for growth. Challenge is not experienced as overwhelmingly un-scaleable. Adolescents feel they have experienced and “come through” difficult time.

(4) *A rich, thick, developing topography.* The lived experience of the self is envisioned as an embodied boundary between the self and experienced challenges, where thickness represents richness of experience. Capturing the evolving nature of resilience, topography varies across spaces and undergoes continuous development. It is neither so thick as to suggest disengagement, nor so thin as to suggest inability to withstand life’s stresses.

Contours of experiential topography are shaped by underlying dimensions of challenge. Challenges are visualised as distinct experiential strata which exist in tension with each other, giving “rise” to topographical features or places of the lifeworld, as tectonic movement creates mountains and fissures. Different challenges are more or less relevant for different spaces but are experientially interlinked within a cohesive topographical experience of self. Underlying the surface of the self’s lived experience are experiential challenges shaping the phenomenology of discrete physical or relational spaces, made distinct through qualitatively variant characteristics. This resonates with views of subjective resilience as domain-specific as well as generalised (see Chapter 1).

Although lifeworld spaces are experientially defined and therefore idiosyncratically realised as physical spaces, they are experienced in characteristic ways within accounts (e.g., home as dwelling). These characteristics reflect phenomenological essences speaking to deep fundamental needs such as knowing and being known. Consequently, spaces can be especially valuable for different support functions and may be shaped in relation to each other (e.g. a close friend’s home becomes a place of safety when one’s own home becomes precarious). In the lived experience, spatial boundaries evolve as meanings and challenges shift. Adolescents both shape and are shaped by their experienced geographies through the intertwined interactions between self and space; self and relationship; and space and relationship. This resonates with conceptualisations of resilience as situated within a relational and sociocultural context (e.g., Ungar, 2010a).
Figure 6.2. An experiential topography of the self in lived experience
This analysis highlights the importance of meaning-making in an encounter with a given space or relationship. In describing the way adolescents intersubjectively experience space and relationship, the word “challenge” has been selected amongst alternatives which carry exclusively positive or negative connotations (e.g. strength, resource, risk or problem) to emphasize the potential for these experiences to simultaneously serve as sources of adversity and growth. Manifestly different types of problems are nonetheless phenomenologically experienced as encounters with underlying existential challenges, such as knowing and being known. Challenges describe ways in which adolescents are most vulnerable, but also ways in which support and growth are experienced.

Facing the challenges named here may be key to adolescent development independently of risk and resilience. Within a spatial resilience framework, however, risk may be envisioned as a subjectively distressing distortion of the topography of the lived experience. In such a distortion, spaces fail to achieve their supportive functions, are experienced as non-existent or dangerous, are inappropriately bounded or interpenetrating, or lack a felt balance between movement and stasis. Adolescents encounter experiential places and challenges in moving through this topography. Stillness is not the poor cousin of movement; purposeful, active staying may be positively seen as habitation. Movement and stasis are experienced in different ways – not all untroubled. These accounts contain movements as various as flight to or from a place; burrowing within and soaring above; being shunted between and easily strolling; straining against and purposefully striding through. Similarly, stasis is variously captured as meaningfully pregnant and vacantly empty; restorative and leeching; liberating and confining; nourishing and oppressive; a temporary respite and threateningly ephemeral; comfortably permanent and despairingly endless. Geography is shaped through various ways: carving, seizing, wrestling, building, sculpting, exploring, and playing.

For adults, well-being may weave together peace and movement, settlement and flow, containing an intimate being-in-the-moment as well as an energetic turn towards the future (Dahlberg, Todres & Galvin, 2008). Adding resilience to this embodied view of well-being incorporates subjective risk, defines the topographical ground for movement and expands the possibilities of ways of engaging. Essential experiences of places and relationships as dwelling, refuge, playground and path suggests that life’s metaphorical journey is intrinsically intertwined with an existential travel towards reaching these experiential places. This journey is experienced as shared encounters with profound
challenges of knowing and being known; achieving safety and security; existential play; and developing meaningful autonomy. These accounts show young people trying in surprisingly powerful ways to craft a lived geography in which they feel known, safe, playful and masterful.

This analysis suggests the lived geography is shaped by adolescents’ engagement with close friendship as well as through personal experience, and casts a spatial perspective on perceived social support. Adolescents encounter a close friend as they navigate challenges. This friend encounters – emotionally and physically – some of the same physical spaces. They may enact a range of support, including: maintaining the integrity of a space, supporting development of autonomy, “hearing” the self, creating physical or emotional refuge, liaising with others. Going through physical spaces and experiential challenges together helps construct a feeling of “being-there”, wherein a friend is interwoven within the lived experience as a supportive presence – even in the absence of physical presence. “There” is defined by the adolescent and will change through the experiential map, leaving the “there” indeterminate but fundamentally always having potential to move with the self. Adolescents’ experiences of what it means to be resilient and to be in a supportive close friendship are, in many ways, shaped by their spatial experiences.

Using “resilience” to describe this journey may arguably impart a sense of deliberateness which is misleading or applicable only in retrospect. Participants were asked about their experiences of “getting through a difficult time”. “Getting through” does not necessarily mean developing resilience, but the present analysis demands attention to the spatial dimensions of such an experience. Yet resilience-as-journey conceptualises an on-going process, embedded within community factors and social relationships, rather than a static personality trait reflecting extraordinary capabilities. Human experience is one of continual process and little completion (Dahlberg, Todres & Galvin, 2008). A sense of destination may not be known or necessary; alternatively, it may be more visible along retrospectively-identified turning points (e.g., Sherpherd, Reynolds & Moran, 2010) or in adulthood when experience of time shifts such that the years appear to pass more quickly, with a sense of linear unfolding (Shmotkin & Eyal, 2003). A temporal perspective of resilience highlights increasing positive psychological adaptation over time by accumulating community and support resources, developing individual coping skills, initiating a cascade of changes at turning points, (Masten & Cicchetti, 2010). A spatial perspective on resilience complements this by attuning to the (dis-)empowering potential of different spaces; showing how
challenge and adaptive resources may be spatially realised; and suggesting how resilience may be recognisably experienced in the immediacy of space as well as the vistas of time. It encourages young people, researchers and practitioners to see different spatially-localised strengths and resources as mechanisms for resilience development. This may be particularly valuable when a sense of hope for the future has been compromised.

**Implications**

An experiential, spatial conceptualisation of resilience does not preclude or limit other theories of resilience, but adds a layer of experiential richness to existing understandings and bring adolescents’ expressed perspectives to the literature. In light of the current findings, key questions open up for researchers and practitioners. Practitioners may interrogate the experiential character of the spaces through which they practice (e.g. a community centre), seeking to understand the felt challenges of a particular space; the diversity of opportunities for empowerment, expression and mutual support offered by the space; and how a young person’s spatially-realised experience sits in relation to other key spaces through which its users navigate (e.g. having a supportive school when community resources are poor). Future studies might engage participants in visual mapping to produce a representation of the connection between social interaction and physical geography which accessibly foregrounds individual experience (Futch & Fine, 2013). Visual mapping methods have been used in ethnographic and geographical research (Powell, 2010) with a limited, yet established, pedigree in social psychology (Futch & Fine, 2013; Powell, 2010). Such methods offer an intriguing complement to more traditional interviewing methods in accessing adolescents’ lived experiences. Future research might also apply the theoretical and methodological framework of spatial experience to adults or other specialised populations. Additional types of experienced spaces are likely to be identified if analytical focus shifts to other types of interpersonal relationships, later-life experiences or other categories of risk, such as physical illness.
CHAPTER 7

THE CONTOURS OF RESILIENCE AND CLOSE FRIENDSHIP: DISCUSSION AND CONCLUSIONS

Aims and chapter overview

The novel research in this thesis explored the hypothesized protective relationship between a single close friendship and psychological resilience, expanding current understandings of social and relational mechanisms of growth in the face of adversity. Researchers increasingly situate resilience as a socially-embedded process of on-going psychological adaptation, facilitated through a variety of interlinked protective mechanisms and processes operating within each individual’s unique context (Rutter, 1999). The present research predominantly focused upon socioeconomically vulnerable adolescents due to the pervasive effects of socioeconomic vulnerability, the importance of friendships during adolescence, and the potential for adolescence to impact outcomes and experiences throughout later life. Rather than viewing adolescent resilience as a feature of an extraordinarily adaptive personality, the findings of this thesis support a process-orientated, multidimensional view of resilience which embeds adolescents’ resilience within their social relationships, cultures, and communities (e.g. Ahern, 2006; Ungar, 2005; Wright & Masten, 2001).

In proceeding from a strengths-based premise that close friendships may facilitate adolescents’ abilities to grow in the face of socioeconomic vulnerability, this thesis has presented a novel and valuable contribution to the resilience literature which supports such multidimensional views of resilience, while extending them in three major ways. Firstly, the research aimed to identify whether and how a supportive close friendship might promote subjective psychological resilience in socioeconomically vulnerable adolescents, and through what psychological processes this might operate, uniquely extending the current literature on social and relational protective processes of resilience (Chapters 3 and 4). The thesis demonstrated the associations between a close friendship and positive psychological adaptation, explicitly showing that a single supportive close friendship facilitates the development of resilience in the face of socioeconomic adversity and
identifying mechanisms through which this can occur, although it is unclear how these
effects may operate over time. Secondly, it sought to draw a conceptual comparison with a
distinct developmental stage, middle adulthood, in order to contextualise the role of
adolescent friendships on resilience and apply a lifespan approach to protective processes
(Chapter 5). This generated new understanding of the function and significance of this
identified protective mechanism within middle age, and extended understanding of the
nature of relational processes supporting resilience. Thirdly, it used a thematic empirical
phenomenological method to radically illuminate the subjective experience of how close
friendships support socioeconomically vulnerable adolescents towards resilience processes
as they encounter challenges. The derived spatial theory of resilience and
conceptualisation of close friendship as “being there” presents new understandings on the
nature of on-going subjective resilience processes. In doing so, it extends and complements,
but also challenges, current views on resilience, support and social and relational
protective mechanisms (Chapter 6). Using a mixed-methods design (Chapter 2), these three
main lines of inquiry together resulted in the development of a complex, multidimensional
view of resilience processes which strongly supports a salutogenic role for peer friendships
as a relational protective mechanism facilitating resilience.

I begin this chapter by reviewing key findings from each of the studies conducted in this
thesis. I then turn to discussing these findings in relation to each other in order to elucidate
emergent patterns and tensions across the research, critically engaging with how these
extend and challenge current theories of resilience and friendship. I first explore how this
thesis has uniquely added to existing knowledge concerning the role of a single supportive
close friendship as a social and relational protective process facilitating resilience. I then
focus specifically on the findings within the context of theoretical understanding about
adolescent resilience. I then examine the implications of a lifespan perspective on
resilience development in terms of resilience trajectories and adult resilience. I briefly
discuss how innovative mixed-methods programme of research used in this thesis enabled
deeper understanding of friendships and psychological resilience. I review implications of
the present findings for developing interventions supporting resilience promotion. I explore
limitations of the present research, and then invite considerations of directions for future
research at the intersection of close friendships and resilience, before concluding this
journey through the complex but inspirational relationship between friendship and growth
in the face of challenge.
Summary of key findings

Chapter 3 presented a novel demonstration of the benefits of a single, supportive close friendship for psychological resilience in socioeconomically vulnerable adolescents in the UK through the development of the Adolescent Friendship and Resilience Model. In a unique contribution to the literature, the research showed how such friendships may be a protective mechanism supporting resilience. Regardless of the perceived support available from the family, greater perceived close friendship quality was associated with higher levels of resilience in both older and younger adolescents through protective pathways of facilitating a constructive coping style, encouraging effort, using an extended supportive friendship network and minimizing use of disengaged and externalising coping. There was a small but significant positive relationship between girls’ supportive and the use of disengaged and externalising coping, although for boys this relationship did not emerge. However, boys were much more vulnerable than girls to the detrimental effects of this type of coping upon resilience. Reliability was not necessarily essential to a supportive close friendship in this age group; neither was it important to the latent construct of resilience that adolescents felt they must tackle life challenges on their own.

Chapter 4 extended the previous chapter’s findings by applying a similar line of analysis to a longitudinal sample. This provides the first known study of the salutogenic effects of a single close friendship upon resilience over time. Contrary to expectations, perceived close friendship quality did not predict resilience at a one-year follow-up once earlier resilience was controlled, regardless of whether participants had maintained the same closest friend over the year. A hypothesis that protective processes would operate differentially according to baseline resilience received mixed support. Adolescents who were higher or lower in resilience at baseline did not differ significantly in subsequent disengaged and externalising coping, perceived close friendship quality and perceived support from friends and family. However, resilient adolescents showed greater self-esteem, emotional intelligence, self-efficacy and constructive coping at follow-up than their less-resilient peers. Further analysis showed that upward trajectories of resilience promotion were qualitatively different than downward trajectories of resilience reduction, particularly regarding protective effects of relational resources. Increasingly-resilient adolescents showed greater subsequent constructive coping, close friendship support, peer network support and relational-interdependent self-construal, whilst decreasingly-resilient adolescents reported worsening close friendship quality. Decreasingly-resilient adolescents used less...
constructive coping and had lowered self-esteem, but were no more likely than their resilient peers to report disengaged and externalising coping or less supportive friendship networks over time. This suggested that the reduction of resilience is not associated with general pathways of peer deviancy training (Dishion, 2000) or dysfunctional social groups, although it may relate to a worsening single close friendship. Instead, resilience reduction relates more to an inability to utilise effective coping mechanisms and poorer self-esteem. By contrast, increasing resilience is associated with utilisation of constructive coping, better quality peer relationships and incorporation of those relationships into the self.

Chapter 5 examined the hypothesized protective relationship between perceived close friendship quality and resilience in a developmentally distinct period to adolescence by focusing upon adults aged 35 to 55 years. Analysis revealed that greater perceived close friendship quality at baseline predicted increased psychological resilience at follow-up, controlling for prior resilience levels, supporting the assertion that a supportive close friendship can be a protective mechanism promoting resilience in adulthood. Only constructive coping significantly mediated the cross-sectional relationship between friendship and resilience at T1, although partial mediation effects were found at follow-up for increased general self-efficacy and its components initiative and persistence, self-esteem, constructive coping, emotional intelligence, and reduced perceived stress and disengaged and externalising coping. By contrast, only constructive coping marginally mediated this longitudinal relationship, suggesting that friendships might promote resilience through a more limited range of processes at this age or through pathways which were not assessed within the current study. Unlike adolescents, baseline-resilient adults showed a consistent pattern of greater psychological resources and support (except for RISC) at subsequent assessment than their less-resilient peers, suggesting a more cohesive and less differentiated portfolio of quality of psychological and support resources than adolescents. Patterns of resilience trajectories differed from the adolescent cohort. The important role of self-esteem in decreased resilience was maintained as decreasing resilience was associated with worsening self-esteem only. The significance of constructive coping to increased resilience was also maintained, with increased persistence the only other resource linked to increasing resilience over time. However, findings are necessarily tentative given the small sample size, predominance of women and the marginal selective attrition which suggested that adults who were more resilient, more constructive copers and less socially isolated at baseline were more likely to participate in follow-up.
Chapter 6 reconceptualised resilience processes amongst socioeconomically vulnerable adolescents through the experienced interrelationship between the self, friendships and spaces of the lived geography, presenting a spatial perspective on both resilience and close friendships. Findings showed that resilience and protective processes are experienced through the physical spaces young people inhabit. Physical spaces are themselves shaped by the interpersonal relationships played out in them. Resilience may also feel like different spaces – real, metaphorical, imagined. Four kinds of experiential-spaces conceptually located within the topography of the lifeworld were identified: dwelling, refuge, playground and path. These are each associated with characteristic feelings of, respectively, sojourn, escape, existential play and mastery. The phenomenological essences of spaces also differentiate the ways in and through which closeness and supportiveness of friendships are experienced. Friendships are argued to be a metaphorical and relational “space” which holds the experiential essences of dwelling, refuge, playground and path, capturing the complex, multi-dimensional power of support. The experiential spaces are sculpted through dynamic interplay between underlying existential challenges and are differentiated through concern with a corresponding predominant challenge. They interact with and within each other, in tension between movement and stasis. Challenges dialogically shape the topography of the lived experience, as adolescents actively relate to the physical, geographical spaces that populate their lives. Resilience was conceptualised as an on-going subjective process of physical and experiential navigation through encountered challenge, adding a spatial cast to a process typically viewed as temporal.

The protective capacities of supportive close friendships

This thesis has uniquely added to existing knowledge concerning friendships’ place in the social and relational processes underpinning resilience promotion in three major ways. Firstly, the research showed that amongst both adolescents and mid-life adults, a single close friendship can be a protective resource facilitating this development of psychological resilience. Peer relationships have previously been conceptualised as predicting, mediating and moderating psychopathological processes and outcomes (Bukowski & Adams, 2005) but have been largely overlooked as promoting adaptive processes or as mechanisms in themselves. The focus on a single supportive close friendship, compared to friendship groups, was a particularly innovative contribution. Secondly, the research explicitly addressed understanding of the interconnected processes behind resilience promotion (Rutter, 1990) by identifying selected pathways underpinning observed positive relationships between close friendship and resilience. This demonstrates not only the value
of a supportive close friendship, but how it supports adolescents’ and mid-life adults’ adaptive functioning. The explication of how these processes operate differently – and similarly – for adolescent boys and girls is of particular interest. Thirdly, the research generated new understanding of adolescents’ supportive close friendships, illuminating distinct but interlinked kinds of subjective closeness facilitating movement through difficult times, such that a supportive close friendship is experienced as a feeling of “being-there.” This presented a fresh understanding of friendship support and vividly described the subjective experience of processes supporting adolescent resilience, teasing apart what may be meant when researchers speak of the value of social support.

The research presented here uniquely suggests that for both adolescents and adults, a single supportive close friendship can facilitate the development of psychological resilience and should be systematically included in models of resilience processes. The adolescent study detailed a robust association between a supportive close friendship and psychological resilience, including mechanisms underpinning this relationship, albeit in the absence of a longitudinal protective effect. Given the instability of longitudinal resilience outcomes, this is not entirely surprising (Vanderbilt-Adriance & Shaw, 2008). In adults, a close supportive friendship was identified as a protective mechanism promoting psychological resilience over time. An important part of resilience is the capacity to move into mutually supportive relationships during times of distress (Jordan, 2013). Although singular and group friendships are implicitly considered in models conceptualising peer relationships as important to resilience-promoting coping mechanisms (Hart, Blincow & Thomas, 2007), support, and experiences of belonging, companionship and acceptance (Everall, Altrows & Paulson, 2006; Hauser & Allen, 2007), the import of a single close friendship to resilience has yet to be explicitly integrated into existing models of resilience promotion. Rather than making inferences as to the impact of individual relationships on positive psychological adaptation, a systematic explication across the resilience literature of how this could occur is necessary.

There are undoubtedly adaptive benefits to having numerous friendships and a strong, supportive peer group, such as achieving developmentally appropriate social competence, especially at adolescence (Frydenberg, 1997). However, a single close friend is a realistically accessible resource for most people. It allows for variations in introversion and extraversion, social competence and closeness preferences (Finkenauer & Righetti, 2011; Frost & Forrester, 2013) to be accommodated. It also takes into account the changing
nature of friendship networks over the lifespan to become smaller and more selective (Hartup & Stevens, 1999). This research shows how a single relationship can contribute to the positive development of a supportive wider friendship network and psychological resilience in both adolescent girls and boys. As such it draws a link between a single close friendship and friendship network support, this thesis adds a dimension of positive adaptation to literature concerning how a close friendship can mitigate against the negative impacts of peer victimization (Hodges, Boivin, Vitaro & Bukowski, 1999; You & Bellmore, 2012). Focus on a single supportive friendship in two age groups helps to disentangle between support processes and related mechanisms such as social competence and peer acceptance (Everall, Altrows & Paulson, 2006; Frydenberg, 1997), which can have their own effects on adjustment (Nishina, Juvonen & Witkow, 2005).

This research then moved beyond identifying a single close friendship as an important facilitator of resilience to explicate processes through which this occurs. The adolescent structural model is particularly valuable to showing how protective processes operate with respect to each other. The adolescent model demonstrated that the positive relationship between friendship quality and resilience is partially explained through the promotion of constructive coping, the development of a supportive wider friendship network, facilitation of effort and suppression of disengaged and externalisation coping. In adults, the protective effects of friendship were found to be supported over time solely by the facilitation of constructive coping, although cross-sectional findings intriguingly suggest a potentially wider range of processes. A recurrent theme in this thesis has been the importance of coping to the relationship between friendship support and resilience in both cohorts, supporting assertions that effective coping is integral to resilience (Rutter, 1990). A take-home message of this thesis is that adolescents’ close friendships are adaptive in nature. Socioeconomically vulnerable adolescents support each other through difficult times by facilitating constructive coping which is in turn associated with increased resilience. Orientating towards the adaptive capacities of close friendships in future research is, therefore, an essential task.

Previous evidence suggests that friends can encourage pathologising coping responses such as co-rumination over a problem (Rose, 2002) and reinforcing antisocial behaviour (Dishion, 2000). Interestingly, both responses conceptually involve the persistence of coping behaviours (such as venting or substance use) which need not themselves be maladaptive to initiate or entrench internalising or externalising trajectories of problematic pathways
(Zimmerman & Brenner, 2010) beyond an adaptive time interval. These responses might comprise risky behaviours such as drinking excessively in order to cope, and be reinforced by one’s friendship group (Bernstein et al., 2011). There are indications that both resilient and vulnerable adolescents engage in more antisocial and illegal activities with peers than moderately well-adjusted adolescents do (Dumont & Provost, 1999). Yet vulnerable adolescents also engage in neighbourhood activities that promote better outcomes in areas such as academic achievement (Francois, Overstreet & Cunningham, 2012). Engaging with the available enacted practices of coping within a social group and community may be seen as socioeconomically vulnerable adolescents’ efforts to adjust themselves to their social environments whilst they simultaneously or later employ emotion regulation strategies such as stress reappraisal (Chen & Miller, 2012). Taking the quantitative and qualitative findings together, the relationship between these coping styles and poor outcomes may be closely related to the choices available to young people through the significant relationships and places in their world to enact social and affective practices (Reckwitz, 2012). These social practices might have social, academic or criminal implications that entrench or escalate problems. It may be that, in focusing on the potentially provocative surface structure of coping responses, researchers miss the meaningful support being enacted by young people through their friendships, especially their individual friendships. The research presented in this thesis shows that young people’s close friendships can be salutogenic forces facilitating resilience. It is time to systematically acknowledge this.

The present findings suggest it is important to see the friendships which adolescents consider supportive as resilience-promoting in nature for both boys and girls. At the same time, the findings presented showed that boys are more vulnerable than girls to the deleterious effects of disengaged and externalising coping responses upon resilience. However, these adolescent boys’ single close friendships were not significantly associated with such coping responses. Interviews suggested that adolescent boys also experienced their close friendships as generally supportive, meeting existential needs for intimacy and mastery whilst facilitating and modelling effective coping responses. This lends empirical evidence supporting Way’s (2013) argument that boys’ friendships are critical for their emotional well-being and may be incredibly intimate, trustworthy and supportive, even as boys struggle to be seen within masculine ideals of independence and stoicism.

Despite relationships between self-esteem and resilience observed in previous literature (Harvey & Delfabbro, 2004), self-esteem did not mediate the relationship between
friendship and resilience amongst the adolescents. Given the fluidity of these adolescents’ friendships – reliability being unimportant as a component of friendship quality, and many adolescents selecting different closest friendships at follow-up – it may be unwise to base one’s self-worth predominantly on even a supportive friendship. Indeed, greater support from peers relative to family members and educators has been linked to behavioural problems in adolescents via an overreliance on peers for deriving feelings of self-esteem (DuBois et al., 2002). Components of friendship such as validation may comprise these adolescents’ close friendship, but they do not appear to feed self-esteem. Yet, these adolescents’ closest friendships promote a relational interdependent self-construal in which one’s self-construct is partially defined in terms of valued relationships. This self-construal on its own partially mediated the relationship between friendship and resilience, but not alongside other protective pathways. Taken together, these findings suggest that these adolescents likely derive their self-esteem from sources other than their closest friendship, and a relational self-construal is but a component of their self-worth.

Intersubjective closeness can develop a sense of self; being seen by another allows one to become fully present to oneself (Burkitt, 2003). It may have been supposed the close friendships might promote an esteem-raising view of the self, although present findings do not support this assertion. Qualitative findings pointed towards the importance for adolescents of feeling like a friend is “being there”, which relates less to self-esteem than to a feeling that the friendship has somehow been constituted, if indefinably and indeterminately, into the experience of the self.

In exploring whether and how a close friendship might be a protective mechanism facilitating resilience, this thesis critically examined friendship through the lens of subjective experience. The complex pattern of cross-sectional and longitudinal findings across both cohorts in this thesis, and the complex relationship between phenomenological essences of adolescents’ close friendships, highlights that friendships are subject to change and growth themselves. Even as friendships go through their own processes of developing closeness and mutuality (Finkenauer & Righetti, 2011) living through a traumatic experience may bring friends’ underlying qualities to the fore, developing resilience in a friendship as well as a person. Challenging experiences may test friendships to breaking point. Yet friendships may be enhanced as people entrust friends with their vulnerability and friends bear witness to each other’s most intimate experiences, perhaps exchanging assistance, recognition, encouragement, alliance, and carrying each other through to the future (Wertz, 2011).
This thesis illuminated a phenomenological view of how perceived support is experienced, arguing that a close friendship entails a feeling of “being there”. Even in the absence of physical presence, a friend feels like a meaningful combination of dwelling, escape, playground and path. Much like Hartup and Stevens’ (1997) distinction between the deep and surface structures of friendship, these phenomenological essences speak to what a friendship feels like, regardless of what it looks like to the outside observer. Important aspects of close friendship include feeling known and feeling able to engage in existential play which challenges but still accepts evolving identities. These can be experienced as helping to facilitate movement towards resilience. At the same time, the current findings suggest that, especially for young people, meaningful support may not require in-depth emotionality: physical play or healthy distraction may facilitate a sense of mastery over the lived geography or achieving an experience of impenetrable safety. These experiences of support may be inherently interlinked. Shepherd, Reynolds and Moran (2010) reported that self-identified resilient young women valued their friends as partners in “normal” teenage experiences even more than as confidantes. Feeling accepted within supportive relationships provided a link to a valued non-traumatized self-image, enabling a sense of forward movement. This lends an experiential cast to the range of significant coping behaviours, including distraction and disengagement, through which a supportive close friendship is associated with resilience.

Previous research presents consistent evidence suggesting that social support is cross-sectionally associated with growth following adversity but has rarely shown longitudinal support for protective functions (Helgeson & Lopez, 2010). A view of friendship as existing in an indeterminate experiential space which is shaped, but not strictly bounded, by intersections between the self, other, time and physical space suggests a complex theoretical role for the impact of support provided by a given individual. This has methodological implications, as the necessary longitudinal studies to establish causality within social psychological pathways, with pre-determined time intervals, may fail to effectively capture the idiosyncratically changing spatial-temporal dimensions of a close friendship. The qualities of human relationships are a moving target. The persistence of a friendship’s effects upon psychosocial processes is not straightforwardly linked to the “present presence” of a friend in a person’s life. This thesis make clear that valued friendships may be mantled in very different surface structures and address very different deep needs (Hartup & Stevens, 1997). Closeness may also be a function of individual preference. For example, discrepancy between ideal and actual closeness in adults’
romantic relationships is associated with mental health and relational well-being (Frost & Forrester, 2013). It is possible that congruence between ideal and actual closeness matter for friendships and young people as well. This thesis demonstrates that whilst using an array of relationship-describing measures is useful to assessing friendship, there is likely work still to be done in crafting measures to comprehensively incorporate individuals’ preferences for closeness, the subjective meanings of specific friendship qualities and the experienced spatial-temporal boundaries of the intersubjective relationship of self and friend. A meta-analytic view on the persistence of particular salutogenic effects of friendships at different developmental stages might aid researchers in setting longitudinal follow-up intervals.

Perceived social support may be conceptualised as subjective experiences of transactions between the self and the separate other(s), enacted through negotiation, recruitment or receipt of support (Jordan, 2013): seeking practical help, receiving validating praise, analysing a problem to learn to accept it or see it in a different light (Carver, 1997). Yet the findings presented here suggest that the distinction between self and other is not so simple. Throughout both cohorts, the presence or absence of significant direct or meditational pathways was unaffected by selection of the same closest friend over time, suggesting that friendship is a mix of meaning and mechanism, subjective experience and intersubjective relationship. The findings present a different language for describing the nature of friendship and interpersonal relationship than has been previously seen in the resilience literature – and, indeed the wider social support literature – granting language to the slippery, difficult-to-voice feelings of what close friendships are like.

A critical view of what friendship is has implications beyond the realm of resilience, moving into the social psychology of the self. For example, close relationships are viewed as repositories for self-knowledge, providing information about past self-definition and self-evaluation through cue-based activation of different relational selves (Andersen & Chen, 2002). Perhaps when a supportive friend is experienced as “being-there” in the absence of physical presence, a relational self experienced as more resilient or a better coper might be activated. Thinking of a significant other has been shown to result in changes in working self-concept (Hinkley & Andersen, 1996), linking back with a spatial theory of resilience and relationship through the idea of a friend-related self being expressed in different relational, experiential and physical spaces. A spatial view on friendship also relates to humanistic theories of co-construction of an essential self (e.g. Drigotas, 2002), itself a metaphor for
the sculptural manipulation of the “space” of the self and how it is embodied in the world. At the same time, views of the self as essential or activated prioritize thinking about relationship – intersubjectivity – in terms of the self as an individual subject. A sculptor himself, Heidegger argued against a self as an isolated subject, seeing being-in-the-world as inherently relational and engaging through collaborative, participatory dimensions of embodiment and spatiality (Mitchell, 2010). Although the term “intersubjectivity” powerfully references the relationship between two friends, it necessarily directs focus on the two subjects who together create a frame for the space between them. The present findings suggest that friendship, and intersubjectivity, can be conceptualised on its own terms as a lifeworld space which is interlinked with, but not defined by, the self. A prioritization of the self as subject is not necessarily incorrect, but may be incomplete. It values relationships for their ability to provide support and approval to the self and may inadvertently downplay the importance of connection with others (Jordan, 2013). The argument here is for a conceptualisation which also grants character to the relationship itself – not through reification but through shifting the field of vision. A friendship is less a transaction between two individuals, and more a construction which may be an agentic force of its own accord and have its own unique qualitative feel “there” in the spaces of the phenomenological lifeworld. In saying that friendship feels like a dwelling, refuge, playground or path, we may begin to meaningfully approximate a substantiation of the space between two people as a thing-in-itself.

Implications for adolescent resilience

This thesis has made a number of significant contributions to theoretical understanding about adolescent resilience specifically (as opposed to through the lifespan). Firstly, it suggests that close friendship support is an important protective mechanism, having identified associations between a single supportive close friendship and resilience and mechanisms underpinning this relationship. This adds to the resilience literature by suggesting a previously overlooked protective mechanism which is significant in its salience and enduring relevance throughout this developmental period, amenability to facilitation and intervention, and links with a number of other aspects of adolescents’ lives (Luthar, Sawyer & Brown, 2006). Secondly, it expands and challenges existing theories of resilience by presenting a critical spatial theory of resilience and protective processes derived from the phenomenology of adolescents’ intersubjective experiences of self, friendship and spaces, addressing expressed needs for thicker descriptions of resilience incorporating young people’s perspectives (Ungar, 2005). Thirdly, tying together the quantitative and
qualitative studies, the thesis positions peer friendships as an important protective interface between socioeconomically vulnerable adolescents and their environments, with critical implications for the link between general and domain-specific resilience.

Firstly, the thesis presents a single supportive close friendship as a relational mechanism facilitating growth through adversity for both boys and girls, showing that supportive close friendships are robustly positively associated with psychological resilience cross-sectionally, albeit in the absence of an observed longitudinal protective effect, as discussed in the next section. Many resilience researchers are moving beyond endorsements of an individualistic phenomenon of adolescent resiliency. This thesis supports seeing adolescent resilience as an on-going dynamic, multidimensional process. This process incorporates social support, culture, community and social relationships alongside individuals’ own characteristics, including their abilities to adaptively negotiate their social and physical environments, and involves strengths which are continually evolving and sometimes domain-specific (Ahern, 2006; Hart, Blincow and Thomas, 2007; Luthar, Cicchetti & Becker, 2000; Wright & Masten, 2001; Ungar, 2005). The identification of the importance of close friendship support in facilitating adolescent resilience through mechanisms such as coping, self-efficacy and building a wider friendship network supports this turn towards the social. The research identifies significant supportive peer relationships as an important link between support, individual capacities, and interactions with the wider social environment, including family and community. Beyond including general “social support” as a component of resilience, researchers ought to include peer friendships as relational resources and attend to mechanisms through which protective relationships might operate. A simple but powerful take-home message of this research is that adolescents’ close supportive friendships matter for resilience and protective processes, and should be systematically and explicitly included in theoretical and applied conceptualisations of adolescent resilience. This thesis opens a conversation on the salutogenic contributions of adolescents’ peer relationships to resilience processes.

This thesis has identified ways in which adolescents’ resilience is facilitated by close friendships, with a particularly powerful role for coping. Ungar (2005, pp. 91) suggests that “it is only those youth who cope in ways that please adults who are awarded the label ‘resilient’,” implicitly casting socially unacceptable coping responses as personal failings. The adolescent findings presented in chapters 3 and 4 cast a critical eye on the role of coping behaviours in promoting resilience. For girls, even supportive friendships weakly but
significantly promoted disengaged and externalising coping. Whilst certain types of coping behaviours may be effective when performed for a brief duration or within certain contexts, they may be maladaptive when prolonged or enacted within socially inappropriate contexts. Particularly within the context of socio-economic vulnerability, common challenges may be enacted within, and antagonised by, embodied and relational interactions with spaces that present risk in the form of social or institutional sanctions (e.g., bullying or poor academic achievement) for failure to adhere to contextual norms, opportunities to engage in antisocial behaviour with peers or unhealthy practices such as excessive drinking (Roberts, Townshend, Pappalepore, & Eldridge, 2012). Although previous research has documented how young people might become enmeshed in trajectories of cumulative risk and negative outcomes (Bernstein et al., 2011; Dishion, Nelson & Yasui, 2005; Zimmerman & Brenner, 2010), longitudinal findings suggest that, for these adolescents at least, decreasing resilience need not be associated with peer friendship groups. Alternatively, these adolescents may experience friendships which encourage problematic behaviours as nevertheless supportive, although the fact that the sample did not consistently report increasing or unchanging support suggests they are able to critically appraise their friendships. By contrast, increasing resilience is associated with increasing perceived support from both a single close friend and one’s wider friendship group, suggesting that the supportive close friendships play a role in increasing resilience for some young people.

At least when it comes to growth in the face of socioeconomic vulnerability – itself situated in the geographical landscape - it appears crucial to have physical spaces and interpersonal relationships through which young people can constructively enact coping behaviours such as self-distraction, positively reframing a problem or obtaining practical. Findings further suggest the importance of having safe friendships and physical spaces to engage in coping responses which could be maladaptive in other contexts, such as letting out frustration physically, co-ruminating over a problem to no meaningful resolution (Rose, 2002) or disengaging from the present through substance use. This is poignantly demonstrated by adolescents’ efforts to create independent experiential spaces within the supervised boundaries of the school and exploring emerging identities with friends in their communities. The present findings suggest that close friendships may be one such supportive relationship, whilst physical spaces might include friends’ homes, local parks, shopping centres, affordable eateries, school break-times, afterschool clubs and community centres. Previous research has pointed to the importance of positive school
experiences, clubs and neighbourhood involvement (Gilligan, 1998; Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006; Rutter, 1990). Chapters 3 and 4 suggest that adolescents’ close supportive friendships can provide a means to enact construct coping and, through this, to develop resilience, whilst Chapter 6 provided a powerful account of how such practices might feel to a young person. Both the quantitative and qualitative findings reinforce previous suggestions by coping theorists that a given response is not simply good or bad, although certain coping styles do tend to be more or less effective (Frydenberg, 1997). Indeed, the qualitative findings suggest that even though behavioural disengagement may look like fleeing from reality, it may be experienced as fleeing towards a place of temporary safety. The efficacy of a coping response relates to an individual’s subjective appraisal of a problem, including of the resources available for resolution and the likelihood that this is even possible (Pearlin & Schooler, 1978). Chapters 3 and 4 showed the positive relationship between the perceived quality of a close friendship and a feeling that one can effect change in one’s life through effortful self-efficacy, whilst the Adolescent Friendship and Resilience Model showed that the interrelationship between friendship quality, coping and effort is important for facilitating resilience. Findings throughout this thesis suggest that dismantling friendships and spaces which promote unhealthy processes, and helping young people negotiate boundaries for contextually appropriate behaviour, should be accompanied by constructive efforts by researchers, practitioners and policymakers to facilitate supportive relationships and spaces. If the creation of space for oneself is an essential motivating experience, as the qualitative findings in this thesis suggest, then the absence of constructive, supportive, accessible experiential and physical spaces is also a profound act of suppression.

This thesis proposes that spatial movement between, amongst and within the geographies of the lived experience can be as important as movement through time in the subjective experience of adolescent resilience and protective processes – both as a metaphorical descriptor and as a way of capturing ways in which adolescents experience the events of their daily lives as empowering or inhibiting. A view of self, space and relationship – particularly close friendship – as intertwined is crucial for understanding protective processes promoting resilience in socioeconomically vulnerable adolescents. The present research presents a framework for conceptualising the spatial aspects of resilience in a critical, phenomenological way, granting a vivid, empirically-derived visual language to subjective experience. Bakhtin (1981) argued that time-space – itself comprised of two interrelated dimensions – is an agentic, dialogical arena for the interaction between a
character and her or his development, a setting and its plot, and that this rich complexity of
the meanings and measures of time reflects the human experience. The subjective
retrospective experience of resilience may indeed be tied to a sense of moving beyond
hopelessness towards wellbeing over time to create a future for oneself (Everall, Altrows &
Paulson, 2006). Yet this thesis suggests that whilst resilience is undoubtedly a temporal
phenomenon, researchers would do well to expand their conceptualisation of resilience
into the pervasive, wide-ranging immediacy of subjective experience. Young people move
through space as well as time, navigating their self and social worlds through lived
geographies which situate the continual flow of their embodied and experiential present.
Resilience researchers would do well to attend to the experienced spatial contexts of their
participants alongside more widely assessed considerations such as their age or gender.
This spatial perspective may be particularly useful with young people who lack the
temporal distance necessary to identify turning points in their life experiences or in
mapping what resources, capacities and strengths are available or demonstrable in
different life domains (Futch & Fine, 2013; Powell, 2010). With “turning point” itself a
spatial metaphor, an exercise supporting young people to map the turning points of their
life, embedded within a realm of interconnected relationship, might be an interesting
research or therapeutic tool.

The understanding of adolescent resilience in the face of face of socioeconomic
vulnerability presented here demonstrates the compelling importance of the intersection
of the adolescent self, close friendships and the lived geography over time. Spaces are not
only backgrounds or control variables, implying a singular way of interaction between the
individual and their environment. Although socioeconomic vulnerability is a useful marker
of the propensity for exposure towards a variety of processes such as anti-social behaviour,
substance use, violence, school dropout and poorer educational outcomes (Canvin,
Martilla, Burstrom & Whitehead, 2009; Serbin & Karp, 2004; Zimmerman & Brenner, 2010)
it is nonetheless important that researchers undertake a subjective view of what
socioeconomic vulnerability feels like to the person at risk. This is true of any risk factor,
even ones less obviously spatialised than socioeconomic vulnerability. For example, during
acute family health crises, hospitals become places of suspended time, trauma and
guardedness amidst adolescents’ overwhelming desire to remain close to loved ones
(Eggenberger & Nelms, 2007).
This thesis radically positions peer relationships as a potentially salutogenic sub-context within the larger adolescent social context, demanding attention be paid to how this particular sub-context mediates between distal neighbourhood risks, more proximal risks (Zimmerman & Brenner, 2010) and the self. The lived geography is comprised of affective spaces through which social practices – including friendship – are held and enacted, constituting an integral and dynamic component of social experience (Reckwitz, 2012). It is surprising that despite the significance of friendships to adolescents’ social experiences (Hartup & Stevens, 1999; Way, 2013), the fine detail of salutogenic qualities of peer relationships have thus far been largely overlooked. This is perhaps understandable given the methodological challenges of assessing friendships and adolescent resilience, as well as the historic context of the development of resilience research (see Chapter 1). Yet – as demonstrated by both the qualitative and quantitative research presented in this thesis – a psychological view of resilience which does not take into account the potential protective effects of peer relationships is one which is inevitably incomplete. The present thesis offers a compelling portrait of how the enacted practices and subjective experiences of adolescents’ close supportive friendships form a physical and experiential space mediating between an adolescent and his or her sociocultural context.

A number of researchers see resilience in terms of how young people can, themselves, negotiate or be supported towards domain-specific capacities grounded in the reality of their daily lives (e.g. Everall, Altrows & Paulson, 2006; Hart, Blincow & Thomas, 2007; Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006), drawing strong links between adolescent resilience and the ecological context situating adolescents’ lives (Ungar, 2010a) or seeking cultural expressions and mechanisms of resilience (Clauss-Ehlers, 2008; Ungar, 2010b). This thesis links theories of general adolescent resilience with more domain-specific conceptualisations investigating resilience processes in particular contexts such as healthcare (e.g., Rew & Horner, 2003) and education (Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006). This thesis suggests that a supportive close friendship is one way in which this can be accomplished; indeed, that this is something which adolescents are already doing, themselves. It does this by showing, firstly, how and when close friendships might support resilience in areas of life meaningful to the adolescent including school; secondly, by revealing the meaning of challenge, risk and resilience processes to subjective experience in these contexts; and thirdly, by how adolescents may respond to challenges in one life domain by utilising resources, including friendship support, in another domain. This thesis further encourages theoretical expansion of such domain-specific views. Researchers
interested in domain-specific views of resilience situated in areas where adolescents engage heavily in social interaction, such as schools, might explicitly seek to know whether and how peer relationships can promote such resilience, beyond possible contributions of social competence (e.g. Morrison, Brown, D'Incau, O'Farrell, & Furlong, 2006). Researchers interested in culturally-specific mechanisms and expressions of resilience might consider how a peer relationship expresses or facilitates such resilience. A supportive peer friendship (or group thereof) might even be conceptualised as a peer-situated culture of resilience. These not only reflect a ground for wider cultures of, say, substance use and expected patterns of socialising (Roberts, Townshend, Pappalepore, & Eldridge, 2012) and practices of deviancy training into problem behaviour (Dishion, McCord & Poulin, 1999), but might also situate friendships and relationships which can promote resilience in the face of potentially risky cultural and social practices in specific domains (Graber, de Visser & Hart, in prep.).

A lifespan perspective on resilience

This thesis adopts a lifespan perspective on resilience development over time which extends the current literature in two key ways. Firstly, the thesis explores the operation of a key hypothesized protective mechanism – a single close friendship – at two distinct points: adolescence and midlife. Secondly, the research adds to understanding of the trajectories of resilience processes over time for both adolescents and mid-life adults (Vanderbilt-Adriance & Shaw, 2008). The conceptual comparison between two cohorts contextualises the role of adolescent friendships on resilience by showing how this may differ to friendships and resilience processes later in life. However, differences in sampling procedure, risk exposure and other considerations position this comparison as tentative, albeit promising, in its exploration of friendships and other protective processes.

An important finding in this thesis was that adults’ close supportive friendships significantly promoted psychological resilience over time. This adds to understanding of adult resilience by showing the protective role of a single close friendship at a developmental stage where emphasis is usually on the maintenance of fewer but high-quality close friendships compared to the wider peer networks of earlier stages (Hartup & Stevens, 1997; 1999). The findings are also relevant in light of controversial cultural discourses surrounding the creation of friendship-based “families of choice” (pp. 434), which in Britain may be more significant for younger people or people with salient minority identities than for middle-aged adults, although research has found it difficult to disentangle aging effects from
cultural cohort effects (Pahl & Pevalin, 2005). Present findings suggest that even if friendships are more developmentally significant at other life stages, they are nonetheless adaptively significant at mid-life. The protective effect of a single close friendship in this age group further suggests that the cultivation and maintenance of a single friendship may have promising implications for socially isolated adults, whose isolation is often associated with mental health difficulties (Almedom, 2005). During recruitment, a number of socially isolated adults remarked that their closest friend was their carer – a commissioned relationship, perhaps, but one which was nonetheless subjectively considered a meaningful friendship.

Limited pathways were identified to explain the positive association between friendship quality and subsequent resilience, although cross-sectional findings intriguingly suggest a potentially wider range of processes including self-esteem, general self-efficacy, emotional intelligence, and reduction in perceived stress and disengaged and externalising coping. Although friendships remain important to sociality in middle age, they may be most significant during times of normative transitions and life disruption (Hartup & Stevens, 1997; Wrzus, Hänel, Wagner& Neyer, 2013). Although middle age is characterised by a number of normative challenges (Bonanno & Mancini, 2008; Masten & Wright, 2010), it could be that, particularly without a shared and pervasive risk factor such as socioeconomic vulnerability, there was less potential for turning points or novel occurrences and therefore less space for developing branching routes facilitating resilience to challenge (Rutter, 1990). The presence of pathways at a single time point suggests a potential distinction between short- and long-term resilience processes (Shepherd, Reynolds & Moran, 2010). Friends might facilitate pre-extant habitual patterns of coping responses through present companionship or through having promoted these earlier in the friendship. The mechanisms through which friendship promotes resilience in middle age might differ to those proposed by the framework of the adolescent study. The adult self-concept is relatively stable and adults’ sense of authenticity within significant relationship roles is associated self-esteem and positive emotions (Diehl, Jacobs & Hastings, 2006), important components of adult resilience. This suggests that a mid-life adult’s close friend’s impact upon change in the self-concept might be quite subtle or operate on an elusive timescale. One way of addressing these complex findings might be to further explore adults’ close friendships qualitatively, applying spatial framework of close friendships as “being-there” to qualities of adults’ friendships. In this way, the subjective experience of support within
adults’ close friendships might orientate research towards the qualitative, temporal and
domain-specific dimensions of friendship-based resilience processes.

Examining the role of supportive close friendships at different times of life also helps to
address the interrelationship between friendships and other significant relationships in
challenging intergenerational or cross-domain processes of vulnerability and resilience
(Dishion, 2000; Serbin & Karp, 2004). This thesis shows that adolescents from even non-
supportive family backgrounds are able to develop caring, supportive peer relationship,
showing that close friendships can be an important social resource supporting resilience in
the absence of consistent family support. The Adolescent Friendship and Resilience Model
illuminates how, with a friend’s support, adolescents might develop resilience in the face of
this challenge through learning how to cope more effectively, develop a supportive
extended friendship network, and maintain effort in the face of challenging circumstances.
Phenomenological findings reveal how it feels to adolescents to encounter problematic
home environments. They powerfully convey adolescents’ experienced motivations,
feelings and enacted practices of seeking support elsewhere when faced with an
uninhabitable or hostile home. Together, these two strands of research help contextualise
previous findings that positive peer relationships can buffer the effects of family adversity
upon externalising behaviour and poor adjustment (Criss, et al., 2002; Gauze, Bukowski,
AquanAssee & Sippola, 1996) by showing when and how these processes of neutralising
negative home experiences and building new positive capacities may occur.

This thesis strongly suggests that resilience theories should systematically include peer
friendships as protective resources. Although the persistence and pervasiveness of the
effects of close friendship support is inconsistent, as in previous research (Helgeson &
Lopez, 2010) the pattern of differential resilience trajectories and the robustness of direct
and explanatory pathways between a single close friendship and resilience at a single time
point nonetheless point to significant roles. The salience of peer friendships to adolescence
(Frydenberg, 1997; Hartup & Stevens, 1999) may mean that a protective influence of
supportive close friendships might exert influence over wider aspects of functioning at this
time (Rutter, 1990). Given the potential for adolescence to initiate cascades of
developmental functioning impacting later psychological processes (Masten & Cicchetti,
2010), the demonstrated importance of a supportive close friendship to resilience
processes should encourage resilience researchers to trace the potential enduring
significance of supportive adolescent friendships through later life. Although studies have
examined, for example, the effects of adolescent peer intimacy or friendship networks on subsequent functioning, outcomes are still all-too-often operationalized in terms of negative outcomes such as relationship violence (Giordano, Cernkovich, Groat, Pugh & Swinford, 1998) or gang involvement (Tiet, Huizinga & Byrnes, 2010), instead of exploring adaptive outcomes and processes. Similarly, the present study with middle-aged adults represents an important indication of the role of relational resources in on-going processes of subjective resilience promotion moving beyond the adult resilience literature’s preoccupation with symptomology outcomes (Bonanno, 2005).

Importantly, analysis of resilience trajectories (Fig. 7.1) demonstrated that patterns of adolescent resilience promotion distinctly differ to those of resilience reduction amongst both adolescents and middle aged adults. This is an important finding which empirically supports Rutter’s (1999) assertion that reducing risk through neutralising negative outcomes and reducing negative chain reactions are processes distinct from the development of strengths and capacities through providing new opportunities and fostering positive chain reactions, and relating this to social and relational resilience processes. Adolescent trajectories of increasing resilience appear to involve constructive coping, better quality peer relationships and incorporation of those relationships into the self, whilst resilience reduction relates more to an inability to utilise effective coping mechanisms, poorer self-esteem, and worsening close friendship quality. Whilst less constructive coping was associated with decreased resilience in the adolescents, this was not the case with the adults, whose decreased resilience precipitated poorer self-esteem but not poorer coping. A pivotal role for increasing constructive coping to upwards resilience trajectories across age groups was visible, but decreased resilience was only associated with less constructive coping for young people, perhaps as young people are still discovering different types of coping responses (Frydenberg, 1997). The importance of social and relational mechanisms, including a supportive close friendship, to socioeconomically vulnerable adolescents’ resilience promotion was underscored in findings that increasing resilience was associated with greater social support and perceived close friendship quality. However, there were no social implications of decreased resilience with the adults, including on the quality of one’s closest friendship, perhaps because of the generally greater stability of the relationship qualities and size of adults’ social networks (Hartup & Stevens, 1997; 1999).
Resilience as a process may be much more integral to the adolescent experience than to adults’, and much more bound up with their social relationships. Adult resilience following trauma exposure has been conceptualised as the ability to quickly bounce back to stable, healthy psychological functioning (Bonanno, 2004; Bonanno & Mancini, 2008). Adult resilience might involve a fairly habitual portfolio of coping responses (Bonnano, 2005) positive emotions (Ong, Bergeman, Bisconti & Wallace, 2006) and recruitment of smaller but established and supportive social networks (Hartup & Stevens, 1997), being employed with relative consistency across relationships and domains, with these adaptive capacities having been learned and earned through prior experience with adversity (Seery, 2011), experienced within a context of a life narrative unfolding (Shmotkin & Eyal, 2003). By contrast, it has been shown that both low- and moderately-resilient young people can
either decline or improve in competence (Obradović, Van Dulmen, Yates, Carlson & Egeland, 2006). Adolescence is a key time for development tasks to be integrated, and engagement with these tasks can prefigure later competencies, highlighting the importance of supporting resilience at this stage (Roisman, Masten, Coatsworth & Tellegen, 2004) in preparation for early adulthood (Luecken & Gress, 2010). This speaks to a turbulence characteristic of this age as competencies and resilience processes shift and interconnect. Perhaps widespread changes are needed to substantially alter adults’ learned, relatively consistent (mal-)adaptive functioning over the long term. Adolescents may be more sensitive to diverse, volatile changes in resilience processes as they undergo frequent encounters with risk through developmental tasks, transitions, day to day instability, amidst relational and physical geographies craft specific domains through which resilience and protective processes might be facilitated, inhibited or expressed. The challenges encountered by the adolescent participants relate somewhat to salient developmental tasks, such as developing social competence, which define much of adolescent adaptation (Roisman, Masten, Coatsworth & Tellegen, 2004). A subjective perspective on risk and resilience suggests that the distress experienced by the individual, and the interrelationship between a given developmental task and other life experiences, may lift such challenges beyond the realm of normative developmental tasks. If a substantial existential challenge of adolescent resilience is, as argued in Chapter 6, learning to cope with the unrelenting constancy of change, it may be that adults might be more concerned with coping with less-frequent but protracted and pervasive challenges such as caring for an ill parent. Likewise, although such challenges are normative for mid-life, adolescents are very visibly undergoing many of the same challenges as their friendships at similar times, especially with the shared risk factor of socioeconomic resilience. This suggests greater room for close friends to intersect in coping with challenges and events shared by their cohort or peer group through shared affective spaces (Reckwitz, 2012). As argued in Chapter 6, adolescents’ friendships are valuable not only through proximity but also to developing a sense of self which responds to challenges, sees the world, and skilfully and efficaciously navigates physical and experiential challenges.

Resilient adults were observed to show consistently greater subsequent resources and support at follow-up than their less-resilient peers, whereas resilient adolescents showed a more restricted pattern of resources, with greater self-esteem, emotional intelligence, self-efficacy and constructive coping at follow-up than their less-resilient peers. It might be that as resilient adults with a range of psychological and support resources to support positive
adaptation, there was little room for a friend to detectably alter these pathways, whilst the adolescents had more space to develop adaptive capacities through their friendships. Maladaptive or adaptive processes might also become more entrenched over time so that, again, there is less room to grow (Bonanno, 2004), or are more influenced by middle-aged adults’ prior exposure to risk and challenge earlier in life (Bonanno & Mancini, 2008; Masten & Wright, 2010). As on-going resilience processes are unstable, non-linear and rare (Vanderbilt-Adriance & Shaw, 2008), additional time points using more participants might enable identification of consistent meditational effects. The differential focus between responses to trauma in the adult literature and adversity in the adolescent literature, the inconsistency of risk factors and selective adult attrition in the present studies, and the general paucity of trajectory studies of resilience (Vanderbilt-Adriance & Shaw, 2008) suggests caution in interpreting the implications of observed differences in resilience trajectories between the adolescents and middle-aged adults.

The trajectory analysis also attunes to likely feedback loops between psychological processes including interpersonal relationships and resilience, made more complicated by the non-linear nature of resilience and protective processes (Vanderbilt-Adriance & Shaw, 2008). It is unlikely that resilient adolescents simply demonstrate superior social competence, although proficiency in social relationships is important to recruiting effective support and may be an expression of resilience (e.g., Morrison, Brown, D’Incau, O’Farrell, & Furlong, 2006). As explored in Chapter 3, the relationship and explanatory pathways between perceived close friendship support and resilience were unaffected by perceived family support, suggesting that adolescents with better family relationships do not simply transfer social skills learned at home to their friendships, nor are they categorically better at recruiting supportive friendships (Masten, 2001). Similarly, as discussed in Chapter 5, although a predictive effect of prior resilience was found on subsequent friendship quality in middle-aged adults, there was still a protective longitudinal effect of friendship quality, reiterating that close friendships can indeed facilitate the development of psychological resilience.

This thesis presents a multifaceted view of adult resilience and protective processes which speaks to the importance of close friendship and other social mechanisms supporting positive adaptation. As with the adolescents, resilience appears to be unstable, reflecting an intricate series of on-going, interconnected processes. Considering the complex temporal dimensions of adult resilience, an interesting extension to the present research
would be to qualitatively explore adults’ experiences of positive psychological adaptation using the phenomenological framework of spatial resilience explicated in Chapter 6. The subjective retrospective experience of adult resilience may indeed be tied to a sense of moving beyond hopelessness towards wellbeing over time to create a future for oneself (Everall, Altrows & Paulson, 2006), suggesting a greater role for temporality than is present in adolescents’ accounts. Yet the present findings strongly suggest that as a metaphor for movement, resilience is necessarily spatial as well as temporal. According to young women’s retrospective accounts, long-term resilience processes involve rebuilding and maintaining positive relationships, participating in the usual activities of adolescence, and achieving valued educational goals (Shepherd, Reynolds & Moran, 2010). Greater neighbourhood social cohesion has been found to buffer against depressive symptoms through the development of friendships and a sense of control (Stafford, McMunn & de Vogli, 2011). Such findings link with a view of resilience processes as, for example, feeling like a sense of developing mastery over the lived geography through key friendships which themselves help one to discover and explore the self. Adult well-being has been conceptualised as a balance between existential experiences of feeling rooted-at-home and, simultaneously, expansive, adventure-granting possibility (Todres & Galvin, 2010). A perspective of risk and resilience as on-going, continual geographically situated processes may well hold for adults, even as the phenomenological essences of such processes might be expected to appear manifestly different, or might alter as a result of the different challenges typically facing adults (Masten & Wright, 2010).

Methodological implications: Researching resilience

The innovative mixed-methods programme of research employed in this thesis on friendships and psychological resilience demonstrates the benefits of a pragmatic, dialectical approach. The methodology of this thesis was pragmatically driven by a view of resilience as a subjective, multidimensional and continual process situated within a social and relational context. A pragmatic paradigm prioritizes the specific needs of the research question, the knowledge and experience available to the researcher, and the desired applied outcomes of the research (Greene & Caracelli, 1997). This allows multiple methods to be used to achieve different empirical and theoretical aims, when these are housed within a cohesive overarching paradigm (Cresswell, 2011). The aim of identifying and exploring a hypothesized protective mechanism – a single supportive close friendship – prompted engagement with statistical research practices, whilst the desire to illuminate
young people’s subjective experiences of their close friendships and movement towards resilience prompted engagement with qualitative approaches. This has helped to approach a comprehensive understanding of the role of socioeconomically vulnerable adolescents’ supportive close friendships in facilitating resilience. The use of two cohorts helped address the potentially different operation of protective processes in adolescence and adulthood (Rutter, 1990). This is particularly useful with respect to supportive close friendships, which appear, from the present research, to operate differently in facilitating resilience, and whose qualities and experiential significance change with developmental stage (Hartup & Stevens, 1997, 1999; Pahl & Pevalin, 2005; Wrzus, Hänel, Wagner & Neyer, 2013).

As explained in Chapter 2, this thesis adopted an epistemological approach aligned with subtle, analytic and critical realists who argue that whilst a reality independent of human subjectivity may exist, and therefore is knowable, humans’ knowledge of the world is partial, incomplete, and mediated through subjective experiences which are themselves embedded within the socio-cultural context. The priority in such approaches is on the meaning made within the human experience (Madill, 2010). Consequently, using both subjective self-report measures and questionnaire data, this thesis consistently emphasized participants’ subjective experiences of resilience, friendship and protective processes. The quantitative studies employed the same measures for each cohort, unlike most resilience research which prioritizes self-report with adults, but achievement indicators and informant reports with young people (Luthar, Sawyer & Brown, 2006). This enabled a conceptual comparison between groups to benefit understanding of resilience processes through the life course. Importantly, it also prioritized adolescents’ subjective experiences of their resilience and relationship processes. A thematic phenomenological approach to resilience was particularly valuable in this regard by challenging the disengagement of vulnerable young people from the very literature which purports to empower them by joining the voice of their experience to the existing conversation.

A pragmatic paradigm also acknowledges the researchers’ subjective perspective gained through their skills, experience and academic preoccupations (Cresswell, 2011). By showing how close friendships facilitate adaptive processes, the research explicitly adopted a strengths-based view of human relationships and engagement with challenge. The findings underscore the importance of utilising a methodological framework which assesses strengths, support and adaptive processes, instead of adopting a pre-determined view of either adolescent or adult resilience as remarkable absence or attenuation of negative
outcomes (Almedon & Glandon, 2007). A strengths-based view of friendships was argued to be a logical extension of a strengths-based view on adaptation (see Chapter 1). However, reflective practice allows the admission that this research interest was partially driven by intuitive experiences of friendship as mechanisms of positive transformation, alongside beliefs that understanding young people’s experiences is integral to any research programme desiring to engage with them.

A researcher’s subjectivity can enrich a research endeavour when explicitly acknowledged and integrated into the research process (Gough & Madill, 2012). Researchers can productively engage in processes of “setting-aside” and “engaging-with” by reflecting on their own experiences and exploring the influence of their subjectivities on the research process (Shaw, 2010). Empathic intersubjectivity and continual reflection is integral to the creativity of the phenomenological method. Far from being constraining or delimiting, effective use crafts a genuine openness which challenges the researcher and generates radically new knowledge accounts (Finlay, 2008). Although spatiality is a key dimension to the phenomenological lifeworld (Ashworth, 2003), this analysis was not initially undertaken with an indication that spatiality would be a compelling aspect of adolescents’ experiences. The empirical phenomenological cast on thematic analysis explicated in Chapter 2 sensitized towards particular dimensions of resilience and friendship experiences – in this case, space. It is, however, important to acknowledge that another fragment of the lifeworld might be more resonant within other accounts, further interrogation of other themes within these accounts, engaging a different researcher in a similar analytical task, or employing a different qualitative method (e.g. Frost et al., 2011; Wertz et al., 2011).

The two methodological strands employed in this thesis speak quite different languages at times, and it is not an aim to force the theoretical conclusions of one research strand to fit another or to leave them in dual monologue. A dialectical approach pushes beyond pragmatism to conceptually and theoretically unite diverse streams of knowledge which themselves may operate in slight tension with each other. Contradictory findings are interrogated for insight, with each method speaking to each other using its own strengths and limitations (Greene & Caracelli, 1997). Contextualised within a view of resilience as non-linear, a dialectical perspective has been useful for considering the sometimes complex relationship between cross-sectional and longitudinal findings both within and across cohorts, which has been observed in other studies (Helgeson & Lopez, 2010). However, the most valuable and unexpected contribution of the thesis has been the critical
conceptualisation of both resilience and friendships in terms of spatial experience. This conceptualisation challenges, but also provides potential answers to, the insufficiencies of the temporal framework in which resilience is implicitly cast. The nature of statistical methods they will struggle to capture the on-going, non-linear and possibly domain-specific processes of positive psychological adaptation. Temporality and spatiality cannot here explain each other, but are interlinked methodologically and theoretically within the chronotope (Bakhtin, 1981).

**Impact on developing effective interventions**

The knowledge about resilience and relational protective processes gained through the present research may have wide-ranging applications to resilience practice. A greater understanding of resilience-building processes is essential to designing effective interventions to promote the resilience of individuals in at-risk groups (Bonanno, 2004). The existing literature demonstrates a complex interplay of factors which may promote resilience, with little definitive discourse about how to confidently promote it. Interventions may work to attenuate risk, but it is a separate task to promote resilience and strengths. Most interventions with young people take a deficits-based approach (Cheon, 2008; Zimmerman & Brenner, 2010), with a comparative lack of evidence supporting resilience practices grounded in a strengths-based approach (Morrison, Brown, D'Incau, O'Farrell, & Furlong, 2006). Relatively few resilience interventions formally evaluate their work or, at least, disseminate this evaluation through peer-reviewed publications (Hart & Heaver, in press). There is, then, a practical distinction between the qualities of research evidence underpinning resilience theories on the one hand and resilience-building programmes on the other.

Although the UK has seen a number of initiatives designed to promote resilience and well-being trajectories in youth, these have met with mixed success. For example, the schools-based cognitive-therapy and social problem-solving skill-based UK Resilience Programme failed to show persistent effects upon psychological or performance-based indicators of resilience. On the other hand, the Programme effectively delivered an intervention which pupils enjoyed and employed in their daily lives, and which provided greater benefits for those in higher need (Challen, Noden, West, & Machin, 2011). Resilience interventions are incredibly wide-ranging across a variety of dimensions, such as duration, delivery method, participant group, format, risk factor, and the protective mechanism targeted (Hart & Heaver, in press). It is unclear whether there are crucial, invariant aspects to a successful
resilience intervention, or whether interventions should be flexibly designed to meet specific community or individual needs. A view of resilience as a continual processes situated in sociocultural context would, however, argue for the latter. The complexity of resilience itself may help explain why interventions do not always show sustained protective effects over time. Alongside previous research (e.g. Obradović, Van Dulmen, Yates, Carlson & Egeland, 2006), the findings presented here show that resilience is unlikely to be a linear or strictly cumulative process; resilience trajectories may be variable, inconsistent or domain-specific. Funding bodies and other organisations concerned with outcomes may need to be sensitive to the complex multi-dimensionality of resilience in considering the appropriateness of a given intervention to a particular person or community, evaluation study design, specificity of outcomes and persistence of effects.

Similarly, researchers must demonstrate the value of their work, not least in a climate of growing concern with demonstrating applied research impact. Future work should build upon the number of theoretical models of resilience processes in youth, but should aim to strengthen the relationship between theory and practice. An example of such applied theory is the Youth Resilience Framework, which looks at how protective resources and individual and socio-cultural risk factors might together promote efficacy of health interventions (Rew & Horner, 2003). The interdisciplinary, international Resilience Project is an example of a research programme which explores the social ecology of resilience and relates this back to innovative practice (Ungar & Leibenberg, 2005). The research presented here might, for example, inform development of a peer support programme for socioeconomically vulnerable youth, or support the design of an intervention promoting peer-based coping skills and self-efficacy to refuse excessive alcohol in social situations (Graber, de Visser & Hart, in prep.).

Adolescents’ experiences appear to be dually excluded from most resilience interventions as firstly, few interventions have used participatory research approaches and, secondly, peer relationships are rarely targeted as a mechanism to promote positive change (Hart & Heaver, in press). Integration of young people’s perspectives on what it means to be resilient can inspire a holistic, person-centred perspective on resilience which may translate to more effective interventions. Current findings suggest focus upon peer friendships may be particularly valuable in connecting theory to potential practice, as close friendships are a resource accessible to most young people. The findings presented in this thesis support investment into peer support schemes, mentoring programmes, and informal opportunities.
for young people to engage in friendships in which they can support each other to develop skills, strengths and intimacy. Particularly promising approaches may explicitly or subtly incorporate the facilitation of self-efficacy and constructive coping skills, building upon the protective processes observed in young people’s close friendships according to the present research. They also give psychological credence to the intuitive value of informal or semi-formal spaces for adolescents, such as theatre groups, community centres and sports clubs.

The research presented in this thesis furthermore aims to incorporate young people’s subjective perspectives on their resilience and available protective resources. Qualitative findings suggest that it is important for young people to feel as if they are taking responsibility for their own resilience, and that of their friends, even when the guidance of supportive adults is available. The research also highlights how most young people see their friends as their supporters, even if this may jar with adults’ viewpoints. Feelings of defensiveness generally lower engagement with messages of health promotion and behaviour change, but this effect can be reduced through a focus on love and connection (Crocker, Niiya & Mischkowski, 2008). Effective interventions might support young people to feel as though they are developing their resilience mostly through the efforts of themselves and their friends, and focus on facilitating those critical thinking and coping skills through which a young person might herself come to negotiate the quality of a given friendship, of his or her own accord. Much as the proverbial hungry person benefits more from being taught to learn to fish, young people may learn the interpersonal aspects of managing life’s challenges through teaching and supporting “good” friendships.

Finally, although focus is primarily upon adolescent resilience, a novel focus on resilience in middle-aged adults may similarly generate theory which may be applied to adult peer support groups, mentorship programmes, and social inclusion schemes. These might target issues characteristic of adulthood such as employment, marital and romantic relationships, employment and career difficulties, physical decline and caregiving for children or aging parents (Bonanno & Mancini, 2008; Masten & Wright, 2010). They might also target sustained socioeconomic adversity, chronic illness or trauma. Interventions targeting adults may have knock-on effects on young people as parents’ functioning may be associated with the resilience and mental health of their children (Serbin & Karp, 2004). Whilst the current findings suggest that such programmes might benefit from facilitating constructive coping responses, more research will be needed to illuminate the other mechanisms through which a supportive close friendship promotes subsequent psychological resilience.
Limitations

A number of limitations to the research presented in this thesis must be acknowledged. Firstly, the Resilience Scale is a sophisticated, precise and rigorous measurement of subjective psychological resilience in both adolescents in young people (Wagnild, 2009) and, as such, may be confidently used with Western adult and adolescent cohorts particularly compared to other adolescent resilience measures (Ahern et al., 2006). Yet it is grounded in a specific view of what resilience is, and a study using a different measure could foreseeably derive a somewhat different pattern of findings. Almedom and Glandon (2007) suggest that the Resilience Scale (Wagnild, 2009) prioritizes personal competence over social context. Other authors have adapted this structure to include social competence and social support. However, limiting application to the present research, the resulting scale was designed for adult use (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003). Sociocultural factors to resilience may not be captured by traditional scales and may limit culturally sensitive applications of the concept of resilience by omitting important community-specific strengths such as cultural values of collective responsibility and spirituality (Clauss-Ehlers, 2008). Given the significance of socioeconomic context to the present research, the critical perspective on resilience cast by the qualitative study and the wider research debates around what resilience actually is, it is important to reflect that the resilience measure used will, to an extent, define what is available to be found.

While the research presented in this thesis robustly investigates associations between friendship, resilience and protective processes within and across time, claims of causality will always be limited within non-experimental designs (Masten & Cicchetti, 2010). This does not mitigate the value of the present findings, but puts them into a specific methodological context. Limiting the conceptual comparisons made between the two groups, the adult cohort was more resilient than the adolescents, who were generally of low resilience. Less-resilient people, particularly adolescents may respond to protective mechanisms less powerfully. However, it is important to include participants of varying resilience within the same study when conceptualising resilience as an on-going, multi-dimensional process instead of a discrete and extraordinary outcome available only to a select few (Vanderbilt-Adriance & Shaw, 2008). A related limitation of the statistical studies is that no measure of past subjective or objective risk was taken. Adults were not asked to report their past or present risk, although the adolescents were known to at least have encountered the risk of socioeconomic vulnerability. It is therefore unclear whether and
how past risk and resilience might have impacted present experience. Resilience is an on-going process and prior research suggests that earlier exposure to and responses towards adversity will influence subsequent adaptation (e.g. Seery, 2011). Whilst the results break new ground in investigating the protective capacities of adults’ friendships, findings should be considered exploratory, providing theoretical and empirical groundwork for future studies that more systematically incorporate significant components of adults’ life histories.

A future longitudinal design might use more time points particularly in an adult cohort, using latent growth curve modelling over at least three time points (Cheong, MacKinnon & Khoo, 2003) to achieve greater sensitivity towards to the probable non-linear nature of resilience and its relationship with close friendships and other potential protective mechanisms. However, this must be balanced with demands on participants’ and schools’ capacities to engage in such research. Greater sample size might allow prospective studies to control concurrently for both prior resilience and resilience trajectory. Whilst the variables assessed in the Friendship and Resilience Questionnaire encompassed a number of potential mediating pathways, it might be that variables that were not assessed such as attachment style (Furman, Simon, Shaffer, & Bouchey, 2002; Luke, Maio & Carnelley, 2004) may have affected the quality of participants’ close friendships and their impact on resilience processes as either mediators or contextual moderators. Given the aim of the present research in determining whether and how a supportive close friendship may be a protective mechanism promoting resilience, a questionnaire comprehensively incorporating all such variables would have been unwieldy and therefore impractical. However, future research might include other such variables alongside those, such as constructive coping, which have been found in this thesis to be robust pathways through which friendships facilitate resilience.

Not unexpectedly for longitudinal studies, attrition occurred in both cohorts. Attrition in the adolescent sample was overwhelmingly due to the inability of one school and one college to participate at follow-up. Educational institutions must continually balance curriculum delivery, capacities of staff facilitators, other research commitments and students’ well-being. Some institutional drop-out was planned for during initial study design, but the longitudinal analysis would have benefited from a greater sample size. Follow-up timing had to become flexible in light of an unexpectedly shortened term. Although follow-up with students at participating schools was generally good and the participant password system was sufficient to match participant records over the two time
points, the normal restructuring of class groups meant that without access to the entirety of a year group, some participants were lost. Future research might explore other ways of maintaining participant contact or matching longitudinal records. Prior experience conducting research with schools enabled many of these contingencies to be anticipated and accommodated, but field-based studies will always be susceptible to forces beyond the control of a researcher. Care was taken to maintain engagement with the adult sample, but attrition still occurred to a marginally significant level. Specifically, adults who were more resilient, engaged in more constructive coping, and reported more supportive social relationships were more likely to participate at follow-up. Although attrition was reasonable given that this was a community sample of adults who were unlikely to be financially compensated, it may be that some adults lost contact or did not wish to participate again, that questionnaire length discouraged repeat participation, or that financial incentives were not enticing, particularly as substantive feedback could not be given in the interim. Although no negative feedback was received from participants, adults who felt their friendships to be lacking or unsupportive may not have wished to re-examine those relationships. Future research might use other methods of participant engagement or recruit greater financial incentives to participation.

**Directions for future research**

This thesis opens up a new area of research at the intersection of peer relationships and resilience processes. Methodological advances in studying relationships might support this line of research in future. Future research might take a salutogenic approach to a single supportive close friendship but attempt to focus on the shared subjective experience of this friendship, rather than the subjective experience of one of its participants. A joint interview study or comparison of separate interviews with friends might reveal interesting qualitative insights about, for example, the mutual construction and experience of self. Dyadic statistical analyses or following pairs of friendships over time might enable observation of friendship processes over time (Gable & Reis, 1999).

This thesis argues that peer friendships are an important protective interface between adolescents, their environments and other social relationships. Although this thesis focused on the experience and impact of a single, supportive close friendship in a unique addition to the resilience literature, data was also collected on the supportiveness of a wider friendship network. A follow-on study might apply friendship network support as a predictor variable in cross-sectional and longitudinal modelling analyses. The beneficial
effects of close friendships observed throughout the thesis also lend credence to a general rationale of including positive or resilience-based outcome measures in studies examining the impact of peer relationships, including friendship groups, rather than framing outcomes in terms of the presence or absence of psychological, behavioural or social maladjustment. If researchers exclusively measure the pathologising qualities of social relationships, that is exactly what they will find.

While socioeconomically disadvantaged youth are at high risk for problematic outcomes, this need not imply that their middle-class or affluent peers experience less subjective challenge or lead a life insulated from hardship (Luthar, Sawyer & Brown, 2006). Many of the challenges experienced by participants (e.g. parental bereavement, bullying) are commonly faced by young people regardless of socioeconomic background (Vera et al., 2012). Further research might investigate how the processes explicated here manifest in young people from more advantaged backgrounds, although this was outside the scope and interest of the thesis. Experience from this project informally suggests that interest in this type of research may be strongest amongst under-resourced schools situated in areas of substantial socioeconomic disadvantage and, interestingly, amongst an upper echelon of fee-paying schools which are concerned with offering outstanding pastoral care. Some findings might be expected to generalise across socio-economic groups. For example, the phenomenological essences of friendship may transcend class and sociocultural context, or may be manifestly different even as their intrinsic meanings remain typical or essential. However, the constellations of coping behaviours offered by friends may differ geographically and culturally, for example as communities offer different opportunities for leisure activities, whether shopping, skateboarding or drinking alcohol (Roberts, Townshend, Pappalepore, & Eldridge, 2012). Young people whose communities appear to provide more opportunities for educational advancement and personal development may experience those spaces in different ways than the young people studied here. Yet, the focus throughout the thesis on adolescents’ subjective experiences suggests that even though the manifestations of support and resilience may differ across visible groups, there are likely to be common deep structures of the meanings and functions of friendships (Hartup & Stevens, 1997) and experiential characteristics of resilience and protective processes.

This thesis focused upon subjective self-report measures and interview accounts of psychological resilience, close friendship and hypothesized mediating mechanisms. While a
subjective view of resilience, friendship and related constructs carries substantial psychological import (see Chapter 1), researchers and practitioners interested in the impact of peer support in a given domain may find it helpful to add objective measures to their designs. For example, researchers or practitioners, such as social workers or teachers, may be interested in seeing how subjective peer support promotes academic achievement outcomes, alcohol consumption and substance use alongside subjective general or domain-specific resilience.

The present approach of studying the relationship between a single close friendship and resilience might be applied to different age groups and to different risk factors. Developmental differences in friendship qualities and resilience (see Chapter 1) suggest that this relationship may evolve over time. Retrospective reports of, for example, older women point to the significance of supportive interpersonal relationships to developing resilience (Jordan, 2013) but additional prospective or dyadic studies would add to this burgeoning area of research. Similarly, although socioeconomic risk is pervasive and compelling, affecting even social relationships (Zimmerman & Brenner, 2010), other risk factors may offer less of an obvious role for friendship support in young people, suggesting that the relevance of the current findings may have limited generalizability for other kinds of risk. This thesis presents a foundation for a promising approach towards understanding the resilience-promoting capacities of peer relationships across a number of different life domains and risk encounters. For example, the finding that adolescent friendships are associated with resilience partly through effective coping and self-efficacy can inform development of a resilience-based approach to encouraging responsible alcohol consumption by young people in their peer groups (Graber, de Visser & Hart, in prep.).

Finally, this study is definitively situated within a British context. Adult resilience, like youth resilience, is subject to cultural expression, although patterns of cross-cultural consistency in some aspects of resilience (Ungar, 2010b) lend hope that close supportive friendships might be found to be similarly protective in other countries. A spatial view can attune researchers to sociocultural or relational protective mechanisms, community-based strengths and expressions of resilience which might be otherwise overlooked by dominant research paradigms and instruments (Clauss-Ehlers, 2008). Future research might apply the principles behind a spatial view of resilience to adults’ experiences and to other cultures, illuminating how this theory might apply to different developmental and social contexts.
Conclusions

This thesis has shown the integrity of close friendship for sculpting the experience of resilience – itself a metaphor for movement, wherein the destination is sublimated to the journey itself. Canvin and colleagues (2009; pp. 240) advise that “if extraordinary achievements are required, over and above the norm,” then resilience is necessarily constructed as rare and extraordinary, the unchanging possession of remarkable people possessing incomparable individual strength and an individualised quality of resiliency. In contrast, Richardson (2002; pp. 315) suggests that resilience is “a capacity in every soul”. An empathetic, salutogenic perspective on human psychological adaptation suggests that, with support, resources and understanding, developing resilience in the face of adversity is entirely possible, if not always easy, comprehensible or recognisable, particularly to adults looking in on a young person’s experience. This is not to say there is one way of being or one ideal adaptive outcome. In the intrinsically human experience of making meaning of our encounters with challenge (Richardson, 2002), there must be room for idiosyncrasy and for the primacy of a person’s own perspective on their lives. Tolstoy (1873; 1995, pp. 1) wrote that “happy families are all alike; every unhappy family is unhappy in its own way.” Whether he thought the same of friendship is left unsaid. But the research presented here suggests that the vibrant tapestry of human friendships is woven from many uniquely coloured strands, to shape a human experience composed of as many shapes and forms of positive psychological adaptation as there are types of pathological distress and negative outcomes. If the contours of the topography of the lifeworld have aesthetic value – which I humbly suggest they do – this reflects the texture and richness which can be brought to life through encounters with challenge, and through our shared journeys with friends along the way.
LIST OF REFERENCES


Koro-Ljungberg, M., Bussing, R., & Cornwell, L. (2010). Framework for the analysis of teenagers’ agency and self-disclosure and methodological reflections on knowledge
production during qualitative research. *Qualitative Research in Psychology, 7*(3), 193–213. doi:10.1080/14780880802641516


LIST OF ABBREVIATIONS

AFR: Adolescent Friendship and Resilience
AGFI: Adjusted Goodness of Fit Index
AIC: Akaike Information Criterion
ANOVA: Analysis of Variance
CC: Constructive Coping
CFA: Confirmatory Factor Analysis
CFI: Comparative Fit Index
CMIN/DF: Chi-Square to Degrees Of Freedom Ratio
DEC: Disengaged and Externalising Coping
EFA: Exploratory Factor Analytic
EI: Emotional Intelligence
EPP: Empirical Phenomenological Psychology
FF: McGill Friendship Questionnaire – Friendship Function (also: McGill FF, perceived close friendship quality)
GFI: Goodness of Fit Index
GSES: General Self-Efficacy Scale
GSES-E: General Self-Efficacy Scale Effort Sub-Scale
GSES-I: General Self-Efficacy Scale Initiative Sub-Scale
GSES-P: General Self-Efficacy Scale Persistence Sub-Scale
IOS: Inclusion-of-the-Other-in-the-Self
IPA: Interpretative Phenomenological Analysis
MANOVA: Multivariate Analysis Of Variance
MPSSS: Multi-dimensional Perceived Social Support Scale
PSS: Perceived Stress Scale
RISC: Relational Interdependent Self-Construal

RMSEA: Root Mean Square Error of Approximation

RS: Resilience Scale

SEM: Structural Equation Modeling

SES: Rosenberg Self-Esteem Scale

SOC-3-mod: Modified Sense of Coherence 3-item Scale

SS: Social Support Scale

T1: Time 1

T2: Time 2

TA: Thematic Analysis
APPENDIX 1

ETHICAL APPROVAL

Certificate of ethical approval
#09285-18

Title: Close Friendships and the Development of Psychological Resilience across the Lifespan: A

Researcher(s): Rebecca Graber (PhD student), Rhiannon Turner (co-supervisor)

Supervisor: Anna Madill

Date of approval: 7 January 2010

From: Ethics.Committee@webhost02h.leeds.ac.uk
Sent: 05 November 2010 11:55
To: pscalm@leeds.ac.uk
Subject: Ethics form decision

Anna Madill,

Your ethics application, reference 10-0035, has been passed by the Ethics Committee.

From: Ethics.Committee@webhost02h.leeds.ac.uk
Sent: 21 June 2011 12:47
To: pscrnt@leeds.ac.uk
Subject: Ethics form decision

Rhiannon Turner,

Your ethics application, reference 11-0089, has been passed by the Ethics Committee.

Respective ethical approval certifications for longitudinal adolescent and adult study, adolescent interview study, and amended longitudinal adolescent and adult study at T2
APPENDIX 2

ADOLESCENT QUESTIONNAIRE AT TIME 1

1. This study looks at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives.

This study is being carried out by Rebecca Graber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Hadl and Dr Rhianne Turner.

This study contains a series of questions about friendship, coping, and related topics. The information learned from this study will be used to see in what ways close friendships may help us cope with difficult events. Some ways this may be useful are by developing strategies for anti-bullying or peer support programmes.

By filling in the questionnaire, you give permission for us to use your answers in our research. Your teachers, parents or school will never see your responses. Your responses are confidential, meaning that only the researchers may view them. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you remain anonymous, meaning that no one can tell who you are. This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

You will be required to create a project password, which will only be seen by the researchers. It will allow us to match up your answers today with your answers to any future studies. It will also allow us to remove your answers if you change your mind about participating.

You are allowed to change your mind about participating at any time until a week from today, without giving a reason. If you do not wish to participate today, please tell the researcher that you wish to withdraw; you do not have to give a reason. If you do not want to answer a particular question, you do not have to, without giving a reason.

The survey should take about 30 minutes to complete. There are no right or wrong answers, we just want to know what your life is like for you.

* 1. Click here to begin the survey:

☐ - Yes I give my permission for my responses to be used for research.
2. Before you begin, please check that you fit the criteria for the study:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am between the ages of 12 and 18.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I speak English fluently.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I live in the UK.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you answered "No" to any of these items, you are not eligible for the study.

We now need you to create a project password.

This takes the format of the first 3 letters of your last name, followed by your day and month of birth.

For example, if your name is Jane Tweed and you were born on the 5th of October 1990, your project password is TWE0510.

3. Write in your project password here:
3.

First we would like to know some basic information about you.

4. What is your gender?
   - Male
   - Female
   - Prefer not to say

5. What is your date of birth?

   DD/MM/YYYY (for example, put 05/10/1985 if you were born on the 5th of October 1985):

6. Who do you live with? Tick as many as apply.

   If you split your time between 2 homes, please answer for both homes.
   - Mother
   - Father
   - Stepmother
   - Stepmother
   - Sister
   - Brother
   - Grandparent
   - Other

   If you answered “other”, please explain:
7. Here is a list of areas in which people may experience problems. For which of these kinds of problems would you approach a close friend?

Tick as many as apply.

☐ Friendships
☐ Identity
☐ Abuse
☐ Crime
☐ Dating/Relationships
☐ Health

☐ Sex
☐ Family
☐ Work/Education
☐ Money
☐ Other

If you answered "Other", please specify:

8. In which areas have you actually approached a close friend, within the last year? Tick as many as apply.

☐ Friendships
☐ Identity
☐ Abuse
☐ Crime
☐ Dating/Relationships
☐ Health

☐ Sex
☐ Family
☐ Work/Education
☐ Money
☐ Other

If you answered "Other", please specify:
5.

Now we are going to ask you some questions about your relationship with your closest friend.

This person should be someone whom you knew well, and should not be a sibling or romantic partner.
6.

First we would like you to tell us a bit about your friend.

9. Please write in the initials of your friend to help you think about them:

10. What gender is your friend?
   - Male
   - Female

11. How long have you been friends?
   - Years: [__]  
   - Months: [__]  

12. What is your main reason for spending time with your friend?
   - Work together
   - Education (e.g., shared classes)
   - Common activity
   - Common friendship group
   - You simply choose to spend time with them

13. How close are you with your friend?
   - Extremely close
   - Very close
   - Fairly close
   - Not very close

14. On average, how many hours do you spend with your friend each week?
    - Hours: [__]  

15. We asked you to choose a close friend to talk about who was not a sibling or romantic partner. But we would still like to know, was the first person you thought of as a close friend...

   - a sibling? [__] Yes [__] No
   - a romantic partner? [__] Yes [__] No
Think again about your close friend, whose initials you just gave us.

Each of the sets of circles below describes how a person might feel with their friend. Each of these circles is labeled with a number (from 1 to 7), with circle set number 1 in the upper left-hand corner and circle set number 7 in the lower right-hand corner.

16. Tick the number of circle set that best describes your relationship with your friend:

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] 7
17. The items here concern your feelings for your close friend, whose initials you just gave us. Imagine that the blank space in each item contains your friend’s name.

With your friend, __ in mind, decide how much you agree with the item. Click the number that describes how much the statement agrees with your feelings. There are no right or wrong answers – just honestly describe your feelings for your friend.

Very much disagree----- Somewhat disagree------ Somewhat agree------ Very much agree

<table>
<thead>
<tr>
<th>I am happy with my friendship with ___</th>
<th>-4</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I care about ___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like ___ a lot.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel my friendship with ___ is a great one.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to stay friends with ___ for a long time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer ___ over most people I know.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel close to ___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think my friendship with ___ is strong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
18. These items concern the kind of friend your friend is to you. Again, imagine that the blank space in each item contains your friend’s name.

With your friend in mind, decide how often the item applies. Tick the number that indicates how often your friend is or does what the item says. There are no right or wrong answers – just describe what your friend is to you.

Never---------Rarely----------Once in a while--------Fairly often--------

Always

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ helps me when I need it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ would make me feel comfortable in a new situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ has good ideas about entertaining things to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ would want to stay my friend if we didn’t see each other for a few months.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ makes me feel clever.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ makes me laugh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ knows when I’m upset.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ helps me do things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ points out things I am good at.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ would be good to have around if I were frightened.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ would make me feel better if I were worried.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ is someone I can tell secrets to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ would stay my friend even if other people criticized me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ compliments me when I do something well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>__ is exciting to talk to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
19. As before, these items concern the kind of friend your friend is to you. Again, imagine that the blank space in each item contains your friend's name.

With your friend in mind, decide how often the item applies. Tick the number that indicates how often your friend is or does what the item says. There are no right or wrong answers - just describe what your friend is to you.

Never---------Rarely----------Once in a while---------Fairly often----------Always

<table>
<thead>
<tr>
<th>Item</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>... makes me feel special.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... would stay my friend even if other people did not like me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... knows when something bothers me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... is exciting to be with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... would make me feel calmer if I were nervous.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... helps me when I'm trying hard to finish something.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... makes me feel that I can do things well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... would want to stay my friend even if we argued.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... shows me how to do things better.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... is fun to sit and talk with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... is easy to talk to about private things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... makes me feel better when I'm upset.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
20. Thinking again about your friend whose initials you just gave us, please say how your friend acts with you.

When talking to me, this friend would:

<table>
<thead>
<tr>
<th>Agree</th>
<th>----Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show me warmth</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Comfort me when I was upset</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Listen and talk to me when I was sad</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Teach me how to do something I didn't know how to do</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Give me good advice</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Analyse a situation and tell me about available options</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Is there anything else your friend would do that is not on this list? Please tell us.
21. Now, we would like you to think back to a difficult time you experienced in this past year. Please tell us about how your close friend whose initials you just gave us, may or may not have helped you with this problem.

You don't have to go into detail about the difficult time itself - we are more interested in how your close friend may have helped you deal with it. Write as much or as little as you need.

22. How long ago was this difficult time?

23. Think again about your close friend, who you told us about earlier in the survey. How do you feel about yourself when you are with your close friend?

Write as much or as little as you need to.

24. Think again about your relationship with your close friend whose initials you just gave us. Please tell us whether you think your close friend has shaped who you are, and in what ways?

Write as much or as little as you need to.
For these questions, we again want you to think of your close friend whose initials you just gave us. Imagine your close friend's name in the blank space of each item, and choose the answer that best describes how you communicate within your friendship.

A **social networking site** is a website such as Facebook, MySpace, Twitter or Bebo where you can communicate online, play games, and share content such as photos and links.

An **instant messaging program** is a service such as Google chat, Facebook chat, MSN or Skype chat where you can talk or type to someone online and they can respond immediately (unlike email where people usually read your message later).

**Photo-sharing websites** are sites such as Flickr where the main point is to share photographs. They are different from social networking sites because there is more you can do on social networking sites.

### 25. How often do you use the following ways to communicate with ___?

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>A few times a week</th>
<th>A few times a month</th>
<th>A few times a year</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Instant messaging programs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Photo-sharing websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Online games</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Emails</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Telephone</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Letter</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Face-to-face</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

If you said "other", please explain:

### 26. How important are the following ways of communicating in your friendship with ___?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Important</th>
<th>Neutral</th>
<th>Unimportant</th>
<th>Very unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networking sites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Instant messaging programs</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Photo-sharing websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Online games</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Emails</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Telephone</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Letter</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Face-to-face</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

If you said "other", please explain:
Now we are going to ask you some questions about your life more generally.
27. These questions ask you to think about the various sources of support you may have in your life.

For each item, select which of the seven answer choice best describes how well you agree or disagree with the item as it applies to you. The answer choices range from "1" (very strongly disagree") to "7", (very strongly agree"), with neutral in the middle at "3".

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a special person who is around when I am in need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a special person with whom I can share my joys and sorrows.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family really tries to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get the emotional help and support I need from my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a special person who is a real source of comfort to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My friends really try to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can count on my friends when things go wrong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can talk about my problems with my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have friends with whom I can share my joys and sorrows.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a special person in my life who cares about my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family is willing to help me make decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can talk about my problems with my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Listed below are a number of statements about attitudes and feelings. There are no right or wrong answers to these questions; we are simply interested in how you think about yourself.

28. Please tick the answer that best indicates how much you agree or disagree with each of these statements:

<table>
<thead>
<tr>
<th>_statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Disagree somewhat</th>
<th>Neutral</th>
<th>Agree somewhat</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My close relationships are an important reflection of who I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I feel very close to someone, it often feels to me like that person is an important part of who I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, my close relationships have very little to do with how I feel about myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think one of the most important parts of who I am can be captured by looking at my close friends and understanding who they are.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I think of myself, I often think of my close friends or family also.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I establish a close friendship with someone, I usually develop a strong sense of identification with that person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a person hurts someone close to me, I feel hurt as well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My close relationships are unimportant to my sense of what kind of person I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My sense of pride comes from knowing who I have as close friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, my close relationships are an important part of my self-image.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually feel a strong sense of pride when someone close to me has an important accomplishment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
29. These questions ask you about your thoughts and feelings during the last month. In each case, you will be asked to indicate how often you thought or felt a certain way. Although some of the questions are similar, there are differences between them and you should treat each as a separate question.

The best approach is to answer each question fairly quickly. Tick the choice that seems like a reasonable estimate. There are no right or wrong answers - we are just interested in your experience.

**In the last month, how often have you...**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost never</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>been upset because of something that happened unexpectedly?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt that you were unable to control the important things in your life?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt nervous and &quot;stressed&quot;?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>dealt successfully with irritating life hassles?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt that you were effectively coping with important changes that were occurring in your life?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt confident in your ability to handle your personal problems?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt that things were going your way?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt that you could not cope with all the things that you had to do?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>been able to control irritations in your life?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt that you were on top of things?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>been angered because of things that happened that were outside of your control?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>found yourself thinking about things that you had to accomplish?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>been able to control the way you spend your time?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>felt difficulties were piling up so high that you could not overcome them?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
30. Now we would like you to think about how you usually try to deal with difficult situations in your life. These items describe ways in which people may react to problems. Tick the number that best indicates whether the statement describes how you react to problems you have experienced. There are no right or wrong answers - we are just interested in how you deal with things.

I don't do this at all ------------------------------------------ I do this a lot.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get emotional support from others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I say things to let my unpleasant feelings escape.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make jokes about it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to come up with a strategy about what to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to get advice or help from other people about what to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to find comfort in my religion or spiritual beliefs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I give up the attempt to cope.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I refuse to believe it has happened.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get help and advice from other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I express my negative feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get comfort and understanding from someone.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use alcohol or other drugs to make myself feel better.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I criticize myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I blame myself for things that happened.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think hard about what steps to take.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I say to myself &quot;this isn't real.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take action to try to make the situation better.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I look for something good in what is happening.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to see it in a different light, to make it seem more positive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I turn to work or other activities to keep my mind off things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make fun of the situation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learn to live with it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I pray or meditate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I give up trying to deal with it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I accept the reality of the fact that it has happened.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to concentrate my actions on doing something about the situation I'm in.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do something to think about it less, such as going to films, watching TV, reading, daydreaming, sleeping or shopping.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use alcohol or other drugs to help me get through it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
31. Please read the following statements. To the right of each you will find seven numbers, on a scale ranging from "1" (Strongly disagree) to "7" (Strongly agree). Tick the number which best describes your feelings about that statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I make plans, I follow through with them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually manage one way or another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to depend on myself more than anyone else.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeping interested in things is important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can be on my own if I have to.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel proud that I have accomplished things in life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually take things in stride.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am friends with myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I can handle many things at a time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am determined.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I seldom wonder what the point of it all is.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take things one day at a time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can get through difficult times because I’ve experienced difficulty before.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have self-discipline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I keep interested in things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can usually find something to laugh about.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My belief in myself gets me through hard times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In an emergency, I’m someone people can generally rely on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can usually look at a situation in a number of ways.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes I make myself do things whether I want to or not.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My life has meaning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not dwell on things that I can’t do anything about.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I'm in a difficult situation, I can usually find my way out of it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have enough energy to do what I have to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s okay if there are people who don’t like me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
32. Please select the answer choice which best describes how you feel about your life. The answer choices run on a scale ranging from "7" (Very often) to "1" (never).

<table>
<thead>
<tr>
<th>Very often</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do you usually see a solution to problems and difficulties</strong></td>
<td>[ ] 1</td>
</tr>
<tr>
<td><strong>Do you usually feel that your daily life is a source of personal satisfaction?</strong></td>
<td>[ ] 1</td>
</tr>
<tr>
<td><strong>Do you usually feel that the things that happen to you in your daily life are difficult to understand?</strong></td>
<td>[ ] 1</td>
</tr>
</tbody>
</table>
33. These questions ask about how you deal with all sorts of tasks in your life. For each item, tick how well the item describes you.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>If something looks too complicated, I will not even bother to try it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I avoid trying to learn new things when they look difficult.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When trying something new, I soon give up if I am not initially successful.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I make plans, I am certain I can make them work.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>If I can’t do a job the first time, I keep trying until I can.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel insecure about my ability to do things.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I decide to do something, I go right to work on it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I do not seem to be capable of dealing with most problems that come up in my life.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I have something unpleasant to do, I stick at it until I finish it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I set important goals for myself, I rarely achieve them.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When unexpected problems occur, I don’t handle them very well.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Failure just makes me try harder.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
34. Please tick the appropriate answer for each item, depending on how well you agree or disagree with it.

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the whole, I am satisfied with myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At times I think I am no good at all.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I have a number of good qualities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to do things as well as most other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I do not have much to be proud of.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I certainly feel useless at times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I'm a person of worth.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wish I could have more respect for myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All in all, I am inclined to think that I am a failure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take a positive attitude toward myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you for completing the questionnaire!

You will be given an information sheet to take home explaining more about this research project and how to get in touch with us.
APPENDIX 3

BRIEF EMOTIONAL INTELLIGENCE SCALE

I know why my emotions change
I easily recognise my emotions as I experience them
I can tell how other people are feeling by listening to the tone of their voice
By looking at their facial expressions, I recognise the emotions people are experiencing
I seek out activities that make me happy
I have control over my emotions
I arrange events others enjoy
I help other people feel better when they are down
When I am in a positive mood, I am able to come up with new ideas
I use good moods to help myself keep trying in the face of obstacles

(BEIS-10: Davies, Lane, Devonport & Scott, 2010)
APPENDIX 4

ADOLESCENT QUESTIONNAIRE INFORMATION AND DEBRIEFING SHEETS
Leeds Friendship Study: Information Page for Adolescents

This study looks at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives.

This study is being carried out by Rebecca Graber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner.

This study contains a series of questions about friendship, coping, and related topics. The information learned from this study will be used to see in what ways close friendships may help us cope with difficult events. Some ways this information may be useful are by developing strategies for anti-bullying or peer support programmes.

By filling in the questionnaire, you give permission for us to use your answers in our research. Your teachers, parents or school will never see your responses. Your responses are confidential, meaning that only the researchers may view them. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you remain anonymous, meaning that no one can tell who you are. This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

You will be required to create a project password, which will only be seen by the researchers. It will allow us to match up your answers today with your answers to any future studies. It will allow also us to remove your answers if you change your mind about participating.

You are allowed to change your mind about participating at any time until a week from today, without giving a reason. If you do not wish to participate today, please tell the researcher that you wish to withdraw; you do not have to give a reason. If you do not want to answer a particular question, you do not have to, without giving a reason.

The survey should take about 30 minutes to complete. There are no right or wrong answers, and this is not an exam; we just want to know what your life is like for you.

Click here to begin the survey:

- Yes I give my permission for my responses to be used for research
**Leeds Friendship Study: Debriefing Page for Adolescents**

This study looked at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives. The information learned from this study may be used to develop anti-bullying and peer support programmes.

This study is being carried out by Rebecca Graber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner.

We encourage you to speak with an adult at home about today’s research activity. If you or someone at home has a question about the research, please contact us using the information at the bottom of the page.

If you would like to speak confidentially with someone about any problems you might be having, you can contact ChildLine for free at 0800 1111, or contact them by email at text through [www.childline.org.uk](http://www.childline.org.uk)

The responses to the questionnaire are kept confidential, meaning that only the researchers may view them. Your teachers, parents or school cannot see your responses. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you are anonymous, meaning that no one can tell who you are.

By filling in the questionnaire, you gave your permission for us to use your anonymous answers in our research. If you decide you do not want your responses to be included, you can withdraw up to 1 week from today. To do this, send an email or a letter with your “project password” to the email address or postal address listed below. You must include your project password because that is the only way by which we can identify your questionnaire responses. You do not have to say why you want to withdraw.

This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

If you or someone at home would like more information about this study, please visit our website or contact me using the information at the bottom of the page.

Thank you again for your participation!

Rebecca Graber  
PhD Student  
Institute of Psychological Sciences, University of Leeds  
R.Graber09@leeds.ac.uk  
[www.psyc.leeds.ac.uk/friendship](http://www.psyc.leeds.ac.uk/friendship)

Supervisors:

Dr Anna Madill: a.l.madill@leeds.ac.uk  
Dr Rhiannon Turner: r.n.turner@leeds.ac.uk
APPENDIX 5

ADULT QUESTIONNAIRE AMENDMENTS

1.

This study looks at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives.

This study contains a series of questions about friendship, coping, and related topics. The information learned from this study will be used to see in what ways close friendships may help us cope with difficult events. Some ways this may be useful are by developing strategies for dealing with stress, harassment or bullying, and informing community-based support programmes.

This study is being carried out by Rebecca Gruber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhianon Turner.

By filling in the questionnaire, you give permission for us to use your answers in our research. Your responses are confidential, meaning that only the researchers may view them. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you remain anonymous.

You will be required to create a project password, which will only be seen by the researchers. It will allow us to match up your answers today with your answers to any future studies. It will also allow us to remove your answers if you change your mind about participating. You are allowed to change your mind about participating at any time until a week from today, without giving a reason. If you do not want to answer a particular question, you do not have to, without giving a reason.

You will be asked to submit a valid email address, which we will use to invite you to complete the same questionnaire in a few months. It is important to our research to see how things may change over time for you. You do not have to provide your email address to participate today.

Participants who provide a valid email address will be entered into a prize draw to win one of 5 £25 vouchers for Amazon.co.uk.

Your email address will not be shared with anyone else, and will be kept securely and separately from your questionnaire responses, to preserve anonymity and confidentiality.

This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

The survey should take about 30 minutes to complete. There are no right or wrong answers, we just want to know what your life is like for you.

* 1. Click here to begin the questionnaire:

   - Yes I give my permission for my responses to be used for research.
2. Before you begin, please check that you fit the criteria for the study:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am between the ages of 35 and 55.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I speak English fluently.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I live in the UK.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you answered "No" to any of these items, you are not eligible for the study.

You can still continue, but your answers will be discarded, and you will not be eligible for the prize draw.

We now need you to create a project password.

This takes the format of the first 3 letters of your last name, followed by your day and month of birth.

For example, if your name is Jane Tweed and you were born on the 5th of October 1980, your project password is TWD0510.

*3. Write in your project password here:
First we would like to know some basic information about you.

4. What is your gender?
   - Male
   - Female
   - Prefer not to say

5. What is your date of birth?
   DD/MM/YYYY (for example, put 05/10/1985 if you were born on the 5th of October 1985):

6. Who do you live with? Tick as many as apply.
   If you split your time between 2 homes, please answer for both homes.
   - Husband/Male Partner
   - Wife/ Female Partner
   - Son
   - Daughter
   - Mother
   - Father
   - Stepmother
   - Stepfather
   - Sister
   - Brother
   - Grandparent
   - Housemate/Friend
   - Other

If you answered "other", please explain:
Thank you for completing the questionnaire!

We now invite you to provide your email address to us, so that we can enter you into a prize draw for one of 5 £25 Amazon vouchers and invite you to complete the follow-up study in a few months' time. We will also send you a short summary of findings.

Your email address will not be distributed to anyone else or used for any reason other than the reasons explained here, and will be stored separately from your survey answers.

35. Please write in an email address at which we can contact you in a few months' time:

36. If you would also like to be included in an emailing list for research at the University of Leeds, with opportunities to be paid for participation in future studies, please tick here.

If you choose not to do this, your chances of winning the prize draw for this study will not be affected.

☐ Yes, include me in the University of Leeds Recruitment Pool
APPENDIX 6

ADULT QUESTIONNAIRE INFORMATION AND DEBRIEFING SHEETS
Leeds Friendship Study: Information Page for Adults

This study looks at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives.

This study contains a series of questions about friendship, coping, and related topics. The information learned from this study will be used to see in what ways close friendships may help us cope with difficult events. Some ways this may be useful are by developing strategies for dealing with stress, harassment or bullying, and informing community-based support programmes.

This study is being carried out by Rebecca Graber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner.

By filling in the questionnaire, you give permission for us to use your answers in our research. Your responses are confidential, meaning that only the researchers may view them. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you remain anonymous.

You will be required to create a project password, which will only be seen by the researchers. It will allow us to match up your answers today with your answers to any future studies. It will allow also us to remove your answers if you change your mind about participating. You are allowed to change your mind about participating at any time until a week from today, without giving a reason. If you do not want to answer a particular question, you do not have to, without giving a reason.

You will be asked to submit a valid email address, which we will use to invite you to complete the same questionnaire in a few months. It is important to our research to see how things may change over time for you. You do not have to provide your email address to participate today.

Participants who provide a valid email address will be entered into a prize draw to win one of 5 £25 vouchers for Amazon.co.uk.

Your email address will not be shared with anyone else, and will be kept securely and separately from your questionnaire responses, to preserve anonymity and confidentiality.

This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

The survey should take about 30 minutes to complete. There are no right or wrong answers, we just want to know what your life is like for you.

Click here to begin the questionnaire:

- Yes I give my permission for my responses to be used for research
**Leeds Friendship Study: Debriefing Page for Adults**

This study looks at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives. The information learned from this study may be used to develop strategies for dealing with stress, harassment or bullying, and inform community-based support programmes.

This study is being carried out by Rebecca Graber, a PhD student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner.

If you have any questions about the study, contact us through our website [www.psyc.leeds.ac.uk/friendship](http://www.psyc.leeds.ac.uk/friendship).

Your answers are kept confidential, meaning that only the researchers may view them. If we use any of your free-text answers in a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you are anonymous.

By filling in the questionnaire, you gave your permission for us to use your anonymous answers in our research. If you decide you do not want your responses to be included, you can withdraw up to 1 week from today. To do this, send an email or a letter with your “project password” to the email address or postal address listed below (this information is available on our website). You must include your project password because that is the only way by which we can identify your questionnaire responses. You do not have to say why you want to withdraw.

This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

There are many charitable organisations who offer help and support to people going through difficult times in their lives. If you wish to talk with someone about problems in your life, you may wish to ring your local Citizens’ Advice Bureau to find contact information for local organisations, or ring the Samaritans (08457 90 90 90) for confidential support.

If you or anyone else has any questions or would like more information about this study, please visit our website or contact me using the information given.

Thank you again for your participation!

Rebecca Graber  
PhD Student, Institute of Psychological Sciences, University of Leeds  
Tel: 0113 343 9195 Email: R.Graber09@leeds.ac.uk  
[www.psyc.leeds.ac.uk/friendship](http://www.psyc.leeds.ac.uk/friendship)

Supervisors:

Dr Anna Madill: a.l.madill@leeds.ac.uk  
Dr Rhiannon Turner: r.n.turner@leeds.ac.uk
**APPENDIX 7**

**SEMI-STRUCTURED INTERVIEW SCHEDULE**

Friendship & Resilience Interview Study: Semi-Structured Interview Schedule

i. Re-introduce researcher to participant.
ii. Check possession of signed consent form.
iii. Review ethics: confidentiality and anonymity, data protection, withdrawal, only go into as much detail as you feel comfortable.

Opening: There are two main parts to the interview, where we talk about your close friend and then we focus on how your close friend may have helped you through a difficult time. While you can give as much or as little detail as you want to, and you can skip a question if you want, I’ll ask you to be as detailed and descriptive as you feel comfortable being.

<table>
<thead>
<tr>
<th>Research Questions: What is the Participant’s closest friendship like? What is the participant’s sense of self like within this friendship, how might it have evolved and changed?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>1. Can you describe this object for me? What this object mean to you? Can you tell me about the object you’ve brought?</em>&lt;br&gt;<strong>Prompts/probes.</strong> What time in your life does this object remind you of? How did you feel (when you were given this object? How do you feel looking at this object now? Who does this object make you think of – is that person your closest friend? What did you learn from that experience?*&lt;br&gt;<em>If object not brought, go on to question2.</em></td>
</tr>
<tr>
<td>2. I’ll ask you to talk about your friendship with your closest friend. Who would you like to talk about? What is he/she like? Can you give me an example of when he/she was (funny, smart, etc) around you, how he/she is (funny, smart, etc)?&lt;br&gt;<strong>Prompts/probes.</strong> How did you meet? What do you like to do together? How does your friend feel about you – are you their best friend too, do you think? Can you give me an example of when you felt like this? How has your friendship changed – have you always been this close?</td>
</tr>
<tr>
<td>3. How do you feel about yourself when you are with your friend/How does your friend make you feel?&lt;br&gt;<strong>Prompts/probes.</strong> What adjectives would you use to describe how you feel when you are with your friend? Can you give me an example of when your friend made you feel like this?</td>
</tr>
<tr>
<td>4. What do you value about your friend/your friendship?</td>
</tr>
<tr>
<td>5. What have you learned from your friendship/your friend? What does your friend/friendship mean to you?</td>
</tr>
</tbody>
</table>
Research Questions: What was it like for the participant to go through this difficult time? What was the participant’s experience of (un)supportive friendship during this time, and what impact did it have on them? What was it like for the participant to become stronger/more resilient or less strong/less resilient?

6. Can you tell me about a difficult time in your life that your close friend helped you deal with? What was it like to go through that?

*If needed: You don’t have to go into detail about what that difficult time was – we’ll focus on how you dealt with the difficult time, and how your friend might have helped you.

*If needed: If you have more than one person to talk about in relation to this tough time, that’s ok – we can talk about that other person as well.

Prompts/probes. How did you feel when (event) happened (carry through timeline of event)? If they are comfortable with detail: Where were you when (event) happened/other detail-oriented questions. What did you do with your friend/did your friend say? How did it feel to do (X) with your friend/to hear your friend say that? How helpful was your friend?

7. What did you learn from your friend’s support? What did (doing X, saying X) mean to you?

8. What did you learn from going through that difficult time? How does it feel to have gone through that?

Prompts/probes (If ongoing) How did you come to those conclusions? How do you deal with that sort of thing now? How did that affect/change you? What does it mean for your life today?

Research Questions: How does this participant experience resilience? What would it mean for them to be resilient?

9. Has your friend had a similar experience (if not, do you know other people who have had a similar experience to you?) – how did she/he deal with it compared to you? What do you think about how they dealt with that problem?

If needed: 10. We’ve talked about a negative experience that you’ve had, when you weren’t doing so well. Can you give me an example of when you encountered a small problem – like an exam, or someone saying something nasty – and how you dealt with it? How do you think you deal with things like that compared to your friends?

11. Is there anything that you might not have thought about your friendship before that occurred to you during the interview?

Is there anything else you think I should know to better understand what we’ve talked about?

Is there anything you’d like to ask me?

i. If ending on a negative note, reiteration of participant’s strengths by the researcher.

ii. Thank participant. Delivery of debriefing information, reminder of anonymity/confidentiality/withdrawal procedure.
APPENDIX 8

INTERVIEW RECRUITMENT AND DEBRIEFING MATERIALS
Dear [Student Name],

Earlier this year, you took part in a study looking at how friends may help us when we face difficult events in our lives. This study is being carried out by me, Rebecca Graber, a postgraduate student in psychology at the University of Leeds. Firstly, I want to thank you for completing the questionnaire so thoughtfully – your responses, combined with those of more than 400 others, have helped us learn a great deal about how friendships can sometimes support us through difficult times.

As part of this research, I am now running an interview study with selected students, and I would like to interview you. This interview will involve questions about your friendships and how you cope with problems in your life. Understanding your friendships and how you deal with problems will be a valuable part of this project. This project may help to develop advice for anti-bullying or peer support programmes. Just as in the questionnaire, there are no right or wrong answers – I just want to hear about your experiences. Also like before, your responses in the interview are confidential and anonymous – only the researchers and their assistants will ever hear your interview (so, not your school and not your parents), and nothing will ever be made available that could identify you or your school. The only reason I would break confidentiality would be if I believe you to be in danger of serious harm or there is danger of serious harm to others – in that case, where appropriate I would tell you before informing the appropriate authority. In the interview itself, you can skip any questions you do not want to answer, without giving a reason. I would like you to bring in something that reminds you of a close friend or an event you’d like to talk about – for example, a photograph, or a present from a friend. This is to get the conversation going, you will not have to give it to me.

To thank you for your time, you will receive a £5 shopping voucher after the interview.

I have included a consent form for you to return with your signature - if you have not returned the signed consent form by the interview day, you cannot participate. If you would like to take part, please return the consent form to [Teacher Name] before [Interview Date].

Important information about this study can be found on the information sheet I have included with this letter. Please read through the information sheet, as it will explain what will happen in the interview and hopefully will answer any questions you may have. I recommend that your parent or guardian read through this information sheet, too. Of course if you have any other questions, please feel free to telephone or email me according to the information below. More information about the study can also be found on the project website, www.leeds.ac.uk/psyc/friendship

Thank you!

Yours sincerely,

Rebecca Graber
Institute of Psychological Sciences, University of Leeds, LS2 9JT
Email: R.Graber09@leeds.ac.uk, Phone: 0113 343 9197
Friendship & Resilience Study: Letter to Students Under 16

Dear [Student Name],

Earlier this year, you took part in a study looking at how friends may help us when we face difficult events in our lives. This study is being carried out by me, Rebecca Graber, a postgraduate student in psychology at the University of Leeds. Firstly, I want to say thanks for completing the questionnaire so thoughtfully – your responses, combined with those of more than 400 others, have helped us learn a lot about how friendships can sometimes support us through difficult times.

I am now running an interview study with selected students, and I would like to interview you. This interview will involve questions about your friendships and how you cope with problems in your life. Just like before, there are no right or wrong answers – I just want to hear about your experiences. Also like before, your responses in the interview are confidential and anonymous – only the researchers and their assistants will ever hear your interview (so, not your school and not your parents). The only reason I would break confidentiality would be if I believe you to be in danger of serious harm or there is danger of serious harm to others – in that case, where appropriate I would tell you before informing the appropriate authority. Nothing will ever be made available that could identify you or your school. In the interview itself, you can skip any questions you do not want to answer, without giving a reason. I would like you to bring in something that reminds you of a close friend or an event you’d like to talk about – for example, a photograph, or a present from a friend. This is to get the conversation going, you will not have to give it to me.

To thank you for your time, you will receive a £5 shopping voucher after the interview.

In addition to your own agreement to participate, you will need a parent or guardian’s permission to participate in this interview. I have included a consent form for you to return with their signature - if you do not have their permission, or you have not returned the consent form by the interview day, you cannot participate. If you would like to take part, please return the signed form to [Teacher Name] before [Interview Date].

Important information about this study can be found on the information sheet I have included with this letter. Please read through the information sheet, as it will explain what will happen in the interview and hopefully will answer any questions you may have. Your parent or guardian should read through this information sheet, too. Of course if you have any other questions, please feel free to telephone or email me according to the information below. More information about the study can also be found on the project website, www.leeds.ac.uk/psyc/friendship

Thank you!

Yours sincerely,

Rebecca Graber
Institute of Psychological Sciences, University of Leeds LS2 9JT
Email: R.Graber09@leeds.ac.uk, Phone: 0113 343 9197
Leeds Friendship Study: Permission Letter for Parents of Adolescent Participants

Dear Parent,

Earlier this year, your child took part in a study looking at how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives. This study is being carried out by me, Rebecca Graber, a postgraduate student in psychology at the University of Leeds, for my doctoral research, in cooperation with your child’s school. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner. The study has so far involved more than 400 students at secondary schools and colleges in South and West Yorkshire.

As part of this research, I am now running an interview study with selected students, and I would like to interview your child. This interview will involve questions about friendship, coping, and related topics. The information learned will be used to see in what ways close friendships may help us cope with difficult events. This information may be useful in developing advice for anti-bullying or peer support programmes. Understanding your child’s experience of friendship and how they deal with problems will be a valuable part of this project.

Your child will need your permission to participate in this interview study. I have included a consent form for your child to return with your signature - if you do not give your permission, or they have not returned the consent form by the interview day, they cannot participate. Your child must sign this consent form as well to show they have agreed to participate. If your child would like to take part, please return the consent form to [Teacher Name] before [Interview Date].

Important information about this study can be found on the accompanying information sheet. Please read through this before signing the consent form, as it will explain what will happen in the interview and should answer any questions you may have. Your child should read through this information sheet, too. Of course if you or your child have any other questions about the study, please feel free to telephone me at 0113 343 9197, or to email me at R.Graber09@leeds.ac.uk.

More information about the study in general can also be found on the project website, www.leeds.ac.uk/psyc/friendship

Thank you very much for your time.

Yours sincerely,

Rebecca Graber

Institute of Psychological Sciences, University of Leeds, LS2 9JT
Email: R.Graber09@leeds.ac.uk
Phone: 0113 343 9197
Friendship & Resilience Study: Information Sheet for Participants and Parents

What is this study about?

The Friendship & Resilience Study looks at how young people's close friendships may help them become resilient, helping them to cope with difficult events in their lives. This study has two phases and takes place over about a year.

Why is this study important, and what impact might it have?

Research in this area has mostly focused on family support - there is very little understanding of how young people gain support from each other. The project will contribute to evidence-based practice in areas such as anti-bullying strategies in schools and workplaces, care of vulnerable persons, and community-based programmes for reducing personal stress and discrimination.

Who are the researchers?

This study is being carried out by me, Ms Rebecca Graber, a postgraduate student at the Institute of Psychological Sciences at the University of Leeds. My supervisors are Dr Anna Madill and Dr Rhiannon Turner. The study has received the support of the Access Academy, a Leeds University organisation working to raise achievement in schools. It has also received support from Healthy Living Network Leeds, which works to increase physical and mental health in the community, and from the Community Alternatives Team, a council-run organisation which helps adults with mental health difficulties to support each other.

I have previously led interview studies on resilience and close friendship. I worked as a Research Associate on a major study looking at young people’s use of the internet. For this I conducted focus groups with dozens of students, including questions on potentially sensitive subjects (such as online bullying). I have a current clearance from the Criminal Records Bureau (CRB) to work with children and young people.

Dr Anna Madill is a leading expert on qualitative methods (including interview studies) in social and health areas. Dr Rhiannon Turner is a leading expert on friendships and has led several studies of friendships in young people.

What does the interview study involve?

The interview consists of questions about how a student’s close friend may have helped them through a difficult time. Questions involve how students tend to deal with problems; what their close friendships are like; and what they think it means to deal well with a problem.

There are no right or wrong answers, we are just interested in understanding the student’s experience. Students are asked to bring in an object relating to their friendship in order to help them talk about their experience – for example, a photograph. This object will only be used to start conversation and will not be given to me. Interviews will take place at the student’s school at a time decided by the school.

The interview will last about 60 minutes, depending on how much the student wishes to say. The student can skip any questions they don’t wish to answer, without giving a reason. The
interview will be audio-recorded. The recording will be turned into a written transcript, with the entire conversation written out. Extracts of this transcript may be published in research work, but nothing will be published that can identify the student or the school. Students or parents can change their mind about participating up to one week after the interview.

**How was my child selected for the interview study?**

Earlier this year, your child completed a survey as part of the Friendship & Resilience Study, with the permission of the school. Some of the questions your child answered involved descriptions of his or her closest friendship and how he or she tends to deal with difficult events in life. Your child’s responses were combined with those of more than 400 students to see patterns of how friendships work and how young people tend to deal with problems. Based on all of these responses together, we then selected a few young people who had different responses about what their friendships are like and how they tend to deal with problems.

When your child completed the survey, he or she provided a **project password** – this password is always the first 3 letters of the student’s last name and the date and year of birth. This password is used to preserve the student’s anonymity across the 2 time points of the Friendship & Resilience survey study by allowing us to match each child’s answers to next year’s online questionnaire with the one already completed, without knowing the child’s name. We looked up the project passwords of the young people we wanted to invite to interview, and asked your child’s school if they could determine the student’s identity based on the first three letters of their last name and date of birth. If they could, we then asked them to pass along to you this invitation for your child to come to an interview. The school has never seen any of the students’ responses to the online questionnaire or interview, and the research team does not yet know your child’s name.

**Have ethical guidelines been followed?**

This study has received the ethical approval of the Institute of Psychological Sciences. The Ethics Committee judges each research project according to the ethical guidelines of both the Institute and the British Psychological Society, the professional association for research psychologists in the UK.

The main researcher, Ms Rebecca Graber, has a current enhanced clearance from the Criminal Records Bureau (CRB) to work with children and young people.

**Are there any risks in taking part?**

The interview has been judged by the Ethics Committee as unlikely to be upsetting. Students’ individual responses are **confidential**, meaning that only the researchers and their assistants can hear the recordings of the interview. In the consent form, you are asked to give consent for the researchers to use quotes from the interview in research reports. So that your child may speak freely and to protect their identity, students remain **anonymous**, which means that no details which could reveal the identity or location of the school or student will ever be published. For example, if a student uses his or her own name or a friend’s name in interview, these names would be changed; if a student tells a story which could identify them, we would
leave out the details of the story. Although teachers will know that a student is taking part in
the study (they must be made aware of this in order to pass along this letter and to set up an
interview time) **only the researchers and their assistants — not teachers, schools or parents —
will ever hear the interviews or see a student’s transcripts.**

The only situation where confidentiality would be broken is if, during the interview, I become
concerned about serious harm to the student or other people. In that case, in accordance with
the law and with the school’s guidelines about child protection, I would inform the appropriate
authority. Where appropriate, I would try to tell the student before doing this.

If, for any reason, you or your child changes your mind about participating in this study after
having done the interview, he or she can withdraw from the project without giving a reason.
To do this, please contact me by telephone (0113 343 9197) or email
((R.Graber09@leeds.ac.uk) **within one week** of the interview and I will remove the student
from the study.

After the interview, the student will be given an information sheet with a reminder of what the
research was about and contact details for me, my supervisors, and local support agencies.

**What are the benefits of taking part?**

Each interview will be valuable in developing our understanding of how close friendships can
help us deal with difficult events. As a way of saying “thank you,” each student interviewed will
receive a **£5 shopping voucher** redeemable at numerous high street shops, such as music
shops, bookshops, clothes shops and supermarkets.
Friendship & Resilience Study: Parental Consent Form

This consent form must be filled out by the parent or guardian of the student asked to participate in interview. Both the parent and the student should read the information sheet that came with this consent form.

Please circle as appropriate:

1. I and my child have read this information sheet fully.
   
   YES          NO

2. I and my child have had an opportunity to ask questions.
   
   YES          NO

3. If I have asked a question, it has been answered to my satisfaction.
   
   YES          NO

4. I understand that my child can withdraw from this study during the interview, or up to a week after the interview, without giving a reason, by contacting the researcher, Rebecca Graber, by telephone (0113 343 9197) or email (R.Grabber09@leeds.ac.uk)
   
   YES          NO

5. I understand that my child’s responses will be made anonymous, so that to the best of the researcher’s ability no information which could identify my child will ever be published.
   
   YES          NO

6. I understand that my child’s interview responses will be kept confidential, so that only the researchers and their assistants can access their interviews.
   
   YES          NO

7. I give my permission for anonymised quotes from my child’s interview to be used in reports of this study.
   
   YES          NO

Student’s Name (please print):
Student’s Signature:

Parent’s Name (please print):
Parent’s Signature:
Date:
Friendship & Resilience Study: Adolescent (aged 16+) Consent Form

This consent form must be filled out by the student – aged 16 or over - asked to participate in interview. The student should read the information sheet that came with this consent form, and is advised to read this with sheet with his or her parent. This information sheet will be reviewed with the researcher before beginning the interview.

Please circle as appropriate:

8. I have read this information sheet fully.
   YES   NO

9. I have had an opportunity to ask questions.
   YES   NO

10. If I have asked a question, it has been answered to my satisfaction.
    YES   NO

11. I understand that I can withdraw from this study during the interview, or up to a week after the interview, without giving a reason, by contacting the researcher, Rebecca Graber, by telephone (0113 343 9197) or email (R.Grabber09@leeds.ac.uk)
    YES   NO

12. I understand that my responses will be made anonymous, so that to the best of the researcher’s ability no information which could identify me will ever be published.
    YES   NO

13. I understand that my interview responses will be kept confidential, so that only the researchers and their assistants can access their interviews.
    YES   NO

14. I give my permission for anonymised quotes from my interview to be used in reports of this study.
    YES   NO

Student's Name (please print):
Student’s Signature:
Date:
Friendship & Resilience Study: Student Checklist

I have read through invitation to interview and information sheet

I have signed my consent form

My parent or guardian has signed my consent form (if I am under 16 years of age)

I have returned the signed consent form to my teacher

I have picked out an object (e.g. photograph, gift) to help me talk about my friend
Friendship Interview Study: Debriefing Page for Adolescents

This study looked at friendship: how friends may shape how we feel about ourselves, and how friends may help us when we face difficult events in our lives. The information learned from this study may be used to develop anti-bullying and peer support programmes.

This study is being carried out by Rebecca Graber, a postgraduate student in psychology at the University of Leeds, for her doctoral research. Her supervisors are Dr Anna Madill and Dr Rhiannon Turner.

We encourage you to speak with an adult at home about today’s interview. If you or someone at home has a question about the research, please contact us using the information at the bottom of the page.

If you would like to speak confidentially with someone about any problems you might be having, you can contact ChildLine for free at 0800 1111, or contact them by email at text through www.childline.org.uk

Your interview responses are kept confidential, meaning that only the researchers may listen to them. Your teachers, parents or school cannot see your responses. Your recorded interview will be typed up into a transcript. If we use any part of this transcript a report, we will remove any information you have written that may identify you (for example, a nickname or your town), so that you are anonymous, meaning that no one can tell who you are. The only reason I would break confidentiality would be if I believe you to be in danger of serious harm or there is danger of serious harm to others – in that case, where appropriate I would try and tell you before informing the appropriate authority.

By returning your signed consent form, you gave your permission for us to use your anonymous responses in our research. If you decide you do not want to be included anymore, you can withdraw up to 1 week from today. To do this, email me or telephone me according to the information below. You do not have to say why you want to withdraw.

This research adheres to ethical guidelines set by the British Psychological Society and the University of Leeds.

If you or someone at home would like more information about this study, please visit our website or contact me or one of my supervisors with any questions.

Thank you again for your participation!

Rebecca Graber
PhD Student, Institute of Psychological Sciences, University of Leeds
R.Grabero9@leeds.ac.uk
www.psyc.leeds.ac.uk/friendship

Supervisors:
Dr Anna Madill : email a.l.madill@leeds.ac.uk telephone: 0113 3435750
Dr Rhiannon Turner: email r.n.turner@leeds.ac.uk telephone: 0113 3436686
Emphasis is on transcribing the conversation verbatim, with attention to general features which may impact the interpretation of content (as in Hugh-Jones & Madill, 2009).

((Laughs)) – Use 2 sets of rounded brackets to indicate important non-verbal sounds e.g. laughter, sighing, sobbing.

[Em] – Use squared brackets to indicate simultaneous speech from the other speaker (e.g., the interviewer)

**Emphasis** – Use underline to indicate where a word has been emphasised by the speaker

*Educated guess* – Use asterisks to encompass speech at which you (the transcriber) have taken an educated guess.

*** Use 3 plain asterisks to indicate where speech is inaudible.

, Use a comma to indicate a short pause (less than 2 seconds, approx.) or a verbal comma

(paren) – For pauses over 2 seconds in duration, note (pause) in round brackets

. Use a full stop to indicate a verbal full stop (not necessarily a grammatical full stop)

? Question mark for rising questioning intonation

(12:00) Indicates timestamp of recording

.... – Indicates transcript has been edited to omit words
APPENDIX 10

CONFIDENTIALITY AGREEMENT

Unless notified otherwise in writing, all documents, recordings and information that I see or hear whilst working for the Friendship & Resilience Study shall be treated as confidential. Such documents, recordings and information shall not be used except for the purposes for which they were made available and shall not be disclosed to any other person without the prior written consent of Ms Rebecca Graber or her supervisors.

On completion of the project, all transcriptions and digital audio files will be deleted unless requested otherwise.

All transcriptions and digital audio files will be handled in accordance with BPS guidelines and best practice concerning maintenance of confidential data. In particular, digital files will be stored in a password-protected digital space and any paper transcriptions will be stored in a locked area accessible only by project staff. Contents of transcriptions and digital audio files will not be disclosed to individuals other than project staff, except if I believe someone to be in danger of serious harm, in which I will inform project staff and the appropriate authorities according to child protection legislation.

I accept the terms of the above confidentiality agreement.

Name:

Signature:

Date:

Email address:
APPENDIX 11

SAMPLE TRANSCRIPT EXTRACT

E: Yeah ((laughs)), yeah, yeah I think when we argue we end up like (8:00) shouting at each other and I think, if we end up shouting at each other I mainly, and she as well, we say things that we don’t mean. It’s just kind of in the heat of the moment and I don’t

Int: Yeah, so that would happen the last time?

E: Yeah and I I don’t want to say horrible things to her because she knows that she’s my best friend. And I love her but in that heat of the moment I think everybody seems to say things that they don’t mean. So I think by giving each other a break, it kind of makes sure that we don’t say things - obviously say things that you mean, not keep things hidden up, but, sometimes to say things that you don’t mean then it’s quite hard to go back on it so that’s what we tend to do, so.

Int: Have things always, has that always been the dynamic of your friendship?

E: I think so but. I don’t, I don’t like, obviously I don’t think I don’t think anybody likes arguing but, I don’t I don’t really enjoy it and I think especially arguing that’s done behind people’s back, that’s kind of the type of argument that really annoys me because I think if you’re gonna say something - I know everybody says this, but I think if you’re going to say something then I’d rather you tell me what your problem is with me and, and then I, if I feel that I’ve done something wrong than I’ll apologise but if I feel I haven’t done anything wrong then, I don’t see why I should apologise in a way, so. (9:13)

Int: Yeah. But it sounds like things are more out in the open.

E: Hmm, yeah. I think because we both we both hate the whole talking behind people’s backs so that’s how we deal with it by, saying it or giving each other a break and then calling back to talk to each other and telling each other how we feel about the situation so.

Int: Mm. And that seems to be? Working out for you?

E: Mm? Mhm ((laughs)) yeah, yeah.

Int: So you think that she, so you said that you think that she’s your closest friend [mm] probably.

E: Mm.
And do you think that you’re her closest friend?

I think so, yeah. I think, I hope so anyway ((laughs)) but yeah, I think I think we are each other’s best friend so, um, yeah and I get along with her family as well, like her, she’s got an older sister her sister and my older sister are the same age and they were in the same year, they’re not like close friends but they know each other (10:01) so I get along with her family, so, I think so, yeah ((laughs)).

That’s really good. What what do you think is the main thing that makes you feel like you’re each other’s closest friends?

((laughs)) like just just how relaxed we are around each other, like em I feel that I can act myself around her em I think she acts her complete self around me too. And we’re not bothered about making a fool out of ourselves in front of each other because we’re so close and I know I can tell her anything and I know that either she’s not going to go telling everybody or more importantly that she’ll help me, and she won’t just go “oh that’s really bad or that’s really good”, but she’ll actually help me through it so.

Mm yeah. What do you mean that she won’t just say, what what do you mean?

Like she won’t, like if I say something bad’s happened like can you give me an example?

Em. Oh when was it? My my mum went in hospital last summer. Em for about a week and a half and they didn’t think she was going to come out (11:03) and they said “yeah, she’s probably, she’s probably not going to make it out”. So I went straight to Ruth, she was the first person I went to, em cause I don’t have much family in [my city] cause my mum and dad split up when I was two em and most of my family is on my dad’s side, so I don’t really have much family here so she was my first person and instead of just going “oh Beth that’s really bad, I feel really sorry for you” she actually helped me and she said “well why don’t we do this, why don’t, we go and see her and you can stop with me and we’ll, I’ll get my mum to cook you some meals so your family don’t have to worry about cooking” so instead of actually just saying “oh that’s really bad” she actually helped me through it and gave me some solutions so. That was really nice ((laughs))

What was important to you at the time about that way of dealing with things?

Em I think just knowing that she was going to be there for me. And. I wasn’t expecting her to say “oh it’s going to be okay”, because at the time I didn’t think it
was going to be okay, but, just having her there and knowing that she was going to help me (12:02) and that she wasn’t gonna kind of just forget about me and she was going to do whatever she could to help me. I think that was the most important thing for me. And because I have a little sister as well and she was em just seven at the time, so, Ruth really helped me with her and I do have a step-dad but, obviously he was, at the hospital all the time so me and my 19 year old sister we, em, we were responsible for Emily as well, my little sister so Ruth really helped me with her, and Emily was one of my main priorities because she’s my little sister, and I want to look after her and Ruth helped me with that as well, so that was really nice.

Int: How did she help you?

E: Em like picking her up from school and trying to explain to her what was happening and, because obviously we thought my mum wasn’t going to come out of hospital so, not telling her “oh yeah, mummy’s going to die” but kind of saying that, things might not be the way you expect and kind of preparing her for that. And em Ruth really helped with that so. (13:02)

Int: Yeah [mm] yeah, and you said, it was interesting when you were saying about how, you felt at the time, you said that she wouldn’t she didn’t make you feel like she was going to forget [mm] did you feel that way?

E: Yeah I think because obviously that’s quite a big thing saying, your mum’s in hospital and they’ve said she might not come out. And I think some people’s reaction is to kind of back away and think “oh I’ll leave, it’s a family moment, I’ll leave them to it”. And I think as a best friend, like, she knew what my needs were at the time, and she knew what I, wanted from her and that I needed her next to me, so it was really important to me, so [yeah] yeah.

Int: How do you think she knew about, those needs?

E: I think because because in general we’re so open to each other, and we haven’t talked about our parents dying before but we’ve talked about different situations, and because she’s known me for so long, she knows, when I’m upset, she knows that I just want somebody there for me and somebody to help me. So I think because we’re best friends she knew straightaway that I just, the things that I needed and the things that I wanted so.

Int: (14:10) And going back to that time then, how how were you feeling at that time?

E: Well I think, I felt a lot of pressure because, and obviously I was worried about my