How are Leadership Self-Efficacy, Leadership Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists'?

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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.

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Abstract

Background: A newly qualified clinical psychologist (NQCP) can be defined as having completed clinical training within the last two years. NQCP's enter the workforce, typically the NHS, with specific expectations to engage in leadership activities and roles. The present study aims to address three gaps within the literature through the exploration of how self-efficacy, self-identity, and leadership style are related to motivation to lead in newly qualified clinical psychologists in the UK. This study hopes to have wider implications for the training and development of both trainee and newly qualified clinical psychologists.

Methods: A cross-sectional online survey design was used, where data from 68 NQCP's were analysed. Participants provided demographic information which included gender, age, ethnicity, service type, area of work, and perceived leadership behaviours. Standardised measures were utilised to investigate the study variables, these included leadership style, leadership self-efficacy, leadership self-identity, and motivation to lead.

Results: Forced-entry multiple regression was used to assess the relationship between leadership style (transformational, transactional, passive/avoidant), leadership self-efficacy, leadership self-identity, and motivation to lead. Descriptive statistics were used to assess any similarities and differences in the study variables in relation to the demographic characteristics. There were significant positive relationships between motivation to lead and three of the predictors: transformational leadership style, leadership self-efficacy, and leadership self-identity. A significant negative relationship was found between motivation to lead and passive/avoidant leadership style. Regression analysis found the model was a significant predictor of scores on the motivation to lead measure, $F(5, 62) = 8.93$, p

<.001, and explained 41.9% of the variance. Transformational leadership style contributed significantly to the model (b = 3.94, t(62) = 3.07, p = .003. Leadership self-identity also contributed significantly to the model (b = 1.50, t(62) = 3.72, p = < .001). The remainder of the predictor variables did not significantly contribute to the model.

Discussion: The findings of this study suggest that transformational leadership style and leadership self-identity are associated with, and predictive of, motivation to lead. The present study findings also highlighted that NQCP's had reduced belief in their perceived capabilities to attain effective performance across their various leadership roles (leadership self-efficacy), when compared to normative data. The study had a number of methodological strengths and limitations, in addition to clinical implications for clinical training and practice.

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Introduction

This literature review will initially consider what leadership is. Following this, theories of leadership will be outlined before focusing on the variables which comprise this study in relation to leadership: style, self-efficacy, self-identity, and motivation. The review will also cover leadership in the NHS and the current context for newly qualified clinical psychologists. Finally, the literature review will define the term NQCP and present the study rationale and research questions.

What is Leadership?

The term leadership is widely used with numerous definitions proposed; however, at present no empirical or standardised definition exists (Vroom & Jago, 2007). Previously, Bass (1990) summarised this difficulty, stating: "there are almost as many definitions of leadership as there are persons who have attempted to define the concept" (p.11). Assessing the current literature this appears to still hold true today.

However, Yukl (2010) highlighted commonalities in existing definitions as "involving a process whereby intentional influence is exerted over other people to guide, structure, and facilitate activities and relationships in a group or organisation" (p.21). More simply, Tafvelin (2013) summarised that leadership involved both an influential process and a specialised role held by an individual. There have also been attempts at distinguishing between the terms 'leadership' and 'management' which are frequently used interchangeably within the literature. Beech (2002) differentiated between the two and posited that management involves strategic thinking about systems and structures within an organisation, whilst leadership endeavoured to foster group commitment towards a shared goal. A further useful distinction

proposed that although management often requires leadership skills, not all leaders manage (Lunenburg, 2011).

Theories of Leadership

Leadership research is vast due to its incorporation of different disciplines, though the largest body of work has been developed within the organisational and management literature separate to psychologically informed leadership research (Hogg, van Knippenberg & Rast, 2012). An explanation for this is the expanding requirement for organisational success, which has been linked to effective organisational leadership (Hogg, van Knippenberg & Rast, 2012). This has resulted in a lack of theoretical integration within the research field (Avolio, 2007).

Consequently, in line with organisational focus, earlier theories of leadership postulated that the individual traits of a leader facilitated team success, these theories are known as 'the great man' theories (Borgatta, Bales & Couch, 1954). In the original great man theory, from which this application to organisational leadership emerged, Carlyle (1840) claimed that leaders are born and that only those men with heroic potential could ever become leaders. This application of the Greek mythology of heroes to leadership appears outdated, it is now "conceptualised in terms of distinctive traits that are believed to make those who possess them inherently more adept" at organisational leadership (Haslam, Reicher & Platow, 2011, p.4). Traits such as intelligence and charisma were proposed, with the latter receiving the most scrutiny due to over-generalised causality findings and the emergence of 'charismatic' dictators such as Hitler and Napoleon (Haslam, Reicher & Platow, 2011; Khan, Nawaz & Khan, 2016). Therefore, the credibility to these theories was questioned and leadership research shifter away from 'heroic men' towards individual differences psychology (Haslam, Reicher & Platow, 2011).

The trait theory of leadership moved the earlier great man theory away from whether traits are genetic to consider whether specific personality characteristics make an individual better suited to leadership (Kirkpatrick & Locke, 1991). This theory was credited as ‘democratizing the discipline’ due to the empirical psychological studies which underpinned the theory and promised large-scale personality testing which was both reliable and valid (Haslam, Reicher & Platow, 2011). This theory was particularly popular in organisations whereby it informed recruitment and selection for leadership positions (Bolden et al., 2011). An influential review by Stogdill (1948) of 124 individual difference studies concluded that five overarching dimensions with sub-facet characteristics had a role in emerging leaders which included: capacity (e.g., intelligence), achievement (e.g., scholarship), responsibility (e.g., initiative), participation (e.g., sociability), and status (e.g., popularity). However, these characteristics ability to predict leadership success significantly varied within the included studies. This limitation of supporting research for the trait theory was replicated in a further review by Mann (1959) who concluded that differing leadership contexts required different characteristics. Taken together, these theories of leadership both suffer from the same limitations of being static and deterministic, in addition to ignoring the social context to which leadership is situated in.

In response to these criticisms situational leadership theory was developed by Hersey and Blanchard (1969) and underpinned by the premise of an interaction between leader and situation. Situational leadership theory proposes that effective leaders are flexible and adapt their leadership style to the situation (Khan, Nawaz & Khan, 2016). Mainly, whether the leader focuses on required tasks, task-oriented, or their relations with followers, relation-oriented (McCleskey, 2014). Summarising these concepts, Bass (2008) outlined that task-oriented leaders define their

followers' roles by giving clear definitive instructions, creating organisational routines, and establishing formal communication channels. Whilst relation-oriented leaders practice concern for their followers, through reducing emotional conflicts, creating harmony, and creating equal participation (Bass, 2008). Several variants of the situational leadership theory exist and are broadly classified as behavioural (Bass, 2008) or contingency theories (Yukl, 2011); however, both agree that task and relation behaviours are dependent approaches and that an effective leader engages with both (McCleskey, 2014). Situational leadership theory was a favoured approach to understanding effective leadership. However, criticisms of the theory include a lack of internal consistency in existing research (Bass, 2008), and the utilisation of abstract concepts that are difficult to study (Glynn & DeJordy, 2010).

In summary, the outlined leadership theories demonstrate an evolution in the research field and a move away from born to lead, to better-suited to lead, to the most flexible leader. Consequently, contemporary leadership research has broadened the determinants of effective leadership as to not focus on a single factor. However, these older theories of leadership have still played a pivotal part in informing this new wave of leadership theories.

Current Theories of Leadership

Contemporary theories of leadership have moved onto to focus on the interaction between a leader and group members or followers (Yammarino, 1999). The theory of transactional leadership posited that leadership was an exchange ('transaction') between leader and follower (Burns, 1978). These exchanges facilitate leadership and organisational success through the achievement of followers' goal-directed behaviours which are rewarded by the leader and are underpinned by behavioural reinforcement theory. McCleskey (2014) proposed

“transactional leadership evolved for the marketplace of fast, simple transactions among multiple leaders and followers, each moving from transaction to transaction in search of gratification” (p.122). Whereby, leaders proactively monitor followers’ performance and intervene appropriately in terms of negative feedback (Avolio & Bass, 1997). Research studies have supported the relationship between transactional leadership and effectiveness in some settings (Bass, Avolio, Jung, & Berson, 2003; Hater & Bass, 1988; Zhu, Sosik, Riggio, & Yang, 2012)

Historically, Burns (1978) posited that transactional leadership results in shallow and temporary relationships, that create resentment between leader and followers. Further to this, transactional leadership theory has been criticised for disregarding contextual and situational factors, individual differences, and therefore is viewed as a reductionist approach (Yukl & Mashud, 2010). In support of these limitations of the theory, a large body of research exists which observed that people are less motivated to do things for extrinsic reasons such as monetary rewards, as opposed to intrinsic reasons such as they feel valued (Deci, Koestner, & Ryan, 1999; Lepper, Greene, & Nisbett, 1973).

Consequently, Burns (1978) proposed an alternative theory of transformational leadership, which focuses on the relationship between a leader and followers and how a leader inspires individuals to do things for intrinsic value. He operationalised a transformational leader to be “one who raises the followers’ level of consciousness about the importance and value of desired outcomes and the methods of reaching those outcomes” (Burns, 1978, p. 141). The theory draws on earlier seminal theories of motivational development (Maslow, 1943), and outlined that a successful leader aids followers to develop and progress in areas of self-actualisation, self-esteem and belonging (Burns, 1978).

Transformational leadership has received considerable interest within the leadership field over last 30 years. A literature review of 476 articles by Diaz-Saenz (2011) summarised this plethora of empirical research which supports the notion that transformational leadership positively influences performance on an individual and organisational level in diverse settings and cultural contexts. Despite this body of empirical support transformational leadership theory has been criticised for being broad and conceptual, and therefore lacking a clear underlying mechanism (Yukl, 1999). It has also been criticised for taking leadership research back to its 'great man' roots as the theory postulates that successful leaders will have the right amount of 'transformational characteristics' in order to positively influence followers (Haslam, Reicher & Platow, 2011). This comparison was initially proposed by Conger (1999) who stated that "the heroic leader has returned – reminiscent of 'great man' theories – but with a humanistic twist given the transformational leader's strong orientation towards the development of others" (p.149).

In summary, current theories of leadership appear to have moved on to encompass the relationship between leaders and group members, of which the two main current theories have been outlined. However, both transactional and transformational leadership approaches are not without the influence of older theories and associated criticisms. There are also several sub-theories of each, and ultimately reflects the inability of one existing theory to comprehensively explain leadership. Nonetheless, transactional, and transformational leadership theories have the largest bodies of empirical evidence and remain influential in the field and practice.

Leadership Style

Leadership style can be defined as the method and approach of providing direction, implementing plans, and motivating people (Kotter, 2001). The first empirical study of leadership styles established three distinct styles within a United States (US) army sample: autocratic, democratic, and laissez-fair (Lewin, Lippin, & White, 1939). The researchers observed that successful leaders typically adopted all three styles but with one as a dominant style, as opposed to less successful leaders who typically used one style, autocratic (Lewin, Lippin, & White, 1939). Since this initial research which clustered leaders approaches into 'styles' with associated outcomes, leadership styles have become a popular area within the leadership and individual difference literature. Consequently, a multitude of methods and questionnaires have been developed aimed at establishing an individual's leadership style for empirical research, organisational training, and selection.

Moreover, the aforementioned prevailing theories of transactional and transformational leadership have also been developed into 'styles'. Burns (1978) believed that managers could be classified into a transactional or transformational leadership style through observation of their interactions with their followers. Following this, Bass (1985, 1997) recognised that both transactional and transformational styles could be linked to achievement and conceptualised each style in terms of the behaviours associated with each. Bass further believed these styles were 'complementary constructs' which are both conducive to leadership success. These are summarised in Table 1, adapted from van Eeden, Cilliers, and van Deventer (2008).

Table 1. *Conceptualisation of the transformational and transactional leadership styles proposed by Bass (1997).*

Transformational Leadership	*Idealised influence:* Followers respect, admire and trust the leader, and emulate their behaviour, assume their values, and are committing their vision. The leader shows dedication, purpose, perseverance, and confidence in the actions of the group and helps to ensure the success of the group and give followers a sense of empowerment and ownership. The leader behaves morally and ethically. *Inspirational motivation:* The leader has enthusiasm and optimism in creating a vision of the future and stimulates similar feelings with followers. The leader is seen to commit to the vision, goals and expectations are clearly communicated, and confidence is expressed in followers' ability to achieve these. *Intellectual stimulation:* The leader values the intellectual ability of followers, encourages innovation and develops creativity. They encourage others to reframe problems, use a holistic perspective in understanding problems, question the status quo, and approach problems from different angles, thus creating readiness for change and developing the ability to solve current and future problems. *Individualised concern:* The leader considers the ability of followers and their level of maturity to determine their need for further development. They act as a mentor giving personal attention, listening to others' concerns, and providing feedback, advice, support, and encouragement. The leader designs appropriate strategies to develop individual followers to achieve higher levels of motivation, potential, and performance. Support is provided and progress is monitored.
Transactional Leadership	A social exchange process where the leader clarifies what the followers need to do as their part of a transaction (e.g., successfully complete a task) to receive a reward or avoidance of punishment that is contingent on the fulfilment of the transaction.

Note. Adapted from "Leadership styles and associated personality traits: Support for the conceptualisation of transactional and transformational leadership", by van Eeden, R., Cilliers, F., & van Deventer, V., 2008, *South African Journal of Psychology*, *38*(2), p. 255.

This conceptualisation of transformational and transactional leadership styles and the belief that these are complementary constructs led Bass (1985) to develop of the Multifactor Leadership Questionnaire (MLQ) to assess these different styles. The MLQ is the most widely used measure of leadership style in both organisational practice and research (Boamah & Tremblay, 2019). Therefore, the following literature within this section will focus on research which utilised the current version the MLQ-5X (Bass & Avolio, 2000; Bass & Avolio, 2004). The laissez-faire/passive leadership style was additionally proposed by Bass and Avolio (1994) to account for absent or avoidant leadership whereby a leader avoids setting goals and making decisions.

A seminal meta-analysis of the MLQ literature comprised of 37 published and unpublished studies established that studies largely reported significant relationships between transformational scales and leader effectiveness (Lowe, Kroeck, & Sivasubramaniam, 1996). The review also summarised two further important findings, the first an association between the transactional scale 'contingent reward' and effectiveness, though the magnitude of the association was lower than transformational scales. Secondly, a significantly negative association between the transactional scale and effectiveness (Lowe, Kroeck, & Sivasubramaniam, 1996). In addition to these observed relationships the authors investigated potential moderators of the leadership style-effectiveness relationship and found that the criterion used to measure effectiveness was a 'powerful' moderator of the relationship (Lowe, Kroeck, & Sivasubramaniam, 1996). Interestingly, the type of organisation moderated the strength of relationships e.g., public vs private organisations (Lowe, Kroeck, & Sivasubramaniam, 1996). This review proposes that overall transformation leadership style is associated with effectiveness when compared to transactional in a wide array of public and private

organisations. However, the ‘public’ organisations were entirely samples from the military or educational settings and did not include other types of public services such as civil service or healthcare.

Following this earlier influential review, the psychometric properties of the MLQ have come under scrutiny, in particular the ‘broad and conceptual’ theoretical constructs which underpin the measure (Yukl, 1999). In support of this criticism, Tejeda, Scandura and Pillai (2001) investigated the underlying factor structure of the MLQ-5X (Bass & Avolio, 1995) across four independent samples (N=1567) and concluded that the MLQ required psychometric refinement to a 27-item measure as their findings did not support the original structure and scales. A strength of this study is its utilisation of a large-scale sample in diverse settings; however, it is representative of US leadership which limits the generalisability to other cultures and contexts. This is particularly pertinent as an empirical study investigating an alternative measure of leadership established differences in views on leadership between the US and UK (Alban-Metcalfe & Alimo-Metcalfe, 2000).

The most recent published meta-analysis of the MLQ literature investigated the effects of cultural values on transformational leadership specifically, across 18 nations (Leong & Fischer, 2011). Nations varied in terms of industrialisation, cultural norms, and economic conditions, these included Australia, Canada, China, France, Germany, Greece, India, Israel, Italy, Kenya, Netherlands, New Zealand, Singapore, South Korea, Spain, Taiwan, UK, and USA. The authors observed significant variability in reported transformational leadership between countries, with managers in countries defined by the authors as egalitarian engaging in more transformational leadership behaviours when compared to hierarchical countries (Leong & Fischer, 2011). The authors defined egalitarian settings as socialised

individuals that take care of others and have a strong commitment to the well-being of others, whereas hierarchical contexts individuals accept and expect unequal power and resource distribution, as measured by the dimensions of cultural variability (Schwartz, 1994). This review highlights the importance of the context on leadership styles and behaviours, particularly the impact of culture and society. A similar debate has plagued leadership theories which underpin leadership styles, regarding the importance each theory placed on the context in which leadership exists.

Further to this review, a meta-analysis by Ridder (2016) re-examined the associations between leadership styles as measured by the MLQ and leadership effectiveness and confirmed that the findings from two earlier seminal reviews (Dumdum, Lowe, & Avolio, 2002: Lowe, Kroeck, & Sivasubramaniam, 1996) remain applicable. The analysis established a significant positive relationship between transformational leadership style and job satisfaction outcomes, when compared to transactional leadership style which had mixed relationships (Ridder, 2016). This replication of previous meta-analyses provides a stable pattern of findings across a 20-year period, and ultimately strengthens the conclusions that can be drawn from the MLQ, leadership styles and leadership effectiveness literature. Particularly as the reviews include all versions of the MLQ, and therefore the findings are not applicable to one specific version or outcome of effectiveness.

In summary, the quality of research surrounding the MLQ as a measure of leadership style is of a high standard with multiple meta-analyses that show a stable pattern of findings over time which posit positive relationships between the transformational leadership style and leader effectiveness, when compared to transactional leadership. Although the psychometric properties of the MLQ have

been historically questioned and research has been disparate, contemporary factor analysis studies of the current version appear to corroborate the nine-factor structure. Further to this, research has highlighted the importance of the cultural context on leadership styles and behaviours, this has been acknowledged in the manual of the MLQ-5X which outlines international normative data for interpretation of the outcomes of the measure. Consequently, the MLQ prevails as the most utilised measure of leadership styles within research and organisational practice, with alternative measures having a limited body evidence in comparison.

This concludes the review of leadership theories and leadership style literature which were born out of these. The following sections focus on both the theory and research of intrapersonal variables that have been proposed as relevant in the context of leadership. More specifically, leadership self-efficacy, leadership self-identity, and motivation to lead.

Self-Efficacy and Leadership

Self-efficacy was originally defined by as:

> "beliefs in one's capabilities to organize and execute courses of action require in managing prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves, and act"
>
> (Bandura, 1997, p.2).

Further to this definition, Bandura (1997) posited that self-efficacy is the most pervasive of the mechanisms of agency and provides a foundation for all other facets of agency to operate.

Historically, the concepts of self-efficacy and self-confidence have been used interchangeably, however drawing distinctions between these is important as they

are different constructs which differ in terms of composition, definition, theoretical support, practical application (Cramer, Neal, & Brodsky, 2009). Although they are closely associated, self-efficacy beliefs have been described as more focused in terms of context, for example work, and task-specific, for example leadership (Carleton, Barling, & Trivisonno, 2018). The main differences in self-efficacy and self-confidence are summarised in Table 2, adapted from Cramer, Neal, and Brodsky (2009).

Table 2. *Differences in Self-Efficacy and Self-Confidence Constructs.*

Factor	Self-Efficacy	Self-Confidence
Definition	Affirmation of ability and strength of belief	Only degree of certainty in outcome
Components	Behavioural, cognitive, and affective	Cognitive and affective
Target	Specific behaviours prior to action	Judgements resulting from action
Theoretical Basis	Social-Cognitive and Self-Efficacy theories	Fragmented; viewed as a general construct
Utility	Belief system acting as an agent of change; can be a target of intervention	Construct results from intervention

Note. Adapted from "Self-efficacy and confidence: Theoretical distinctions and implications for trial consultation", by Cramer, R. J., Neal, T. M. S., & Brodsky, S. L., 2009, *Consulting Psychology Journal: Practice and Research, 61*, p. 323.

Self-efficacy as a theoretical construct is embedded in the empirically supported and influential social cognitive theory (Bandura, 1977, 1986), which posits that human learning occurs in a social context through dynamic interaction of the person (cognitions and personal factors), environment, and behaviour. Bandura (1993) postulated that self-efficacy is a determinant of thoughts, feelings, and behaviours. In support of the notion that self-efficacy is a standalone construct which impacts behavioural outcomes an empirical study by Judge et al. (2007) who

compared self-efficacy and the five-factor model personality traits in predicting task performance. The authors found self-efficacy was the most strongly associated with task performance when compared to the five-factor model traits. This research poses the question as to whether self-efficacy is itself a trait. However, Bandura's (1977) original perspective proposed that self-efficacy is both a context and task-specific belief system.

Since this time, the concept of self-efficacy has been applied to leadership and been defined in this context as:

> "leaders' beliefs in their perceived capabilities to organise the positive psychological capabilities, motivation, means, collective resources, and courses of action required to attain effective, sustainable performance across their various leadership roles, demands, and contexts"
>
> (Hannah, Avolio, Luthans, & Harms, 2008, p.2).

This definition emerged from earlier research which proposed that higher levels of self-efficacy provided the drive and internal guidance to pursue challenging tasks and opportunities successfully (Carver & Scheier, 1998; Lord & Brown, 2004, Mischel & Shoda, 1998). The concept of 'leadership efficacy' is comparatively limited in the wider leadership literature, despite the increasing demands on leaders to continually meet complex challenges and possess the required agency to positively influence their followers (Hannah, Avolio, Luthans, & Harms, 2008). The literature and measures that exist in this area are often limited due to the usage of the concepts self-efficacy and self-confidence interchangeably.

A recent review of leadership efficacy summarised the findings from twenty empirical studies in this area (Hannah, Avolio, Luthans, & Harms, 2008). The review found that leadership efficacy had capacity to predict a number of work

outcomes including performance ratings from peers and superiors (Chemers, Waston, & May, 2000; Luthans & Peterson, 2002; Robertson & Sadri, 1993), motivation to lead (Chan & Drasgow, 2001), organisation performance (Wood & Bandura, 1989). However, caution should be exercised when drawing conclusions from these collective studies as the majority utilised either university student or military samples which limits the generalisability of the findings to diverse settings and contexts.

A further limitation highlighted by Hannah, Avolio, Luthans, and Harms (2008) is the tendency for included studies to view and measure leadership self-efficacy as a single construct relating to an individual's self-beliefs. In contrast to earlier research which has shown that other means in an individual's environment can enhance or deter their leadership, and that 'means-efficacy' operates alongside self-efficacy with a distinct impact on performance (Eden, Ganzach, Granat-Flomin, & Zigman, 2010; Walumba, Cropanzano, & Goldman, 2011). The review's authors concluded that existing leadership self-efficacy research fails to recognise the social context and proposed that it would be better measured as a multi-factor construct similar to leadership styles and the MLQ (Hannah, Avolio, Luthans, & Harms, 2008).

Expanding on this multi-factor construct recommendation Hannah, Avolio, Walumbwa and Chan (2012) proposed Leader Self and Means Efficacy (LSME) as a multi-component approach. LSME is conceptualised as a leader's level of perceived capability to self-regulate their thoughts and motivation, draw from means in their environment, and act successfully across a span of leader challenges and tasks in their current context recommendation (Hannah, Avolio, Walumbwa, & Chan, 2012). The authors aimed to examine the psychometric properties of LSME in five diverse

samples including the predictive validity of LSME by establishing its relationship with three outcomes: leader performance, leadership style, and motivation to lead. They found LSME to be comprised of three independent dimensions but that converge to create the construct: leader action self-efficacy, leader self-regulation efficacy, and leader means efficacy (Hannah, Avolio, Walumbwa, & Chan, 2012). The research also established in a sample of 63 military personnel that LSME predicted the motivation to lead (affective-identity subscale), leadership style (contingent reward transactional and transformational subscales) and performance.

This pioneering research underpins the later named Leader Efficacy Questionnaire (LEQ) which is a multi-construct measure of LSME (Hannah & Avolio, 2013). The LEQ requires contextualised responses about an individual's capabilities to lead and it can therefore be used across variety of differing contexts. The authors highlight the need for research utilising the LEQ in a variety of contexts and samples, despite this a large proportion of the existing literature focuses on student and military samples, impacting the generalisability of the findings. It would therefore be important for future research to investigate the outlined links between leadership self-efficacy and outcomes including motivation to lead and leadership styles in differing samples and contexts

Moreover, leadership self-efficacy as aforementioned has been linked to an array of work-related outcomes and contexts. A study by Courtright, Choi, and Colbert (2014) investigated the positive and negative effects of challenging job assignments on the leadership behaviour of 631 junior and mid-level managers within a large financial organisation in the US and Canada. The researchers utilised self-report measures of developmental challenge, leadership self-efficacy, engagement, emotional exhaustion, leadership style. The study observed that leaders

lower in leadership self-efficacy were more likely to experience negative effects of developmental challenge including increased emotional exhaustion and display laissez-faire leadership style behaviours (Courtright, Choi, & Colbert, 2014). In support of this link between leadership self-efficacy and leadership styles, a more recent study established that both leaders' positive affect and leadership self-efficacy beliefs predicted transformational leadership (Carleton, Barling, & Trivisonno, 2018). Taken together, these studies propose a relationship between leadership self-efficacy and leadership styles, specifically that lower scores of self-efficacy are associated with laissez-faire style whereas higher scores predict increased transformational style behaviours. However, each of these studies used a different self-report measure of leadership self-efficacy and style, thus drawing conclusions is tenuous and further research is required to elucidate the relationships and predictions further. A further limitation of the studies is the utilisation of US and Canadian samples limiting the generalisability of the findings, this is pertinent given the outlined research in the leadership styles section which established differences in leadership style behaviours in US and UK contexts.

A recent study focused on extending the earlier proposed links between transformational leadership style and leadership self-efficacy in a sample of 225 social services employees in Spain (Djourova et al., 2019). The researchers investigated the impact of four dimensions of the transformational leadership style as measured by the MLQ-5X on self-efficacy, and the mediating relationship of self-efficacy on transformational leadership and well-being. Djourova et al. (2019) established a positive relationship between self-efficacy and the inspirational motivation dimension, and contrary to their hypothesis a negative relationship with the individualized consideration dimension. These findings are in contrast to previous studies which regarded transformational leadership style as a whole core

construct and found it to be an antecedent of self-efficacy (Liu, Siu, & Shi, 2010, Nielsen et al., 2009). There is a notable limitation of the Djourova et al. (2019) study including the inclusion of varied job roles (psychologists, educators, social workers, admin, sociologists, and technicians) without consideration of the impact of differing levels of leadership responsibilities. The sample is both a limitation and benefit of the research, given that the included job roles are largely underrepresented within the research area. Overall, this study has important practical implications as within organisations transformational leadership is largely regarded as a positive style, underpinned by research which has highlights its benefits at both a personal and follower level. Further research would benefit from focusing on underrepresented job roles but in a homogenous sample to elucidate the relationships between transformational leadership as a core construct and its dimensions on self-efficacy further.

In summary, within the literature there appears to overall agreement in the definition of self-efficacy including that it is context and task specific. Despite difficulties in the definition and conceptualisation, a substantial body of research has linked self-efficacy to diverse work outcomes and contexts including leadership styles, job performance, developmental challenges, positive affect, and motivation to lead (MTL). Finally, a limited number of researchers have called for leadership self-efficacy to be viewed and measured as a multi-factor construct which recognises the social context of leadership similar to leadership styles and the popular MLQ measurement tool.

Self-Identity and Leadership

Across the world individuals spend a considerable amount of their lives engaged in work-related activities. Increased alignment with a professional identity

has been found to be a source of job satisfaction and sense of accomplishment (Pearson, Hammond, Heffernan, & Turner, 2012). Identity theory proposes that identity is defined by the different social roles and social expectations an individual holds (Gecas, 1982), and these roles provide structure and meaning to behaviours (Stryker & Burke, 2000). Therefore, leadership identity has been defined as the extent to which an individual self-defines as a leader and considers the leadership role as a central part of who they are (Day, Harrison, & Halpin, 2009). Whilst leadership self-efficacy posits the perception of an individual's ability to lead, leadership self-identity can be thought of as a way individuals think about themselves and the role of a leader (Day, Harrison, & Halpin, 2009).

A qualitative study utilising a grounded theory approach focused on the development of leader identity in 13 college students who had been previously nominated by peers for being effective relational leaders (Komives et al., 2004). The researchers concluded that positive group experiences, and a motivation to grow, learn, and make friends contributed to relational leadership identity leadership (Komives et al., 2004). However, this study is limited by several methodological issues, firstly the focus on 'effective relational leaders' which was not established using a standardised measure and relied on peer nomination. This could have been influenced by peer popularity and therefore impacts the studies internal validity. Finally, leadership identity was not clearly defined within the study, therefore future research would benefit from a reliable and valid measure of the concept.

Consequently, a published doctoral thesis by Hiller (2005) aimed to address the limitation of a reliable and valid measure of leadership self-identity. The researcher highlighted that the existing measure of leadership self-schema (Engle & Lord, 1997) does not directly assess the extent to which an individual sees

themselves as a leader. Underpinned by self-schema research Hiller (2005) proposed that individuals interpret events according to the lens of their schema, believe they are capable in that domain, and will seek out opportunities that allow them to demonstrate their self-view. Therefore, Hiller (2005) developed 12-item measure to directly assess these self-views termed leadership self-identity. In addition to validating this novel measure Hiller (2005) aimed to elucidate hypothesised links between leadership self-identity and motivation to lead, self-monitoring, and personality variables such as core self-evaluations.

In one study Hiller (2005) administered a battery of questionnaires including the leadership self-identity (LSI) measure, to a sample of 454 undergraduate students from a large university in the US. Hiller (2005) established LSI dimensions had significant positive correlations with all three dimensions of motivation to lead (MTL), self-monitoring, leadership self-schema, and core self-evaluation. In a further study within the thesis, Hiller (2005) administered the LSI amongst other measures to a sample of medical and nurse supervisors (N=44) and their staff (N=187) employed at a US hospital. The study observed higher LSI domains scores of descriptiveness in supervisors when compared to subordinates, but similar scores on LSI domains of certainty and importance of leadership self-views (Hiller, 2005). Interestingly, the research further reported that LSI was predictive of interest in leadership development in the full sample. In conclusion, this study provides the first direct assessment of LSI as a multi-dimensional construct, in addition to outlining normative data across two US large scale samples. Furthermore, the first study within the research proposes significant relationships between LSI and other individual difference factors such as MTL, self-monitoring, self-schema, and core self-evaluations. However, these warrant further investigation by future research.

Further to this work, a study utilised the LSI measure developed by Hiller (2005) in a sample of 196 German managers in formal leadership positions who had recently completed a leadership training programme (Kragt & Guenter, 2018). The researchers established that LSI mediated the relationship between reactions to leadership training and leader effectiveness, but that this indirect effect was only present for less experienced leaders (Kragt & Guenter, 2018). These findings add to the limited previous research which proposed that LSI is malleable and changes during interventions (Miscenko, Guenter, & Day, 2017). The authors propose that LSI serves as a motivational mechanism in line with previous research which has linked positive affect and motivation (Brown, 2005). However, despite significant relationships and alignment with theoretical assumptions a notable limitation of this research includes the small size of the effects. Further research examining LSI and motivation is imperative, particularly at differing levels of leadership. In spite of this limitation, the overall findings have potential practical implications if replicated for leadership training. The authors propose that training qualitatively differ in terms of content and length for senior leaders (Kragt & Guenter, 2018).

A recent conceptual paper extended these earlier findings and proposed a theoretical model for understanding the emergence of leadership style and identity specific to new leaders (London & Sherman, 2021). The model was developed following reviews of leadership theory and a call for future research to develop dynamic approaches that incorporate both intrapersonal and interpersonal processes in the context of new leadership (Day et al., 2014; DeRue & Myers, 2015). The model proposes that leadership style is derived from new leaders' beliefs about power as they become leaders, and that MTL is integral to leadership behaviours, leadership style and LSI over time, as shown in Figure 1 (London & Sherman, 2021). This theoretical model draws together earlier findings that links LSI to other

individual factors including leadership behaviours, leadership style, and MTL specifically in the context of new leaders. Future research could add to this theory and draw together previous literature through the empirical study of parts of this model, including a further focus on factors which influence MTL. It would also be important to consider the application of this model in differing cohorts of new leaders e.g., private vs public, as new leaders as a sample appears to be largely underrepresented in the leadership literature.

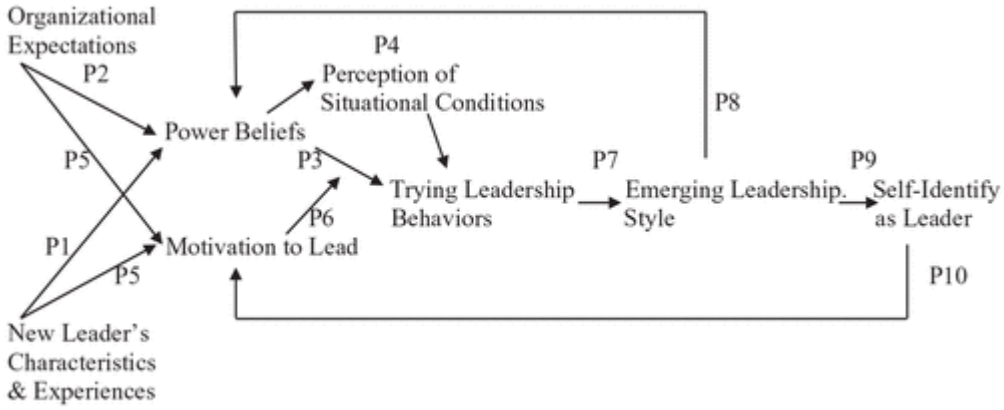


Figure 1. New Leader Development and Emerging Identity.

Note. This model was produced by London and Sherman in 2021, depicting factors of new leader development and emerging identity. From "Becoming a leader: Emergence of leadership style and identity," by M. London and G. D. Sherman, 2021, *Human Resource Development Review, 20*(3), p. 324. Reprinted with permission.

In summary, the leadership self-identity literature appears to be in its infancy relative to other similar research areas, particularly self-schema. The existing literature is limited to US populations and specific contexts, although it has utilised large sample sizes. Despite these limitations, the development of the LSI measure has been a substantial addition to the area and has enabled the reliable and valid measure of the concept. Leadership self-identity has been associated with an array of personality and individual differences as outlined, however motivation to lead appears to have the most consistent positive relationship. Further research would

benefit from exploring the relationship between LSI and MTL further in differing contexts and populations.

The contemporary dynamic theoretical model of new leader development is a welcome addition to the literature and postulates an ongoing relationship between MTL and LSI, in addition to a relationship between MTL and leadership style. Additional empirical research is crucial to extending the earlier LSI findings and investigating parts of this model, through the examination of factors that underlie MTL. This would be particularly interesting in a sample of new leaders in diverse contexts and settings. Given the foundations of leadership behaviours and style could be set during their first leadership experiences and has practical implications for the training of new leaders.

Motivation and Leadership

Motivation to Lead (MTL) is an individual difference defined as the desire to attain and fulfil leadership roles (Chan & Drasgow, 2001). The literature focused on motivation and leadership proposes that understanding MTL is key to addressing questions related to identifying individuals most attracted to leadership roles and whether MTL and effective leadership are linked (Badura et al., 2020). These potential practical applications of MTL have resulted in a greater focus on motivation in the leadership literature. Chan and Drasgow (2001) conceptualised three types of MTL:

- Affective-MTL (the degree to which a person enjoys leadership roles and sees themself as a leader).
- Social-normative MTL (the degree to which a person views leadership as a responsibility and duty).

- Noncalculative MTL (the degree to which a person views leadership opportunities as positive despite potential costs).

Subsequently, the authors developed the MTL scale to capture these three components of motivation in relation to leadership, which has been widely utilised in this research area (Chan & Drasgow, 2001). However, a recent meta-analysis of the MTL literature concluded that there is inconsistency in the measurement and reporting of MTL, with some studies assessing all three types of MTL, whereas others combine the types and produce a single score, and others measure only a subset of the types (Badura et al., 2020).

As a result, the meta-analysis (Badura et al., 2020) aimed to explicate the distinctiveness of the three MTL types and establish MTL's relationship with leadership outcomes. The authors reviewed findings from 100 studies and established that all three types of MTL positively predicted leader emergence and transformational leadership, and negatively predicted laissez-faire leadership. More specifically, Badura et al. (2020) further reported that affective-MTL positively predicted leadership effectiveness, whereas social normative-MTL had a positive relationship with transactional leadership. The review therefore concluded that the three types of MTL are better operationalised as three separate constructs and proposed that further research utilising the three separate MTL constructs as opposed to the one overarching MTL score would be beneficial.

Additionally, the meta-analysis (Badura et al., 2020) observed that gender, leader self-efficacy, personality traits, emotional stability, core self-evaluation, and emotional intelligence each exhibited statistically significant positive relationships with the three MTL types though the strengths of these relationships varied (Badura et al., 2020). As a result, the authors proposed a 'Distal-Proximal Model of

Motivation and Leadership' which outlines a subset of the distal antecedents linked to the outcomes of leader emergence and effectiveness based on available data within the meta-analysis, depicted in Figure 2. Despite this, Badura et al. (2020) highlighted that there were other potentially important variables not included in the analysis due to a lack of primary studies, and therefore emphasised the need for future research to examine a broad array of variables.

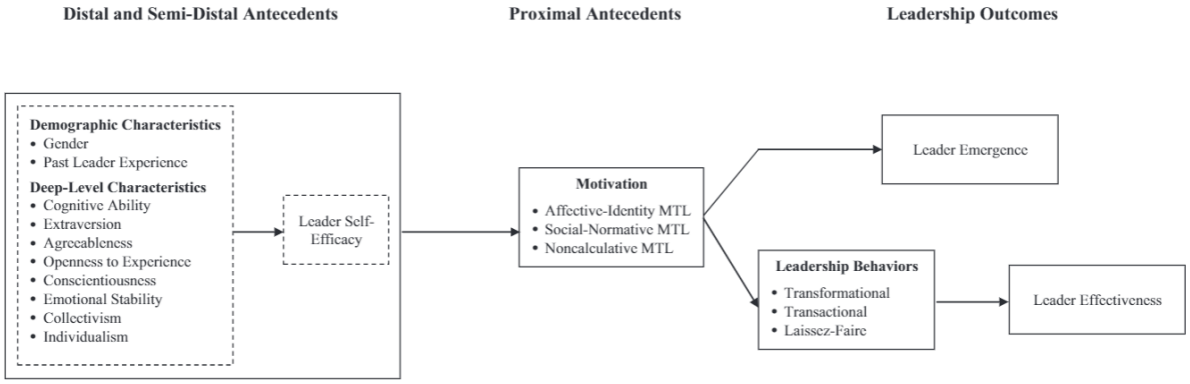


Figure 2. A Distal-Proximal Model of Motivation and Leadership.

Note. This model was produced by Badura, Grijalva, Galvin, Owens, and Joseph in 2020, depicting a subset of the distal antecedents for the leadership and leader effectiveness path analyses (based on available data). From "Motivation to lead: A meta-analysis and distal-proximal model of motivation and leadership," by K. L. Badura, E. Grijalva, B. M. Galvin, B. P. Owens and D. L. Joseph, 202, *Journal of Applied Psychology, 105*(4), p. 336. Reprinted with permission.

In support of this, a published thesis by Aronoff (2019) explored MTL, leadership self-efficacy, and leadership identity in a sample of US undergraduate students. The thesis observed significant positive correlations between all three types of MTL and leadership self-efficacy, and between overall MTL and leadership identity. Thus, extending the findings of the recent meta-analysis to report another potentially important individual difference characteristics associated with MTL: leadership identity.

In conclusion, the current meta-analytic review of the MTL literature links MTL to a number of key variables including leadership styles, leadership self-

efficacy, gender, personality traits, and emotional intelligence. The review also established methodological inconsistencies in existing primary studies and established that future studies would benefit from utilising the three types of MTL as separate constructs as opposed to one overarching MTL scores as informed by their analyses. Finally, the reviewers highlighted other important variables were not included due to an absence of diverse primary studies and emphasised the need for research in this area.

Leadership in the NHS

There exists a body of literature focused on psychologists as 'managers' which proposes the benefits of skills and attributes developed through clinical training on leadership styles in organisations (Kelly & Finkleman, 2013). Conversely, other researchers note that it takes time to learn to apply these skills in new leadership roles and that further leadership training can aid this transition for clinical psychologists (Daiches, Verduyn, & Mercer, 2006; Thorn et al., 2015). In support of this notion the NHS offers leadership training for individuals at differing levels of leadership roles in a stepped care approach. However, Edmonstone (2013) critiqued this approach for focusing on the leader as an individual and ignoring relational qualities of leadership which are key in clinical settings.

A comprehensive review of NHS leadership models is beyond the scope of this literature review. Over the past decade leadership frameworks for the NHS have been developed, to meet the needs of both managerial leadership and clinical leadership roles (Storey & Holti, 2013). The most recent is the Healthcare Leadership Model (NHS Leadership Academy, 2013), although this is not specific to clinical leadership. Whereas the earlier Clinical Leadership Competency Framework (CLCF; NHS Leadership Academy, 2011) centred on this type of

leadership, which is more specific to that of the proposed sample for the current study; newly qualified clinical psychologists.

The CLCF framework states that:

> "clinicians have an intrinsic leadership role within health and care services and have a responsibility to contribute to the effective running of the organisation in which they work and to its future direction. Therefore, the development of leadership capability as an integral part of a clinician's training will be a critical factor"
>
> (NHS Leadership Academy, 2011, p.6).

The CLCF framework outlines five domains of clinical leadership: (1) demonstrating personal qualities, (2) working with others, (3) managing services, (4) improving services, and (5) setting direction. The NHS Leadership Academy (2011) proposed that this competency framework is applicable to every clinician at all stages of their profession. However, the academy also acknowledged that this framework should be used in conjunction with the relevant professional body's guidance and policies.

Leadership in Psychology

Furthermore, the BPS developed a leadership development framework specific to clinical psychologists (CPLDF), their roles in services and at different levels of their careers from psychologists in clinical training to clinical directors (BPS, 2010). Table 3 depicts the CPLDF for practising clinical psychologists.

Table 3. *Practising clinical psychologists' leadership skills as proposed by the clinical psychology leadership development framework (CPLDF).*

Practising Clinical Psychologist
Clinical
• Lead on psychological formulation within your team. • Improve care by advice on how psychological theory can be built into care plans. • Lead on the use of outcome measures/data collection/learning from mistakes in a speciality service. • Engage with and supervise other professionals looking to use/adopt psychological ways of working.
Professional
• Lead on auditing of self and fellow professionals' work and transfer findings to the development of both improved care and of the profession. • Mentor and develop leadership skills in trainee psychologists. • Enhance the credibility of psychology in teams through engagement/conflict management and sharing stories of effective working.
Strategic
• Take a lead on a service development project that will improve quality and share across clinical networks. • Markey and communicate effective service changes.

Note. Adapted from "clinical psychology leadership development framework", by British Psychological Society, 2010, *Leicester, United Kingdom: British Psychological Society*, p. 5.

Taken together, both these clinical leadership frameworks provide a clear list of expectations for clinical psychologists within their roles and services. However, 'practising clinical psychologists' is a broad conceptualisation of clinical psychologists working across various pay bandings in the NHS including newly qualified psychologists. It would therefore seem likely that individuals are engaging with leadership and these frameworks differently depending on a number of reasons which could include being newly qualified, the type of service, availability of opportunities, gender, individual difference, and personality factors.

In support of this, a study by Channer et al. (2018) explored leadership competencies of 43 trainee and 40 qualified clinical psychologists as measured by a

self-assessment tool underpinned by the CLCF. The study included qualified clinical psychologists across the NHS pay grades and included: band 7 (7.5%), band 8a (35.1%), band 8b (22.4%), band 8c (14.9%), and band 8d/9 (19. 9%). They found no difference in self-assessed leadership competencies in trainees across the three years of DClinPsy training or across job bandings in qualified clinical psychologists (bands 7-9). Although they did report significantly greater leadership competencies in qualified clinical psychologists when compared to trainee clinical psychologists (Channer et al., 2018). The latter finding highlights the clear distinction in leadership expectations from trainee to qualified job roles, qualified clinical psychologists are expected to demonstrate a high level of leadership skills as part of their role. Although an explanation for the findings could be that trainees are required to rotate on placements every 6 months and therefore may have found it difficult to demonstrate leadership competencies in such short periods of time. Nonetheless, a notable limitation of the CLCF self-assessment tool is that it considers clinical leadership across many different professional groups and is therefore not specific to clinical psychologists' roles. Consequently, the tool may not be sensitive enough to delineate differences in leadership competencies across training and at different job bandings.

Moreover, it is also important to consider the context of the COVID-19 pandemic on DClinPsy training, transitions into NQCP roles, leadership roles, and mental health as a whole. The pandemic required innovative solutions in clinical practice for mental health service delivery, and clinical psychologists were pivotal in guiding a national response to the 'secondary crisis' of mental health during this time and beyond (Gruber et al., 2021).

The Current Context

Newly qualified clinical psychologists enter the NHS post-qualification at band 7, when compared to other mental health professionals who upon qualification typically start at band 5 or 6 (NHS Agenda for Change, 2020). NHS pay scale bandings are based on the level of knowledge, responsibility, skill, and effort for the role (NHS Agenda for Change, 2020). This entry banding level therefore recognises the extent of the doctoral training to become a clinical psychologist, in addition to the expectations particularly on leadership outlined in Table 3. In support of this, NHS CLCF framework state that development of leadership capabilities is an integral part of a clinician's training (NHS Leadership Academy, 2011).

A recent project 'Clinical Psychologists as Future Leaders' (CPFL) was set up in 2015 response to NHS Health Education England's request for a programme of leadership development for 'junior clinical psychologists' in London. The project produced a report to feedback on the first two years of the programme (CPFL, 2017). The report outlined perceived barriers to leadership activity as NHS structure/resource issues, lack of encouragement, lack of confidence, ambivalence about leadership, and access to leadership training. Further to this, the report also proposed that "attention should be paid to the cognitive and emotional barriers that impact on engagement in leadership activity" (CPFL, 2017, p. 30). However, there is no empirical study to date utilising a newly qualified psychologist sample to elucidate these cognitive and emotional barriers further, so that training can be better targeted. In general research focused on leadership activities and roles in both health and mental health professionals has developed separately to those involving other populations such as those in the private sector. Therefore, newly qualified clinical psychologists appear to be both a unique and under-researched cohort of professionals.

The training and profession of clinical psychology is largely comprised of females when compared to males. In 2021 the national gender split of percentage of accepted places on the DClinPsy training programme was 86% female and 13% male (Clearing House for Postgraduate Courses in Clinical Psychology, 2021). In addition to this, the workforce is also predominantly of white ethnicity (76%), when compared to individuals from ethnically minoritized backgrounds (24%) across the DClinPsy national centres of accepted places (Clearing House for Postgraduate Courses in Clinical Psychology, 2021). This context of the clinical psychology workforce is important as an earlier meta-analysis established differences between female and male leadership styles (Eagly, Johannesen-Schmidt, & Van Engen, 2003). The researchers concluded that female leaders were more likely to engage in included transformational and 'contingent reward' aspects of transactional leadership styles when compared to males.

Definition of 'Newly Qualified Clinical Psychologist'

The term Newly Qualified Clinical Psychologist (NQCP) is typically given to clinical psychologists immediately following the completion of the Doctorate in Clinical Psychology (DClinPsy) training programme. Although, the British Psychological Society (BPS) does not outline a clear definition of NQCP, the society does state that clinical psychologists have to be two years post-qualification before having sole supervision of trainee clinical psychologists (BPS, 2010). Therefore, the following definition of NQCP will be utilised for the purpose of this research study: 'a clinical psychologist who has been qualified for two years or less'. This definition was also used following the appraisal of the BPS's available information by a doctoral thesis focused on the experiences of NQCP's in Child and Adolescent Mental Health Services (Levinson, 2018).

Study Rationale and Summary

Quantitative research to explore individual difference variables specific to leadership in both physical health and mental health care contexts is limited. To date, research has documented relationships between motivation to lead and a number of other variables including leadership style, leadership self-efficacy, and a smaller number of studies have evidenced a relationship with leadership identity. There is also a lack of both UK-based studies despite outlined cultural and contextual differences. Similarly, newly qualified clinical psychologists who are uniquely placed in the NHS with expectations to engage in leadership activities and roles. The present study aims to address these three gaps within the literature through the exploration of how self-efficacy, self-identity, and leadership style are related to motivation to lead in newly qualified clinical psychologists in the UK. This study hopes to have wider implications for the training and development of both trainee and newly qualified clinical psychologists.

Research Questions

This study aims to address the following research questions:

- Primary research question: how are self-efficacy, self-identity, and leadership styles related to motivation to lead in Newly Qualified Clinical Psychologists?
- Secondary research question: are there any similarities or differences in the variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour?

Method

This chapter initially outlines the research design, ethical considerations, and ethical clearance for the present study. The sample selection and recruitment strategy are then summarised, before discussing the study measures, procedure, and pilot study. Finally, the chapter finished by considering the impact of COVID-19 on the study methodology.

Design

This study uses a quantitative methodological approach to address the outlined research questions. Quantitative research is focused on the collection and analysis of numerical data to understand, explain, and predict a phenomenon of interest (Gay, Mills, & Airasian, 2009). Previous literature proposes that the study variables are related but how remains unknown especially in the proposed population. To explore these a correlational research design was utilised. The predictor variables were leadership self-efficacy, leadership self-identity, and leadership style (transformational, transactional, passive/avoidant). The outcome variable was motivation to lead. The data produced from these variables were continuous and interval data.

A cross-sectional study design was used to assess the research variables at a point in time from the same cohort of participants using standardised measures. The advantages of this type of design include the ability to collect data from a large pool of participants in an efficient and relatively inexpensive way when compared to other types of research designs. However, notable limitations include the inability to establish cause and effect relationships in the study variables and analyse the variables over multiple time points. Consequently, cross-sectional research studies

typically have high external validity and lower internal validity compared to experimental study designs such as a randomised control trial (Carlson & Morrison, 2009).

Alternative research designs were considered to address the outlined research questions, but these were not deemed suitable. These included an experimental design to establish cause and effect relationships in the study variables, however difficulties arise in manipulating the predictor variables of leadership self-efficacy, leadership self-identity, and leadership style (transformational, transactional, passive/avoidant) to measure their effect on motivation to lead. As a result, the limited outlined research focused on the study variables predominantly utilised correlational designs. A longitudinal design was also considered to establish the effect of time on the study variables, however due to the length of time and large sample sizes required this was not possible for the present study. Finally, a qualitative methodological approach was considered to provide insight and descriptive accounts into NQCP's motivation to lead and the potential links to their leadership self-efficacy, leadership self-identity, and leadership style. Qualitative approaches are concerned with understanding individual experiences at a particular point in time and in a particular context (Minichiello & Kottler, 2010). However, this approach does not assume a fixed measurable reality and does not typically utilise larger numbers of participants when compared to a quantitative methodological approach.

Ethics

Ethical approval was granted by the University of Leeds School of Medicine research ethics committee on 9th February 2021. A copy of the approval letter is included in Appendix A.

Confidentiality

Confidentiality was maintained through the anonymity of participants. The survey did not collect identifiable information such as names and no free text boxes were included in the survey to reduce the opportunity for participants to share further information which could have led to their identification. For recruitment public sharing and comments sections of the advert post on social media were enabled, however the researcher did not know whether specific participants had taken part or not.

Consent

Informed consent was sought from all participants. Participants were provided with an information sheet which contained the lead investigator's contact details to discuss the study or ask any questions (page one of study). Consent was indicated if participants proceeded to the following page which contained the research measures. Participants were also made aware in the participant information sheet of their right to withdraw from the study at any time without reason. Participants were free to withdraw by exiting the survey/browser. Retrospective withdrawal was not possible due to the anonymous nature of survey responses.

Participants

68 participants completed the online survey, of these 58 identified as female (85.3%), 9 identified as male (13.2%), and 1 identified as agender (1.5%). All participants were NQCP's defined as being qualified/post-training for two years or less, as outlined in the study rationale section of the introduction. Additional demographics of participants can be found in the results section, including ethnicity,

type of service working in, main area of clinical work, and opinion on level of engagement with leadership activities or role(s).

A minimum of 63 participants were required to complete the survey based on a power calculation using G*Power software to detect an effect size f^2=0.35 (large effect), using a two-tailed (non-directional) $\alpha = .05$ at 80% power with 5 predictor variables, see Appendix B for software output. The inputted effect size was selected based on previous similar research which reported large effect sizes. Field (2013) outlines this method of setting the outlined significance and power levels, in conjunction with selecting the appropriate effect size for power calculations. Based on 2020 numbers of final year places across the 30 DClinPsy course centres around 605 trainees were expected qualify and become NQCP's during the period of data collection (BPS, 2020). The study therefore had the potential to capture those that continued into newly qualified posts up to two years post-qualification and gave a potential sample pool of 1,210 participants, without accounting for those individuals who either did not qualify or did not take up posts as clinical psychologists.

The inclusion criteria for participation in the study were:

- NQCP up to two years post-qualification
- Training was completed at a UK- based course (DClinPsy)
- Currently practicing in the UK

Recruitment

Participants were recruited on a purposive basis through social media using the UK based Clinical Psychology Group on Facebook. All members are based within the UK and are practicing within the clinical psychology profession. This is a private group, with all members required to provide their HCPC registered name and

number, or for trainees a photograph of their NHS ID badge. At the time of study recruitment, the Facebook group had 5,914 members. The contents posted in this group are private and are not accessible to anyone other than the approved members who are qualified or trainee clinical psychologists.

A brief advert (see Appendix C) was posted to this Facebook group page which contained the link to the Online Survey's questionnaire. The first page contained the participant information sheet, consent was indicated if participants proceeded to the following page which contained the research measures. This advert was posted by the lead investigator who was an existing member of the group. This was posted as a comment on the group page, which is a common recruitment strategy used by other trainees on UK training courses. The comments section of the post was enabled to allow group members to tag others in if they wished to do so. The same brief advert with survey link was also posted on the lead investigator's Twitter account.

In addition to the social media recruitment strategy, the brief advert and survey link were circulated via email to qualified clinical psychologists who had signed up to 'Introductory Supervisor Workshop (ISW)' at the University of Leeds DClinPsy. This email was circulated by a member of the DClinPsy admin team to the email addresses that individuals had provided to receive information about the training which is largely attended by NQCP's. Participants were also asked to forward the survey to any colleagues they considered eligible to complete it.

Demographic Data

Participants were asked about a number of demographic variables in order to explore the secondary research question. Information regarding their age, gender, ethnicity, type of service, area of work, and opinion on engagement with leadership

activities or role(s) were collected at the start of the survey following the participant information and consent process outlined above. Each demographic variable was selected following review of the literature to reduce bias in the primary research question and account for confounding variables. Specifically, gender was selected due to the large body of literature examining gender differences in personality and individual difference variables including in the field of leadership. Males are largely underrepresented when compared to females in clinical psychology training and post-qualification. In 2021 the national gender split of percentage of accepted places on the DClinPsy training programme was 86% female and 13% male (Clearing House for Postgraduate Courses in Clinical Psychology, 2021).

Measures

An online survey was created using the 'Online Surveys' website host, four separate measures were utilised to assess the study variables. These included the MLQ-5X, LEQ, LSI, and MTL, each measure is discussed in detail in the following sections. A summary table of the included measures, and their scales can be found in Table 4. There was a single order administration of the tests in the order the subsections are presented below.

Due to copyright restrictions of the MLQ-5X and LEQ measures used a full copy of the survey is not included. A number of sample items contained in these measures is instead included in the following section, as approved by the distributor MindGarden. However, copies of the online survey which contains demographic information, LSI measure and MTL measure, and debrief information in Appendix D. All permissions were obtained, and authors provided consent for the use of their measures in this study via email or through the distributor.

Table 4. *Proposed measures for the present study with description of measure and produced scale/subscales.*

Measure	What is being measured?	Scales and Subscales
Demographics	Gender, age, ethnicity, area of work	Continuous and categorial data
MLQ	Leadership style	3 main scales: transformational transactional, passive/avoidant 9 optional sub-scales, see table 4
LEQ	Leaders' self-efficacy and means efficacy	3 scales: leader action self-efficacy, leader self-regulation efficacy, leader means efficacy
LSI	Leadership self-identity	3 scales: descriptiveness, importance, certainty
MTL	Motivation to lead	3 scales: affective-identity MTL, social normative MTL, noncalculative MTL

Multi-Factor Leader Questionnaire (MLQ-5X)

The MLQ-5X is a measure of leadership types including passive/avoidant, transformational and transactional leadership styles (Bass & Avolio, 1995, 2000, 2004). The MLQ-5X is a self-report form which measures the self-perception of leadership behaviour and contains 36 items and takes on average 15 minutes to complete. All items are scored using a 5-point Likert scale (0 = not at all, 1= once in a while, 2 = sometimes, 3= fairly often, 4 = frequently, if not always). The overall reliability of the MLQ-5X self-form scale is acceptable with Cronbach alpha = .60-.78, across the nine factors in a European sample (Bass & Avolio, 2004). Example questions/items from the self-form of the MLQ-5X is "I talk optimistically about the

future", "I spend time teaching and coaching", and "I avoid making decisions". Raw scores are produced for the three overall scales: passive/avoidant, transformational, and transactional, in addition to individual raw scores for each of the nine factors which comprise the overall scales, these are summarised in Table 5.

Table 5. *Leadership styles measured by the MLQ-5X and comprising nine-factor structure.*

Transformational	**Transactional**	**Passive/Avoidant**
Idealised Attributes	Contingent Reward	Management by Exception (Passive)
Idealised Behaviours	Management by Exception (Active)	Laissez-Faire
Inspirational Motivation		
Intellectual Stimulation		
Individualised Consideration		

The most recent version of the MLQ-5X (Bass & Avolio, 2004) includes normative data for numerous international samples (N=8025). Across all the normative samples the authors also reported a significantly improved overall goodness of fit for the nine-factor model when compared to the three-factor, two-factor, and one-factor models (Bass & Avolio, 2004).

At present there is no supplementary empirical research investigating the factor structure in UK-specific samples. However, the current MLQ-5X manual includes international and European normative data and proposes that the current version (nine-factor model) is a valid measure of leadership style. The introduction of international and European normative data is a useful reference for future

research in addressing concerns raised in previous literature regarding differing views on leadership between cultures and contexts.

Leader Efficacy Questionnaire (LEQ)

The LEQ is a measure of both leaders' self-efficacy, the confidence an individual has in their own capabilities to lead, as well as leaders' means efficacy, the leaders' beliefs in the extent that their peers, senior leaders, resources, and other means in their environment support their leadership (Hannah & Avolio, 2013). The overall reliability of the LEQ scale is very good with Cronbach alpha = .93-.94, in a US sample (Hannah, Avolio, Walumbwa, & Chan, 2012). The LEQ is frequently used as a self-report measure. It contains 22 items and takes on average 5-10 minutes to complete. All items are scored using a 0-100 continuous scale (0 – not at all confident, 50 – moderately confident, 100 -totally confident, with indices of 10 in between these points). Example questions/items from the LEQ measure include: As a leader I can…: "energise my followers to achieve his/her best" and "rely on my organisation to provide the resources needed to be effective". Raw scores are produced for the three overall scales:

- Leader action self-efficacy – perceived capability to effectively execute various leader actions such as motivating, coaching, and inspiring followers.
- Leader self-regulation efficacy – perceived capability to (a) think through complex leadership situations, interpret their followers and the context, and generate novel and effective solutions to leadership problems and (b) the ability to motivate oneself to enact those solutions using effective leadership with followers.

- Leader means efficacy – leaders' perceptions that they can draw upon others in their environment (peers, senior leaders, followers) to enhance their leadership and that the organisation's policies and resources can be leveraged to impact their leadership.

The LEQ is trademarked and distributed by MindGarden, the authors have made the measure free for research permissions, for which the present study met the criteria, following the submission of a form.

The paper from which the LEQ was developed outlines that the 0-100 response scale (expressed as percentage) reflects efficacy strength in an individual's perceived capability to enact each aspect of leadership within the measure (Hannah, Avolio, Walumbwa, & Chan, 2012). The authors' rationale for this response format is that it was initially proposed by Bandura (1997) and then validated by Pajares, Hartley, and Valiante (2001) as a more accurate, predictive, and valid scale of self-efficacy when compared to scales of lesser response span. The LEQ developers propose that asking respondents to score using their level of confidence for each item contextualises the measure and that responses do not reflect the level of difficulty or performance required by the leader in a specific situation, but the level of difficulty they believe that they could perform at 'efficacy strength' (Hannah, Avolio, Walumbwa, & Chan, 2012). Therefore, in the context of the LEQ measure the colloquial term 'confidence' refers to the respondent's strength of belief whereas measure items are related to specific leadership capabilities or 'leadership efficacy', given efficacy refers to the belief in an individual's capabilities in a specific context.

Leadership Self-Identity Measure (LSI)

The LSI is a measure of the extent to which a leader role identity is considered descriptive and important to an individual (Hiller, 2005). The overall

reliability of the LSI scale is very good with Cronbach alpha = .83-.92, in a US sample (Hiller, 2005). The LSI is a self-report measure which contains 12 items and takes on average 5 minutes to complete. All items are scored using a 7-point Likert scale (1 = not at all, 7 = extremely). Example items include the same 4 statements "1. I am a leader, 2. I see myself as a leader, 3. If I have to describe myself to others, I would include the word leader, 4. I prefer being seen by others as a leader", across three separate scales (descriptiveness, importance, and certainty) with differing questions and instructions for scoring, see Appendix D for a copy of the measure. An overall raw score (the mean of the three scales) is produced in addition to individual raw scores for each of the three scales. This measure is free to use.

Motivation to Lead (MTL)

The MTL is a measure of individual differences which make an individual motivated to lead (Chan & Drasgow, 2001). The overall reliability of the MTL scale is very good with Cronbach alpha = .75-.91, in a US sample (Chan & Drasgow, 2001). The MTL is a self-report measure which contains 27 items across three scales (affective-identity MTL, social normative MTL, and noncalculative MTL) and takes on average 10 minutes to complete. All items are scored using a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree, 5 = strongly agree). Example items include "most of the time, I prefer being a leader rather than a follower when working in a group" and "I am the type of person who is not interested to lead others". An overall raw score (the mean of the three scales after reverse scoring) is produced in addition to individual raw scores for each of the three scales. The lead investigator has been granted permission to use the MTL by the authors for the purpose of this thesis, see Appendix E. A copy of the MTL measure and scoring instructions can be found in Appendix D.

Procedure

The recruitment advert (see Appendix C) was circulated on social media and via email to qualified clinical psychologists who had signed up to attend a new supervisory workshop at the University of Leeds. The advert contained brief information about the study including the inclusion criteria and the survey link, recruitment commenced in January 2022 and stopped in August 2022.

The survey was hosted using the Online Surveys platform and the first page contained the participant information sheet which outlined the purpose of the study, what to expect, and research privacy information. Consent was indicated if participants proceeded to the following page which contained the research measures. Following this, participants were presented with the following pages in the same order: demographic information (age, gender, ethnicity, service type, area of work, opinion on current leadership engagement), MLQ-5X self-form, LEQ, LSI, and finally the MTL. The last page of the survey contained a short debrief statement and a reminder of the lead investigators contact information. There was no incentive offered for completion of the research and on average it took 30 to 35 minutes to complete.

Pilot Study

Four participants were invited to take part in the pilot study to provide feedback on the wording of questions/scales and how measures were presented on the platform. All participants were purposefully contacted via email and had been qualified clinical psychologists for longer than two years, and therefore were not the study sample. Pilot participants followed the same procedure outlined above, however only a sample of questions (3 items) from the MLQ-5X and LEQ were used due to licensing conditions. All participant responses were anonymous.

Three participants completed the pilot study and provided feedback. The following feedback was used to revise the main research survey and included:

- Reworded the demographic question ‘which type of service do you currently work in?’ to include an example for participants who have split posts and therefore work across more than one service.
- Revised and added answer options to the demographic question ‘what is your current area of clinical work?’ to differentiate inpatient and psychical health services and representation of services across the lifespan.
- One participant recommended the addition of examples of leadership activities to the demographic question ‘in your opinion are you engaging in leadership activities or role(s)?’ Two participants did not feedback that this would be helpful and therefore following discussions in supervision this was not added to ensure participants were reflecting on their own perceptions of leadership as opposed to a prescriptive list of examples.

COVID-19 Impact

Recruitment to the study commenced in January 2022 after the peak of the COVID-19 pandemic and therefore may have impacted the time at which participants had available to complete this study. The purpose of this study is not to assess the impact of the pandemic on leadership for NQCP’s, however it is important to note the context during which participants were asked to reflect on their self-concept and leadership at this time of crisis and threat. The possible implications of this will be further considered in the discussion chapter.

Results

This chapter presents the study findings and starts by outlining the two research questions. The data extraction and data cleaning procedures are then summarised before the data analysis plan is discussed. Descriptive statistics are outlined for the demographic characteristics including age, gender, ethnicity, service type, area of clinical work, and perceived leadership behaviour. A forced entry multiple regression was conducted which produced a Pearson's correlation matrix to explore how leadership style, leadership self-efficacy and leadership self-identity are related to motivation to lead. The regression model is then used to assess the impact of the predictor variables on motivation to lead. Finally, the chapter concludes by presenting descriptive statistics to assess any similarities or differences in the variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour. At the end of the chapter a summary of the key results can be found in Table 15.

The analysis aimed to assess the following research questions:

- Primary research question: how are self-efficacy, self-identity, and leadership styles related to motivation to lead in Newly Qualified Clinical Psychologists?
- Secondary research question: are there any similarities or differences in the variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour?

Data Extraction

On completion of recruitment all data were transferred from the Online Surveys portal to an Excel spreadsheet, from which it was then imported into IBM SPSS 27.0 software for analysis.

Data Cleaning

Data cleaning aims to prepare data for analysis by screening for incorrect and inconsistent data (Van den Broeck et al., 2005). There were no missing data and no removal of invalid data points. Free text responses to the demographic question 'what is your current main area of clinical work?' were analysed and a further 'perinatal' category was created compiling responses indicating 'perinatal' or 'infant' mental health work. It came to the attention of the researcher during data extraction that there were two scoring scales for the LSI measure in circulation. Following discussions with the measure's author (Hiller) and consideration of the normative data published. The present study's scale was transformed from a 5-point scale to a 7-point scale. A linear transformation was performed using (7-1)*(x-1)/(5-1)+1 following the IBM (2020) method for transforming different Likert scales. This converted the scores as follows: 1 – 1, 2 – 2.5, 3 – 4, 4 – 5.5, and 5 – 7.

Data Analysis

Statistical analysis of the raw data were conducted using IBM SPSS 27.0 software. The data were explored using descriptive statistics (ranges, minimum and maximum values, means, standard deviations), histograms, box plots, normal P-P plots, and estimates of skewness and kurtosis (Appendix F). This process was followed for continuous variables: leadership style scores (transformational, transactional, passive/avoidant), leadership self-efficacy score (LEQ), leadership

self-identity score (LSI), and motivation to lead score (MTL) to examine the distribution of the data. All variables were found to be normally distributed and were therefore used for inferential analysis.

Descriptive statistics outlined above were calculated for the continuous variables. Categorical variables including gender, age group, ethnicity, area of clinical work, service type, and leadership behaviours were summarised in frequencies and percentages.

To address the primary research question, a multiple regression model was used to quantify the relationship between the five predictor variables (leadership style (transformational, transactional, passive/avoidant), leadership self-efficacy, leadership self-identity) and motivation to lead (outcome variable). The raw data from these variables were continuous and interval data. Initial data checks reported no multicollinearity, and that the data met the assumptions of independence, normality, linearity, and homoscedasticity. Field (2013) outlines that the most suitable analysis for one continuous outcome variable with two or more continuous predictor variables is multiple regression. Therefore, a multiple regression analysis was used to analyse the data, with a ‘forced entry’ method of adding the five predictors into the model. A forced entry method was utilised due to the outlined previous literature which linked MTL (outcome variable) to each of the predictors in separate correlational studies. There has yet to be a study which has combined each of these into one regression model and therefore hierarchical (blockwise) entry was not appropriate as there exists no rationale for the order of entry at this time.

Finally, to explore the secondary research question and to explore any similarities or differences in the demographic variables descriptive statistics were produced for the overall sample. Due to the size of the sample and spread of

responses descriptive statistics were only produced for characteristics with a frequency count of 5 and above.

Demographic Data

A total of 68 participants completed the online survey in full. Participant withdrawal or attrition was unknown as the survey was anonymous and response submission was on the final page of the survey. The majority of participants identified as female (*N=58*), whilst 9 participants identified as male, and 1 participant identified as agender (description used by the participant). Participants' ages were recorded in age groups which ranged from 18-49 years old with the majority of participants aged between 30-34 years old (48.5%), and closely followed by 42.6% of participants who were aged between 25-29 years old. The largest proportion of participants identified their ethnicity as White British English (76.5%), followed by those who identified as White British Scottish (8.8%). Table 6 below contains an overview of participant demographics including gender, age, and ethnicity. The study used the same demographic characteristic 'labels' as the Leeds Clearing House Equal Opportunities Monitoring Data which is published yearly from applicants applying to DClinPsy training. This was primarily to enable comparisons to their national normative data.

Table 6. *Participants Identified Gender, Age, and Ethnicity Frequencies and Percentages.*

Sample Characteristics	**Frequency (*N*)**	**Percentage (%)**
Gender		
Female	58	85.3
Male	9	13.2
Agender	1	1.5
Age Group		
18-24	1	1.5
25-29	29	42.6
30-34	33	48.5
35-39	3	4.4
40-44	1	1.5
45-49	1	1.5
Ethnicity		
White British English	52	76.5
White British Scottish	6	8.8
White British Welsh	2	2.9
Other White (not specified)	3	4.4
Indian	1	1.5
Pakistani	2	2.9
White & Asian	1	1.5
Other Black (not specified)	1	1.5

In order to fulfil the study inclusion criteria all participants were considered to be NQCP's and had qualified within the 2 years prior to completing the survey. Similarly, all participants completed their DClinPsy training at a UK course and were currently practicing in the UK as per study inclusion criteria. The majority of participants who completed the survey worked within the NHS (92.6%) compared to other types of services including private sector (1.5%), third sector (2.9%), and split post (2.9%). Participants who completed the survey worked in diverse areas of clinical practice. The most common areas of clinical work were CAMHS (20.6%), Adult Mental Health (16.2%), and Adult Physical Health (14.7%). The least common areas of clinical work included Eating Disorders (2.9%), Adult Inpatient (1.5%), and Psychosis (1.5%). Table 7, Figure 3 and Figure 4 illustrate this further.

Table 7. *Participants Indicated Types of Services and Main Areas of Clinical Work.*

Service & Clinical Area	**Frequency (*N*)**	**Percentage (%)**
Type of Service		
NHS	63	92.6
Split Post	2	2.9
Third Sector	2	2.9
Private Sector	1	1.5
Area of Clinical Work		
CAMHS	14	20.6
Adult Mental Health	11	16.2
Adult Physical Health	10	14.7
Paediatrics	7	10.3
Perinatal	5	7.4
Forensics	5	7.4
Neuropsychology	5	7.4
Learning Disabilities	4	5.9
Older Adult	3	4.4
Eating Disorders	2	2.9
Adult Inpatient	1	1.5
Psychosis	1	1.5

Figure 3. Pie Chart of Participant Types of Services Worked Within.

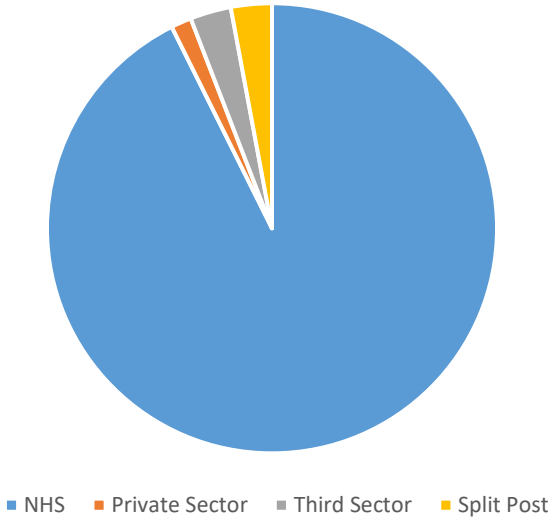
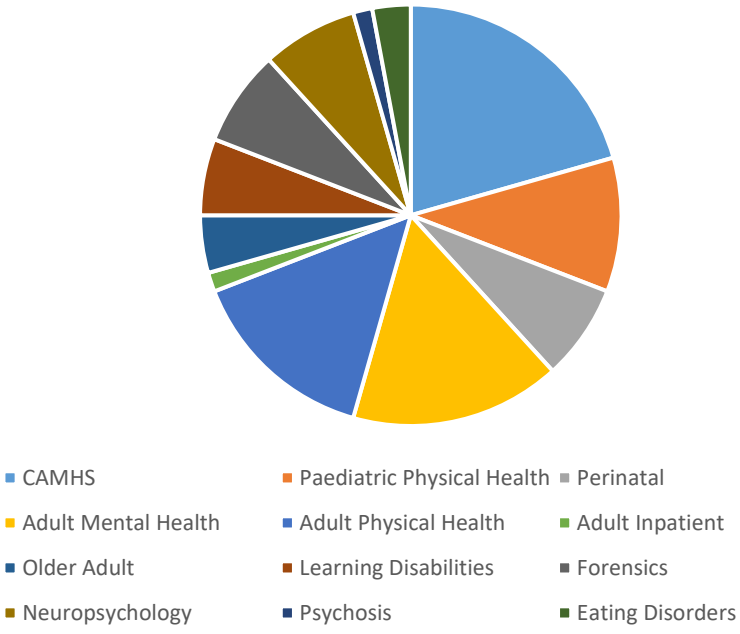


Figure 4. Pie Chart of Participants Main Areas of Clinical Work.



Comparison to Normative Data

The study sample comprised largely of female (85.3%) participants when compared to males (13.2%). This is reflective of national normative data which reported in 2021 the national gender split of percentage of accepted places on DClinPsy training programmes was 86% female and 13% male (Clearing House for

Postgraduate Courses in Clinical Psychology, 2021). Similarly, the study sample were predominantly within the 30-34 years old age group (48.5%) followed by 25-29 years old (42.6%). When compared to the national data of accepted places the 25–29 years old age group (62%) was the most frequent age at which training commenced which takes a minimum of three years to complete (Clearing House for Postgraduate Courses in Clinical Psychology, 2021). The study sample was predominantly of white ethnicity (92.6%) when compared to individuals from ethnically minoritized backgrounds (7.4%), which is comparatively limited in terms of ethnic diversity to the 2021 national data. The 2021 normative data highlighted limited ethnic diversity in the workforce with 76% of white ethnicity and 24% of individuals from ethnically minoritized backgrounds across accepted places (Clearing House for Postgraduate Courses in Clinical Psychology, 2021).

The study sample mainly contained participants who work in the NHS (92.6%). This is reflective of the type of service NQCP's typically take up employment in following completion of training. In 2020, 95.3% of those working as clinical psychologists 98% were working in the NHS or other public sector funded posts (Clearing House for Postgraduate Courses in Clinical Psychology, 2020).

The study sample contained participants from diverse areas of clinical work. Participants working in CAMHS (20.6%) were the most frequent respondents, followed by adult mental health (16.2%), adult physical health (14.7%) and paediatrics (10.3%). In comparison to 2020 data regarding first destination employment following the completion of clinical training, this shows a similar trend with 28.6% taking up employment in CAMHS, 22.4% in adult mental health, 9.2%

in adult physical health, and 2.4% in Paediatrics (Clearing House for Postgraduate Courses in Clinical Psychology, 2020).

Leadership Behaviour

Participants were asked the following two questions:

- In your opinion, in your current role are you engaging in leadership activities or role(s)?
- If possible, would you increase your leadership activities or role(s)?

The majority of participants who completed the survey selected 'Yes' (85.3%) to current engagement in leadership, compared to 14.7% who selected 'No'. Similarly, 69.1% of participants indicated 'Yes' to increasing their leadership, when compared to 14.7% who selected 'No' and 16.2% who selected that they were 'Unsure'. An overview of participants responses to the leadership questions can be found in Figure 5 and Figure 6 below.

Figure 5. Pie Chart of Participants Responses to Opinion on Current Engagement in Leadership.

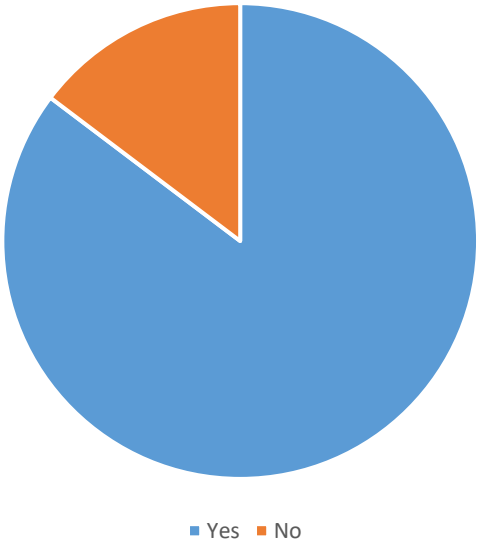
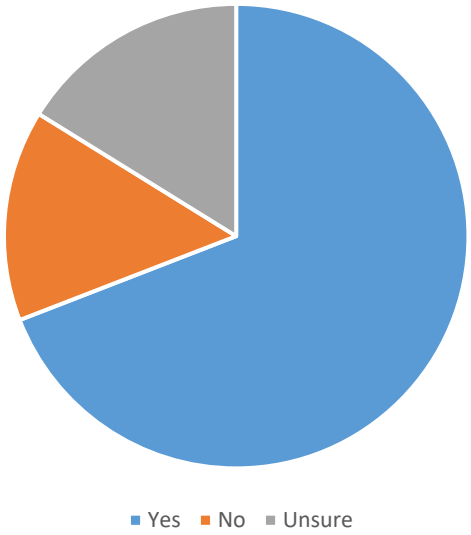


Figure 6. Pie Chart of Participants Responses to Intent to Increase Leadership.



Leadership Style

Leadership style was assessed using the MLQ measure which has 3 main scales: transformational, transactional, and passive/avoidant (see methods chapter for scale descriptions). The mean score for the transformational scale was 2.82 (*SD* = 0.38). The mean score for the transactional scale was 2.01 (*SD* = 0.56). The mean score for the passive/avoidant scale was 0.81 (*SD* = 0.34). Normative data and study data means are compared in Table 8 below. The transformational scale scores were assessed to be normally distributed using the histogram (Appendix F), and with skewness of -0.43 (*SE* = 0.29), and kurtosis of -0.09 (*SE* = 0.57). The transactional scale scores were assessed to be normally distributed using the histogram (Appendix F), and with skewness of 0.28 (*SE* = 0.29), and kurtosis of 0.19 (*SE* = 0.57). The passive/avoidant scale scores were assessed to be normally distributed using the histogram (Appendix F), and with skewness of -0.11 (*SE* = 0.29), and kurtosis of -0.38 (*SE* = 0.57).

Table 8. *Descriptive Statistics Comparing the Study Data and European Normative Sample (Self Form) from the MLQ-5X 2004 Manual.*

Leadership Style	**This Study**	**Normative Sample**
	M *(SD)*	**M *(SD)***
Transformational	2.82 *(0.38)*	2.99 *(0.54)*
Transactional	2.01 *(0.56)*	2.61 *(0.66)*
Passive/Avoidant	0.81 *(0.34)*	0.79 *(0.56)*

Leadership Self-Efficacy

Leadership self-efficacy scores were ascertained using the LEQ measure which has an overall total score and 3 optional subscales (action, means, and self-regulation). The mean total score produced was 61.04 (*SD* = 10.90). Normative data and study data means are compared in Table 9 below. The cumulative self-efficacy scores were assessed to be normally distributed using the histogram (Appendix F), with skewness of -0.07 (*SE* = 0.29), and kurtosis of -0.31 (*SE* = 0.57).

Table 9. *Descriptive Statistics Comparing the Study Data and Normative Sample from the 'Working Adult – Sample 1' in Original Paper.*

Leadership Self-Efficacy	**This Study**	**Normative Sample**
	M *(SD)*	**M *(SD)***
Cumulative Score	61.04 *(10.90)*	79.33 *(11.93)*

Leadership Self-Identity

Leadership self-identity scores were obtained using the LSI measure which has an overall total score and 3 optional subscales (descriptiveness, important, and certainty). The mean total score produced was 3.91 (*SD* = 0.98). Normative data and study data means are compared in Table 10 below. The cumulative self-identity scores were assessed to be normally distributed using the histogram (Appendix F), with skewness of -0.14 (*SE* = 0.29), and kurtosis of -0.27 (*SE* = 0.57).

Table 10. *Descriptive Statistics Comparing the Study Data and Normative Sample from the 'Student Sample' in Original Paper.*

Leadership Self-Identity	**This Study**	**Normative Sample**
	M *(SD)*	**M *(SD)***
Cumulative Score	3.91 *(0.98)*	3.93 *(0.77)*

Motivation to Lead

Leadership motivation was assessed using the MTL measure which has an overall total score and 3 optional subscales (affective identity, social normative, and noncalculative). The mean total score produced was 31.84 (*SD* = 3.88). Normative data and study data means are compared in Table 11 below. The cumulative motivation to lead scores were assessed to be normally distributed using the histogram (Appendix F), with skewness of 0.25 (*SE* = 0.29), and kurtosis of -0.30 (*SE* = 0.57).

Table 11. *Descriptive Statistics Comparing the Study Data and Normative Sample from the 'U.S. Student Sample' in Original Paper.*

Motivation to Lead	**This Study**	**Normative Sample**
	M *(SD)*	**M *(SD)***
Cumulative Score	31.84 *(3.88)*	32.08 *(5.99)*

Comparison to Normative Data

Overall, the individual variable means for the present study are similar to that of the normative samples apart from the leadership self-efficacy variable, as depicted in the tables above. The overall leadership self-efficacy scores have an 18.29 mean score difference between the present study and the normative sample, though the standard deviations are similar. This result suggests that this sample of NQCP's rated their leadership self-efficacy as lower when compared to normative means from a group of U.S. undergraduate students. However, the normative sample had a near equal split of females (53%) and males (47%) from diverse work areas.

Multiple Regression Analysis

To assess the primary research question of how self-efficacy, self-identity, and leadership style are related to motivation to lead in NQCP's a forced entry multiple regression was conducted. A forced entry method was utilised due to the outlined previous literature which linked MTL (outcome) to each of the predictors in separate correlational studies.

Correlation Matrix and Multicollinearity

The regression analysis initially produced Pearson's correlation matrix of the correlation coefficients for each of the variables which is outlined in Table 12 below. The matrix showed significant relationships between motivation to lead and

four of the predictors (transformational leadership, passive/avoidant leadership, leadership self-efficacy, and leadership self-identity). There was a significant moderate positive correlation between motivation to lead and transformational leadership, $r(68) = \mathbf{.46}$, $p < .001$. A significant weak negative relationship was found between motivation to lead and passive/avoidant leadership, $r(68) = \mathbf{-.31}$, $p = .005$. There was a significant moderate positive relationship between motivation to lead and leadership self-efficacy, $r(68) = \mathbf{.39}$ $p < .001$. A significant moderate positive correlation was found between motivation to lead and leadership self-identity, $r(68) = \mathbf{.46}$, $p < .001$. There was found to be no significant relationship between motivation to lead and transactional leadership style, $r(68) = \mathbf{.12}$, $p = .17$.

Pearson's correlation also showed six significant relationships between the predictor variables. These included a significant strong positive relationship between transformational and transactional leadership styles $r(68) = \mathbf{.52}$, $p < .001$. A significant weak negative relationship was found between transformational leadership and passive/avoidant leadership $r(68) = \mathbf{-.25}$, $p = .02$. There was a significant strong positive relationship between transformational leadership and leadership self-efficacy $r(68) = \mathbf{.50}$, $p < .001$. A significant moderate positive relationship was found between transactional leadership and leadership self-efficacy $r(68) = \mathbf{.33}$, $p = .003$. There was a significant moderate negative relationship between passive/avoidant leadership and leadership self-efficacy $r(68) = \mathbf{-.43}$, $p < .001$. Finally, a significant weak negative relationship was found between passive/avoidant leadership and leadership self-identity $r(68) = \mathbf{-.28}$, $p = .01$.

Table 12 shows the correlation coefficients ranged from .11 to .52, with the largest between the MLQ transformational and MLQ transactional scores. The collinearity statistics show no multicollinearity in the data, which includes variance

inflation factor (VIF) values of less than 10 and a greater average which is not substantially than 1, see Appendix F for SPSS output. The data met the assumptions of linearity, homoscedasticity, independence, and normality.

Table 12. *Pearson's Correlation Matrix of Regression Variables.*

	MTL Total Score	**MLQ Transformational Score**	**MLQ Transactional Score**	**MLQ Passive Score**	**LEQ Total Score**	**LSI Total Score**
MTL Total Score	1	.46**	.12	-.31*	.39**	.46**
MLQ Transformational Score	.46**	1	.52**	-.25*	.50**	.19
MLQ Transactional Score	.19	.52**	1	-.18	.33*	.14
MLQ Passive/Avoidant Score	-.31*	-.25*	-.18	1	-.43**	-.28*
LEQ Total Score	.39**	.50**	.33*	-.43**	1	.11
LSI Total Score	.46**	.19	.14	-.28*	.11	1

Note. * values significant to p= .05. ** values significant to p <.001

Regression Model

A multiple linear regression was calculated to predict Motivation to Lead (MTL) based on leadership style, leadership self-efficacy, and leadership self-identity. The results of the regression indicated that the model explained 41.9% of the variance and that the model was a significant predictor of scores on the motivation to lead measure (MTL total score), $F(5, 62) = 8.93$, p <.001. Transformational leadership style (MLQ transformational score) contributed significantly to the model ($b = 3.94$, $t(62) = 3.07$, $p = .003$. Leadership self-identity (LSI total score) also contributed significantly to the model ($b = 1.50$, $t(62) = 3.72$, p = < .001. The remainder of the predictor variables did not significantly contribute to the model see Table 13 below for a summary, and Appendix F for SPSS outputs. The sample's motivation to lead score increased by 3.94 for each one-point increase in transformational leadership score and increased by 1.50 for each one-point increase in leadership self-identity scores. The final predictive regression model was:

motivation to lead score = 13.72 + (3.94*transformational score) + (-1.44*transactional score) + (-0.49*passive/avoidant score) + (0.07*self-efficacy score) + (1.50*self-identity score).

Table 13. *Multiple Linear Regression Model of Predictors of Motivation to Lead Scores.*

	***B* (95%CI)**	**SE**	**β**	***p***
Constant	13.72 (5.90-21.57)	3.93		<.001
MLQ Transformational	3.94 (1.38-6.50)	1.28	.39	.003
MLQ Transactional	-1.44 (-3.01-0.14)	0.79	-.21	.07
MLQ Passive/Avoidant	-0.49 (-2.98-2.00)	1.25	-.04	.70
LEQ Total	0.07 (-0.01-0.16)	0.04	.21	.10
LSI Total	1.50 (0.69-2.30)	0.40	.38	<.001

Additional Analysis

To address the secondary research question of similarities or differences in the study variables in relation to demographic characteristics, descriptive statistics were produced for the overall sample. This was selected to describe the features of the sample as opposed to further inferential statistics and between-group analysis as a consequence of the skewness of the demographic variables (e.g., majority female and white British sample). Despite this being reflective of the wider NQCP cohort. An overall larger sample size would be required to ensure representativeness in subgroup analysis. The secondary research question was therefore not concerned with making inferences about a larger population at this research stage. Due to the size of the sample and spread of responses descriptive statistics were only produced for characteristics with a frequency count of more than 5.

Table 14 illustrates the distribution in demographic characteristics across the study variables including participants' perceptions of current and future leadership

engagement behaviours. This shows that males had slightly higher scores across all variables apart from the leadership self-efficacy variable. It also shows that the 30-34 age group had comparatively higher mean scores of leadership self-efficacy as a cohort. Participants who described their ethnicity as White British Scottish obtained marginally higher scores across all study variables excluding leadership self-efficacy.

Table 14 also demonstrates that participants who worked across adult areas of clinical work scored higher across all study variables when compared to children's services. Further to this, participants who worked in neuropsychology and adult mental health had the highest transformational leadership style mean score. Whereas participants who indicated they worked in forensics the highest mean score of transactional leadership, and perinatal services had the highest mean score of passive/avoidant leadership. Participants who worked in paediatrics obtained the highest mean scores of leadership self-efficacy. Respondents whose main area of clinical work was adult mental health had the highest mean score in the leadership self-identity variable, whereas those in neuropsychology services demonstrated the highest mean scores of motivation to lead.

Table 14 outlines that those participants whose opinion was that 'yes' they were engaging in leadership activities/roles scored consistently higher across all the study variables, apart from the passive/avoidant leadership style when compared to those who said 'no' to engagement. Finally, the table illustrates similarly that those participants who indicated 'yes' they would like to increase their leadership scored consistently higher across all the study variables, apart from the passive/avoidant leadership style when compared to those who indicated 'no'.

Table 14. *Descriptive Statistics of Study Variables Categorised by Participant Demographic Characteristics.*

	MLQ Transformational Score		MLQ Transactional Score		MLQ Passive/Avoidant Score		LEQ Total Score		LSI Total Score		MTL Total Score	
	Mean *(SD)*	**95% CI**	**Mean *(SD)***	**95% CI**	**Mean *(SD)***	**95% CI**	**Mean *(SD)***	**95% CI**	**Mean *(SD)***	**95% CI**	**Mean *(SD)***	**95% CI**
Demographic Characteristics												
Gender												
Female	2.79 *(0.38)*	2.69-2.89	1.97 *(0.59)*	1.82-2.13	0.81 *(0.36)*	0.71-0.90	61.27 *(11.17)*	58.34-64.21	3.78 *(0.93)*	3.54-4.02	31.41 *(3.57)*	30.47-32.35
Male	2.99 *(0.30)*	2.77-3.22	2.28 *(0.31)*	2.05-2.51	0.88 *(0.25)*	0.69-1.07	58.65 *(9.53)*	51.33-65.97	4.64 *(1.07)*	3.82-5.46	34.15 *(5.03)*	30.29-38.01
Age Group												
25-29	2.84 *(0.35)*	2.71-2.97	1.96 *(0.53)*	1.76-2.17	0.81 *(0.29)*	0.70-0.92	58.28 *(10.48)*	54.28-62.26	3.98 *(0.88)*	3.65-4.32	31.25 *(4.04)*	29.72-32.79
30-34	2.78 *(0.37)*	2.64-2.91	2.01 *(0.53)*	1.82-2.19	0.79 *(0.40)*	0.65-0.93	61.99 *(10.84)*	58.15-65.83	3.77 *(1.12)*	3.37-4.17	31.93 *(3.90)*	30.55-33.31
Ethnicity												
White British English	2.78 *(0.36)*	2.68-2.88	1.95 *(0.49)*	1.81-2.08	0.82 *(0.34)*	0.73-0.91	61.42 *(11.24)*	58.29-64.55	3.79 *(0.96)*	3.53-4.06	31.19 *(3.66)*	30.17-32.21
White British Scottish	2.86 *(0.34)*	2.50-3.22	2.46 *(0.83)*	1.59-3.33	0.92 *(0.45)*	0.45-1.39	57.35 *(10.01)*	46.84-67.86	3.82 *(1.44)*	2.31-5.33	32.89 *(5.45)*	27.17-38.61
Type of Service												
NHS	2.81 *(0.38)*	2.72-2.91	2.02 *(0.57)*	1.87-2.16	0.81 *(0.35)*	0.72-0.90	61.18 *(11.17)*	58.36-63.99	3.85 *(0.99)*	3.60-4.10	31.66 *(3.84)*	30.69-32.62

Area of Clinical Work												
CAMHS	2.79 *(0.30)*	2.61-2.96	1.75 *(0.42)*	1.51-2.00	0.74 *(0.31)*	0.56-0.91	60.43 *(12.21*	53.38-67.48	3.72 *(0.69)*	3.32-4.12	30.95 *(3.74)*	28.79-33.11
Adult Mental Health	2.90 *(0.46)*	2.59-3.21	2.30 *(0.55)*	1.93-2.67	0.98 *(0.32)*	0.76-1.20	57.34 *(13.43*	48.32-66.36	4.11 *(0.94)*	3.48-4.74	31.82 *(3.52)*	29.45-34.19
Adult Physical Health	2.80 *(0.48)*	2.45-3.14	1.99 *(0.63)*	1.54-2.44	0.94 *(0.39)*	0.66-1.22	59.23 *(9.24)*	52.62-65.84	3.32 *(0.87)*	2.70-3.95	30.77 *(3.79)*	28.06-33.48
Paediatrics	2.68 *(0.39)*	2.32-3.04	1.87 *(0.42)*	1.48-2.27	0.55 *(0.27)*	0.31-0.80	63.10 *(7.59)*	56.08-70.12	4.06 *(0.97)*	3.16-4.95	31.62 *(2.43)*	29.37-33.87
Perinatal	2.68 *(0.32)*	2.28-3.08	1.48 *(0.45)*	0.93-2.03	1.00 *(0.31)*	0.62-1.38	57.14 *(8.76)*	46.27-68.02	3.73 *(0.33)*	3.32-4.13	30.67 *(4.64)*	24.91-36.42
Forensics	2.78 *(0.33)*	2.37-3.19	2.60 *(0.70)*	1.73-3.47	0.98 *(0.35)*	0.55-1.41	59.44 *(12.25)*	44.23-74.66	3.89 *(1.09)*	2.53-5.24	30.53 *(1.98)*	28.07-32.99
Neuropsychology	2.90 *(0.52)*	2.25-3.55	2.05 *(0.26)*	1.73-2.37	0.90 *(0.10)*	0.77-1.03	62.33 *(10.24)*	49.62-75.05	3.60 *(1.31)*	1.97-5.23	32.60 *(3.91)*	27.75-37.45
Leadership Engagement												
Yes	2.88 *(0.34)*	2.79-2.97	2.06 *(0.58)*	1.90-2.21	0.80 *(0.36)*	0.70-0.89	62.08 *(10.27)*	59.38-64.79	4.00 *(1.00)*	3.74-4.27	32.16 *(3.85)*	31.14-33.17
No	2.51 *(0.45)*	2.19-2.82	1.77 *(0.39)*	1.49-2.04	0.89 *(0.20)*	0.75-1.03	54.98 *(12.95)*	45.71-64.24	3.37 *(0.72)*	2.85-3.88	30.03 *(3.72)*	27.37-32.69
Increase Leadership												
Yes	2.87 *(0.34)*	2.77-2.97	2.06 *(0.57)*	1.89-2.22	0.76 *(0.34)*	0.66-0.86	61.09 *(10.53)*	58.00-64.18	4.09 *(0.96)*	3.81-4.37	32.81 *(3.67)*	31.73-33.89
No	2.77 *(0.48)*	2.42-3.11	2.02 *(0.49)*	1.67-2.36	1.03 *(0.26)*	0.84-1.21	63.33 *(11.26)*	55.27-71.39	3.57 *(1.25)*	2.67-4.47	29.57 *(2.73)*	27.61-31.53

Results Key Findings

Table 15. *Summary Table of the Present Study's Main Findings.*

Sample Characteristics		- All participants trained and practiced in the UK - Worked in a variety of clinical areas across the lifespan - Majority of the sample were: • Female • 25-34 • White British (English/Scottish) • Worked in the NHS • Perceived themselves to be engage in leadership and desired to increase leadership activities/roles - Representative of the wider clinical psychology workforce when compared to normative data
Primary Research Question	**Leadership Predictor Variables**	- Leadership style: participants were engaging most with transformational leadership style. - Leadership self-efficacy: sample had lower ratings of self-efficacy by 18 points as compared to normative sample. - Leadership self-identity: scores were similar between study and normative sample.
	Leadership Outcome Variable	- Motivation to lead: scores were similar between study and normative sample.
	Inter-relationships	- Significant positive relationships between motivation to lead and three of the predictors: transformational leadership style, leadership self-efficacy, and leadership self-identity. - Significant negative relationship between motivation to lead and passive/avoidant leadership style. - No significant relationship between transactional leadership style and motivation to lead. - Predictor variables were significant predictors of motivation to lead scores and explained **41.9%** of the variance. - Only transformational leadership style and leadership self-identity significantly contributed to the model.

Secondary Research Question	**Age**	- Higher leadership self-efficacy in 30-34 age group.
	Gender	- Males had higher scores across all variables apart from leadership self-efficacy.
	Ethnicity	- White British Scottish participants had slightly increased scores all variables apart from leadership self-efficacy.
	Service Type	- Majority of participants worked in NHS so similarities/differences could not be assessed.
	Area of Clinical Work	- Adult areas of clinical work had higher scores across all variables compared to children's services.
	Perceived Leadership Behaviour	- Participants engaging in leadership scored higher across all of the variables besides passive/avoidant leadership style. - Participants who desired to increase their leadership scored higher across all of the variables but passive/avoidant leadership style and leadership self-efficacy.

Discussion

This final chapter will initially summarise the main study findings. These findings will then be discussed in relation to previous existing literature before the strengths and limitations of the study are considered. The implications for both clinical practice and clinical training will be discussed, before focusing on suggestions for future research. Finally, an overall conclusion will be presented.

Summary of Main Findings

The overall aim of this thesis was to address the main three gaps within the literature through the exploration of how self-efficacy, self-identity, and leadership style are related to motivation to lead in NQCP's in the UK. The study also aimed to address two research questions:

- Primary research question: how are self-efficacy, self-identity, and leadership styles related to motivation to lead in Newly Qualified Clinical Psychologists?
- Secondary research question: are there any similarities or differences in the variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour?

To the author's knowledge, this study is the first to quantitatively explore the relationships and combine the leadership variables of style, self-efficacy, self-identity, and motivation to lead among NQCP's. The findings of this study suggest that transformational leadership style and leadership self-identity are associated with, and predictive of, motivation to lead. The present study findings also highlighted that NQCP's had reduced belief in their perceived capabilities to attain effective performance across their various leadership roles (lower

leadership self-efficacy), when compared to normative data. Finally, there were differences in the study variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour, though the number of participants meant statistical significance could not be established and additional analysis focused on descriptive statistics. These findings will be now discussed in the context of the existing literature outlined in the introduction chapter.

Sample Representativeness

All participants trained and practised as NQCP's in the UK. The majority of participants were female, white British, and were within the age group 25-34 years old. Participants predominantly worked in the NHS (92.6%) and worked across diverse clinical areas. The most common clinical areas were CAMHS, adult mental health, adult physical health, and paediatrics. This sample is limited in terms of ethnic and gender diversity; however, it is reflective of the clinical psychology workforce and those entering DClinPsy training which national data has documented to be predominantly female and of white ethnicity (Clearing House for Postgraduate Courses in Clinical Psychology, 2021). Training centres continue to develop strategies to address this, as previous research has found that individuals from ethnically minoritized backgrounds are less likely to be selected for training compared to their white peers (Turpin & Coleman, 2010).

The study sample was comparative to national data which show NCQP's more frequently take up employment in the NHS following completion of training (Clearing House for Postgraduate Courses in Clinical Psychology, 2020). Similarly, study participants' areas of clinical work were reflective of 2020 data which outlined a similar trend in first destination employment following the completion of training with the majority working in CAMHS settings (Clearing House for Postgraduate

Courses in Clinical Psychology, 2020). In summary, similar gender, age, ethnicity, service type, and areas of clinical work patterns were shown in the sample when compared to national data. The study results are therefore likely to be generalisable to NQCP's as a cohort. However, it is important to note that the demographics of the clinical psychology workforce as a whole are limited in terms of diversity and are not representative of the UK population. The comparative national data was obtained from the Clearing House for Postgraduate Courses in Clinical Psychology, which processes every DClinPsy application for the UK national courses and publishes application statistics.

Perceived Leadership Behaviour

The majority of participants indicated that in their opinion they were engaging in leadership activities or roles (85.3%), and most would increase these if further possible (69.1%). The BPS developed a leadership development framework specific to clinical psychologists (CPLDF), their roles in services and at different levels of their careers from psychologists in clinical training to clinical directors (BPS, 2010). The framework is outlined within the introduction chapter in Table 3. It is likely that those participants who stated that they were engaging in leadership activities or roles are engaging on some level with the clinical, professional, and strategic aspects of the framework. This includes examples such as leading on formulations, leading on audits, and taking a lead on service development.

Leadership Style

The present study established that participants on the whole engaged more with transformational leadership style behaviours when compared to transactional or passive/avoidant styles. The findings were also comparative to European normative data which showed a similar pattern of results (Bass & Avolio, 2004). Previous

doctoral qualitative research centred on clinical psychologists' experiences of leadership in the NHS which observed participants describe themselves as leading in transformational ways (Hunter, 2015). These findings together with the present study findings propose that clinical psychologists are choosing to engage with transformational leadership as opposed to other styles of leadership. In support of this, Hunter (2015) further documented examples whereby clinical psychologists spoke about 'influencing' and 'facilitating others', which both fit with the seminal operationalisation of a transformational leader as:

> "one who raises the followers' level of consciousness about the importance and value of desired outcomes and the methods of reaching those outcomes"
>
> (Burns, 1978, p. 141).

However, it is important to note that Hunter's (2015) sample of clinical psychologists were all female and had been qualified for at least a year. Hunter (2015) specified this as to purposefully avoid what they deemed to be the initial year and transitional period from trainee to NQCP. Nevertheless, the present study supports previous findings that clinical psychologists engage more with transformational leadership style behaviours.

The tendency to use transactional leadership less in the study sample could be related to where participants were practicing as it was UK specific. The most recent meta-analysis of the MLQ literature reported significant variability in reported leadership styles across 18 nations, including between European countries (Leong & Fischer, 2011). Similarly, early research proposed differences in leadership styles across a wide array of public and private organisations (Lowe, Kroeck, & Sivasubramaniam, 1996). However, the 'public' organisations were entirely samples from the military or educational settings and did not include other

types of public services such as civil service or healthcare. With this in mind, the present study sample included both a UK specific sample and mainly participants worked in the NHS, a public-sector healthcare system. The present study findings therefore add novel contribution to the research area in terms of the geography and settings. It is therefore likely that this has contributed to the observed differences in transactional leadership style behaviours when compared to the European data.

Leadership Self-Efficacy

Leadership self-efficacy scores in the present study were discrepant by 18 points, when compared to a sample of normative data (Hannah, Avolio, Walumbwa, & Chan, 2012). This suggests NQCP's have less leadership self-efficacy and therefore less belief in their leadership capabilities to organise and execute courses of action, when compared to the other working adults. It should be noted that the normative sample had a near equal split of females (53%) and males (47%) from diverse work areas. In support of this authors of the leadership self-efficacy measure and normative data previously highlighted the need for additional research in a variety of contexts and samples, as much of the existing literature focuses on student and military samples (Hannah & Avolio, 2013). The present study's findings therefore add novel contribution to the research area and suggest interesting clinical implications for both trainee and qualified clinical psychologists.

The impact of the COVID-19 pandemic is also a noteworthy consideration in relation to the present study's observed reduced levels of leadership self-efficacy in NQCP's. Participants were required to reflect on their self-concept and leadership at a time of continued crisis and threat. Interestingly, previous research findings observed that leaders lower in leadership self-efficacy were more likely to

experience negative effects of developmental challenge including increased emotional exhaustion (Courtright, Choi, & Colbert, 2014).

Leadership Self-Identity

Leadership self-identity scores in the present study were found to be similar to those observed in the outlined normative data (Hiller, 2005). The finding therefore suggests that UK NQCP's self-define themselves as leaders and consider the leadership role as central to who they are, to a similar extent as the normative sample of US undergraduate students. In contrast to the leadership style evidence base, the concurrent leadership self-identity scores suggest limited impact of nationality with similar scores across UK and US populations. Despite this, both of these are westernised nations, and it is therefore possible the extent to which and importance of self-defining as a leader is different in diverse contexts.

Motivation to Lead

Results from the present study suggest that NQCP's desire to attain and fulfil leadership roles is similar to a normative sample of US undergraduate students (Chan & Drasgow, 2001). An earlier study proposed that it could have been expected that NQCP's would have had higher levels of motivation to lead given they are fulfilling increased leadership competencies when compared to students (Channer et al., 2018). This could be due to factors such as sample size and the impact of the COVID-19 pandemic on NQCP's motivation to lead, such as service constraints and increased caseloads. Conversely, it could be that both the NQCP's and student samples represent separate cohorts of individuals who are motivated by the desire to attain leadership roles, as opposed to fulfilling these roles at that stage of their careers and studies. Previous research documented significantly greater leadership competencies in qualified clinical psychologists when compared to

trainee clinical psychologists (Channer et al., 2018). However, this study compared participants within the same profession.

In spite of this, it is important to consider the context when discussing the comparable findings. Previous research documented that NQCP's are often the only clinical psychologist in their teams/service (Levinson, 2018). This context may have impacted on their feelings of isolation and practically in terms of increased caseloads and could have therefore affected participants' abilities to reflect on their levels of motivation in relation to leadership in the present study. Further to this, it is feasible that participants who perceived non-engagement with leadership and those who did not desire to increase their leadership activities/roles negatively influenced the samples' scores across the predictors and outcome variables.

Relationships Between Leadership Style, Leadership Self-Efficacy, Leadership Self-Identity, and Motivation to Lead

The primary research question was to explore the relationships between self-efficacy, self-identity, and leadership styles in relation to motivation to lead in NQCP's. The correlational analysis illustrated significant positive relationships between Motivation to Lead (MTL) and three of the predictors: transformational leadership style, leadership self-efficacy, and leadership self-identity. Of these significant relationships the two between motivation to lead and transformational leadership style and leadership self-identity were the strongest with both exhibiting a moderate positive relationship. The present study findings highlight a trend between increased scores of transformational leadership style, leadership self-efficacy, and leadership self-identity, and increased levels of motivation to lead. The findings also suggest a decreasing trend between passive/avoidant leadership style and levels of motivation to lead. Interestingly, the correlational analysis did not find a significant relationship between transactional leadership style and motivation to lead.

The regression analysis showed leadership style (transformational, transactional, passive/avoidant), leadership self-efficacy, and leadership self-identity collectively were significant predictors of motivation to lead scores and explained 41.9% of the variance. However, the analysis found only the transformational leadership style and leadership self-identity predictor variables significantly contributed to the model. The sample's motivation to lead score increased by 3.94 for each one-point increase in transformational leadership score and increased by 1.50 for each one-point increase in leadership self-identity scores.

The present study's findings noted both a significant positive relationship between motivation to lead and transformational leadership style, and that this was a significant predictor of motivation to lead. A similar causal relationship was documented in a recent meta-analysis of over 100 studies which established that motivation to lead was positively related to and predicted transformational leadership (Badura et al., 2020). In addition to this meta-analysis of the collective subscales of the MTL accounted for 17% of the variance in transformational leadership, with the affective subscale accounting for the majority of the variance (Badura et al., 2020). However, it is important to note that the meta-analysis considered the relationship from a different direction e.g., how MTL affected leadership style as opposed to the other way around. The present study also used an overall mean MTL score as opposed to the separate subscales. Future research would benefit from both investigating the three subscales when compared to the overall score and disentangling the causative relationship between MTL and leadership style further.

Interestingly, the present study did not find a relationship between transactional leadership style and motivation to lead, and this did not contribute to

the regression model. This is similar to a previous meta-analysis which reported only the social normative subscale of MTL to have a significant positive relationship with transactional leadership, as opposed to the construct as a whole (Badura et al., 2020). Despite this, the meta-analysis reported that the collective MTL subscales accounted for 16% of the variance in transactional leadership, with the social normative subscale accounting for the majority of the variance (Badura et al., 2020). It is therefore possible that if the present study had separated motivation to lead into three separate predictors for each of the MTL subscales then this previous finding may have been replicated.

The present study found a significant negative relationship between motivation to lead and passive/avoidant leadership style. Passive/avoidant leadership style was defined as absent or avoidant leadership whereby a leader avoids setting goals and making decisions (Bass & Avolio, 1994). Similarly, Bass (1985) outlined that passive leaders do not intervene until problems are either brought to their attention or become serious to demand action. It is therefore plausible to assume that individuals who are motivated to lead are likely to not be passive in their approach towards leadership activities. Therefore, the observed decreasing relationship between passive/avoidant leadership style and motivation to lead, and the absence of the predictor significantly contributing to the model was both an encouraging and theoretically expected finding.

In support of this, previous research established a relationship between intrinsic motivation and the passive leadership style within a large organisation (Gilbert, Horsman, & Kelloway, 2016). Although motivation in the outlined study was measured utilising a different assessment and not specific to leadership the theoretical framework underpinning the measures is similar to that of the MTL.

Despite this limitation, a more recent study utilised the same measure of motivation to lead as the present study and documented that motivation to lead negatively predicted passive/avoidant leadership style (Badura et al., 2020).

Leadership self-efficacy posits the perception of an individual's ability to lead (Day, Harrison, & Halpin, 2009). In the present study leadership self-efficacy did not significantly predict motivation to lead scores. This contradicts findings in an earlier empirical review which established leadership efficacy to predict motivation to lead (Hannah, Avolio, Luthans, & Harms, 2008). However, it is important to acknowledge that the 20 studies summarised in the review utilised either university student or military samples, whereas the present study focused on NQCP's who worked within physical and mental healthcare contexts. There has also been other research which found that leadership self-efficacy to predict only one or two of the MTL subscales opposed to an overall score of MTL (Badura et al., 2020; Hannah, Avolio, Walumbwa, & Chan, 2012). Together with the present study findings this research highlights a complex relationship between leadership self-efficacy that requires additional studies in a variety of contexts and settings to draw firmer conclusions on the relationship.

Leadership self-identity was observed to be a significant predictor of motivation to lead. Previous research established that increased alignment with a professional identity has been found to be a source of job satisfaction and sense of accomplishment (Pearson, Hammond, Heffernan, & Turner, 2012). The findings suggest that the NQCP sample think of themselves as leaders and identify with the role of a leader (Day, Harrison, & Halpin, 2009). The findings support that of previous research which reported leadership self-identity to have significant positive correlations with the three dimensions of motivation to lead (Hiller, 2005).

Interestingly, Hiller (2005) also found leadership self-identity was predictive of interest in leadership development, and this could be an interesting avenue of future research.

The present study's findings centred on leadership self-identity also provide support to a recently proposed theoretical model for understanding the emergence of leadership style and identity specific to new leaders (London & Sherman, 2021). The model was developed from previous literature and suggests motivation to lead is integral to leadership behaviours, leadership style, and leadership self-identity (London & Sherman, 2021). The present study's findings offer the required additional empirical support to the models in a sample of new leaders and extends the limited evidence base focused on leadership self-identity.

Demographic Similarities and Differences in Leadership Variables

The secondary research question was to assess any similarities or differences in the variables in relation to age, gender, ethnicity, area of work, and perceived leadership behaviour. This was explored using descriptive statistics to consider patterns in the data as opposed to statistically significant differences.

Gender

The present study produced descriptive statistics to explore these and found NQCP's who identified as male had increased scores across all variables apart from leadership self-efficacy. Similarly, a contemporary meta-analysis found males had slightly increased scores across leadership self-efficacy and motivation to lead scores when compared to females, but that gender was not a significant antecedent of motivation to lead (Badura et al., 2020). However, these differences are in contrast to previous research which established that female leaders were more likely to engage in transformational leadership style behaviours and aspects of

transactional leadership when compared to males (Eagly, Johannesen-Schmidt, & Van Engen, 2003). Although the study sample was representative of the clinical psychology workforce, limited conclusions can be drawn from the finding as the study sample contained only nine males. Despite this, the outlined differences in mean scores between males and females poses interesting considerations about possible gender differences in leadership.

Age

The present study documented similarities in scores across all age groups for the predictor and outcome variables, the 30-34 age group had marginally higher scores of leadership self-efficacy. Similarly, the seminal meta-analysis of 100 independent studies established that age was not a significant antecedent of the three facets of motivation to lead (Badura et al., 2020).

Ethnicity

As the majority of NQCP participants were white British, observations from this study might not be generalisable to more ethnically diverse populations. Holding in mind this context, white British Scottish participants had somewhat higher scores across all the variables aside from leadership self-efficacy. An earlier critical review concluded that insights about the leadership experience of individuals from ethnically minoritized backgrounds is marginal in the research area (Ospina & Foldy, 2009). This diversity issue appears to have persisted in the leadership research, particularly in relation to the included study variables. There is therefore a lack of both quantitative and qualitative studies which consider the impact of ethnicity on leadership to consider the present study findings in relation to.

Clinical Area

The NCQP study sample reported working in a variety of clinical areas across the lifespan and there were a number of differences noted in the variables. Mainly, adult areas of clinical work scored higher across all variables when compared to those participants who worked in children's services. To the author's knowledge there currently exists no previous literature to compare the study findings of differences between clinical areas of psychological work, and further research focused on this would be valuable.

Perceived Leadership Behaviour

Finally, the present study asked participants their opinion on their level of leadership engagement and desire to increase their leadership activities/roles. NQCP's who stated that they were engaging in leadership in their role scored higher across all of the variables apart from passive/avoidant leadership style. Equally, participants who indicated they would increase their leadership scored higher across all of the variables apart from passive/avoidant leadership style and leadership self-efficacy. These findings suggest that participants who perceive engagement with leadership and desire to increase this are engaging more with transformational and transactional leadership styles. In addition to identifying themselves as a leader more, and increased motivation to lead when compared to participants who perceived non-engagement with leadership. This would be an interesting avenue of future research if a quantifiable measure of leadership activities/behaviours could be sourced that were relevant to the study sample.

Impact of COVID-19

The study commenced in January 2022 after the peak of the COVID-19 pandemic, however it is still important to consider any impact that this context may

have had on recruitment and responses. The study was conducted online and therefore no adaptations were required for participation. However, services employing NQCP's continued to operate within limited-service delivery models, and this may have impacted on the time which participants had available to complete this study. Due to COVID-19 restrictions the recruitment strategy solely relied on online recruitment; this may have impacted on the accessibility of the survey. Study recruitment ended in August 2022 at 68 participants following a 3-week period of no new responses. The accessibility and sample size will be discussed further in the limitations section below.

The purpose of this study was not to assess the impact of the pandemic on leadership for NQCP's, however it is important to note the context from which participants were asked to reflect on their self-concept and leadership at this time of crisis and threat. This could have negatively affected responses as services continued to operate limited-service delivery models and this has nationally resulted in increased waiting lists and caseloads. This potentially has meant NQCP's have had limited time to engage in leadership activities/roles or have been engaging in these in a different way to pre pandemic. Pivotal to this point is the impact of COVID-19 on the DClinPsy training and subsequent transition into NQCP roles. At the time of study recruitment training centres were largely still operating distance learning having commenced this at the start of covid lockdown in March 2020. NQCP's were defined as having been qualified for two years or less, and therefore study participants were likely to have trained under these circumstances. This could have impacted on their confidence, knowledge, and opinions on leadership.

Strengths and Limitations

Strengths

To the author's knowledge, this study was the first to explore and combine the leadership variables of style, self-efficacy, self-identity, and motivation to lead among NQCP's. Previous literature documented relationships between motivation to lead and a number of other variables including leadership style, leadership self-efficacy, and a smaller number of studies have evidenced a relationship with leadership identity. There was a lack of UK-based research and samples which included physical and mental health professionals. Therefore, this study contributes to the wider leadership literature.

A strength of this study included a sample reflective of the clinical psychology workforce and those entering DClinPsy training (Clearing House for Postgraduate Courses in Clinical Psychology, 2021). This ensured that although limited in terms of diversity the leadership study findings are likely to be generalisable to NQCP's as a cohort. In support of this, the sample was reflective of data for NQCP's who had completed training in terms of service type predominantly within the NHS and trends in terms of main areas of clinical work including CAMHS, adult mental health, adult physical health, and paediatrics (Clearing House for Postgraduate Courses in Clinical Psychology, 2020). This further strengthens the external validity and generalisability of the findings to other NQCP's,

A further strength was the use of an online survey, which helped maintain participant anonymity. Previous research has proposed this facilitates more honest responses (Bartell & Spyridakis, 2012). The online recruitment strategy mainly utilised social media platforms, this allowed the survey to access to a large segment

of the unique target population (Wright, 2005). Online recruitment also enabled recruitment throughout the UK and within a variety of settings and clinical areas.

An additional strength of the study was the inclusion of standardised measures to assess the leadership variables. The selected measures demonstrated good reliability and validity in diverse populations as outlined in the literature review and method chapters. The standardised measures also had normative data which allowed for comparisons with the study findings.

Limitations

This study has several limitations which are important to consider when interpreting the results. This includes those associated with recruitment and sampling. Firstly, participants were recruited primarily online through social media platforms such as adverts posted to a UK based clinical psychologist private Facebook group. Therefore, only participants that accessed this group or particular social media platforms would have been able to complete the survey. Similarly, participants were also recruited through an email list of qualified clinical psychologists who had signed up to 'Introductory Supervisor Workshop (ISW)' at the University of Leeds DClinPsy. Participants were asked to forward the email to any colleagues they felt met the inclusion criteria. The sample was therefore susceptible to self-selection bias, whereby participants who were more interested in leadership or felt they had more time available were more likely to have participated in the study.

An additional limitation is that of the sample size and sampling error. The sample consisted of 68 participants a comparatively smaller population than the 1,207 trainees who entered training across the 2018 and 2019 entry years, of which a large proportion were expected to qualify and transition into NQCP roles during the

period of data collection (Clearing House for Postgraduate Courses in Clinical Psychology, 2022). Study recruitment ended in August 2022 following a 3-week period of no new responses despite recurrent social media advertisement and follow-up emails to the workshop participant email list. Alternative recruitment strategies would benefit from being considered to increase participation amongst this population.

Furthermore, despite the total sample size exceeding the proposed minimum of 63 participants based on the power calculation outlined in the methods chapter. The calculation was set up to detect a large effect size (0.35) as per effect sizes reported in similar research studies. Researchers propose this as the most suitable method to selecting an appropriate effect size for power calculations (Field, 2013; Sullivan & Feinn, 2012). The effect size was estimated from studies which were similar but not exact in terms of variables and analysis, this could have led to an inaccurate sample size for the present study. Alternatively, effect size could have been estimated from conducting a pilot study and analysis of the results. However, this was not feasible for the timeline of this research project. The project did operate a small pilot to ensure the survey was accessible and clear for participants.

Finally, the LSI was used in the present study. This measure has two versions in circulation in terms of presenting a 5-point or 7-point Likert scale, the questions remain unchanged. The present study utilised the 5-point scale, following discussions with the author regarding the scale used for normative data the present study's scores were transformed from a 5-point to a 7-point scale. Whilst the process scores transformation is outlined in the results it is important to acknowledge the potential impact of this on the overall LSI scores and findings. Including that

participants could have selected slightly different answers if they had been presented with the 7-point scale.

Implications for Clinical Training and Practice

The findings from the present study suggest several implications for clinical training and practice. The study findings extend recent recommendations from a published DClinPsy service evaluation project that concluded that trainees were motivated to become clinical leaders but that this motivation needed to be developed through structured placement and teaching experience (Hassett, Gresswell, & Wilde, 2021). Similarly, the most recent BPS accreditation standards (2015) outlined that DClinPsy teaching should cover leadership theories and models, and their application to services. In addition, to proposing that it may be worthwhile for DClinPsy training courses to set up specialist third year leadership placements (BPS, 2015). The study findings add specific practical applications to these recommendations, as they propose that both placements which foster and teaching focused on transformational leadership and leadership self-identity are likely to have the greatest impact on trainees' motivation to lead as they transition into NQCP roles. Likewise, and more specific to NQCP's the study findings propose that leadership mentoring or leadership supervision could be useful to nurture and operationalise leadership teaching from trainee to qualified role. In support of this, previous qualitative research by Levinson (2018) established in a cohort of NQCP's that they were overwhelmed at the outset of their transitions. In addition, previous literature has documented that NQCP's are often the only clinical psychologists in their services (Levinson, 2018), and therefore mentoring and supervision with a leadership focus may help them feel more connected and less isolated.

As discussed previously the present study findings noted similar scores across all the study variables between the NQCP sample and normative data which was typically undergraduate students. It could have been expected that NQCP's would have had higher levels of leadership style, leadership self-efficacy, leadership self-identity, and motivation to lead given they are fulfilling increased leadership competencies when compared to students.

The present findings found a transformational leadership and leadership self-identity were predictive of motivation to lead in NQCP's. Interestingly, previous research has proposed that leadership self-identity particularly is malleable and changes during interventions, and therefore targeting training at this part of leadership could be beneficial (Brown, 2005; Miscenko, Guenter, & Day, 2017). These findings could help to revise the current used NHS CLCF framework for leadership development and make it more specific to the clinical psychology workforce by incorporating aspects of leadership style and leadership self-identity. In addition to this, targeted training or workshops centred on fostering transformational leadership and leadership self-identity within the first two years of becoming a NQCP have the potential to positively impact motivation to lead in light of the study findings.

Future Research

This study has explored for the first time the relationships between leadership style, leadership self-efficacy, leadership identity, and motivation to lead in a sample of NQCP's. The study found transformational leadership style and leadership self-identity to be significant predictors of motivation to lead. However, the study required participants to reflect on their self-concept and leadership following the COVID-19 pandemic and at a time where services continue to operate

in limited-service delivery models and with increased caseloads. Although the impact of the pandemic on leadership as a whole is beyond the scope of this study further replication of the study would be a useful comparison once the national context changes, particularly given that the majority of the sample worked in the NHS. This future research should aim to consider and be inclusive of wider cultures and contexts in future samples, particularly in light of recent research promoting the reduction of inequalities in staff recruitment and career progression (Kline, 2021). Similarly, further research establishing UK normative data for the study measures is imperative to the research area.

The present study implemented a cross-sectional design and therefore the data was collected at a single time point. Future research with a longitudinal design that collects data at multiple time points would be a useful additional to the research base. Particularly to assess whether the leadership variables are stable or change over time, such as in response to interventions or training.

Additional novel research using alternative methods of measuring leadership would also be beneficial in expanding the leadership research area. The majority of studies utilise either self-report or peer-report questionnaires to assess leadership variables and work performance. Similarly, a number of the existing frameworks are self-report that focus on leadership behaviour such as the CLCF are applied to clinicians at all stages and are not profession specific. They are also required to be used in conjunction with the relevant professional body's guidance and policies. Future research could add to this area in terms of developing alternative and creative ways in addition to self-report questionnaires. This could include methods such as structured interviews, journals, focus groups, or vignettes/scenarios.

As discussed in the limitations section the study has a relatively small sample size of 68 participants which was not diverse in terms of gender, age, and ethnicity. Although it has to be acknowledged that the sample was representative of the clinical psychology workforce future studies should aim to utilise larger samples. In addition to this, the present study documented relationships with the overall motivation to lead score, a future focus on the three separate facets of motivation to lead would be a useful addition in light of more recent empirical research. This future research could also consider utilising a hierarchical entry method for a regression model based on the present study's findings, which would require a larger sample.

Lastly, an interesting avenue of future research would be to utilise a larger sample and adjust for current leadership engagement in inferential models to investigate whether desire to increase leadership impacts the predictors and subsequent relationships with motivation to lead. In support of this avenue of future research, Hiller (2005) originally found leadership self-identity was predictive of interest in leadership development. These potential findings could have wide-ranging implications for clinical practice, training, and recruitment.

Conclusion

This study drew together previous literature documenting relationships between motivation to lead and a number of variables including leadership style, leadership self-efficacy, and leadership self-identity. Prior to this study there was both a lack of both UK-based studies despite outlined cultural and contextual differences, and within newly qualified clinical psychologists who are uniquely placed in the NHS with expectations to engage in leadership activities and roles.

Consistent with previous research the study found significant positive relationships between motivation to lead and three of the predictors: transformational leadership style, leadership self-efficacy, and leadership self-identity. In addition to this there was a significant negative relationship between motivation to lead and passive/avoidant leadership style. However, in contrast to previous research the study did not find any significant relationship between transactional leadership style and motivation to lead. Further analysis showed leadership style (transformational, transactional, passive/avoidant), leadership self-efficacy, and leadership self-identity collectively were significant predictors of motivation to lead scores and explained 41.9% of the variance. However, the analysis found only the transformational leadership style and leadership self-identity predictor variables significantly contributed to the model. The study also found an interesting pattern of similarities and differences across the study variables in relation to demographic characteristics.

Despite methodological limitations, the findings of this study contribute to a novel area of leadership literature. The study has wider implications for the clinical training and development of both trainees and NCQP's which extend into clinical practice. It is hoped that the findings from this study offer future avenues of research that could extend these recommendations and implications further amongst the clinical psychology workforce.

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Appendices

Appendix A – Ethics Approval Email

MREC 20-036 - Ethical Review - APPROVED

You forwarded this message on Tue 09/02/2021 15:38

Kaye Beaumont on behalf of Medicine and Health Univ Ethics Review
To: Megan McTiffin
Cc: Fiona Thorne; Medicine and Health Univ Ethics Review
Tue 09/02/2021 15:36

Dear Megan

MREC 20-036 - 'How are Self-Efficacy, Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists'

NB: All approvals/comments are subject to compliance with current University of Leeds and UK Government advice regarding the Covid-19 pandemic.

I am pleased to inform you that the above research ethics application has been reviewed by the School of Medicine Research Ethics (Somrec) Committee and on behalf of the Chair, I can confirm a favourable ethical opinion based on the documentation received at date of this email.

Please retain this email as evidence of approval in your study file.

Please notify the committee if you intend to make any amendments to the original research as submitted and approved to date. This includes recruitment methodology; all changes must receive ethical approval prior to implementation. Please see https://leeds365.sharepoint.com/sites/ResearchandInnovationService/SitePages/Amendments.aspx or contact the Research Ethics Administrator for further information fmhuniethics@leeds.ac.uk if required.

Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

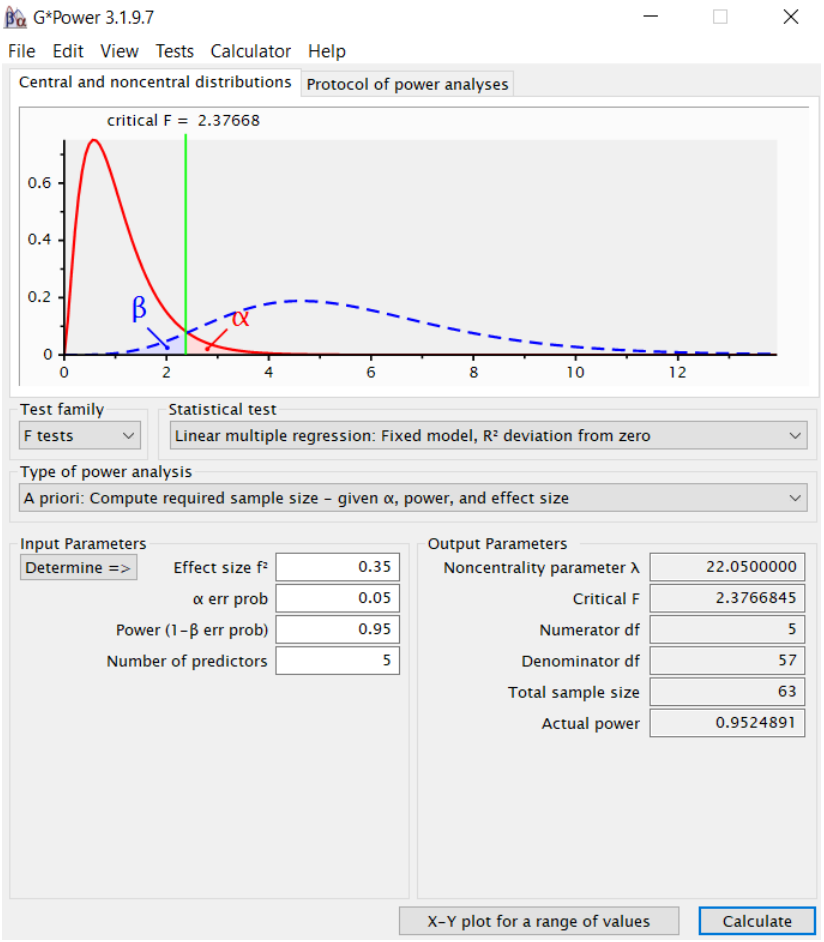
Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

I hope the study goes well.

Best wishes
Kaye Beaumont
On behalf of Dr Naomi Quinton and Dr Anthony Howard, Co-Chairs, Somrec

Appendix B – Power Calculation



Appendix C – Recruitment Advert

Appendix D – Online Survey

How are Self-Efficacy, Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists?

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Page 1: Welcome

Participant Information Sheet

How are Self-Efficacy, Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists?

Invitation to take part:

You are being invited to take part in a doctoral research project, as part of the Doctorate of Clinical Psychology training programme at the University of Leeds. Before you decide, it is important for you to understand why the project is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the project?

The purpose of this study is to explore the relationships between self-efficacy, self-identity, leadership style, and motivation to lead in Newly Qualified Clinical Psychologists.

We are interested in your personal evaluations of self-efficacy, self-identity, leadership style, and motivation to lead in relation to leadership.

Why have I been chosen?

You have responded to an advert for the project and meet the following criteria:

- Qualified Clinical Psychologists up to two-years post qualification.
- Training was completed on a UK course (DClinPsy).
- Currently practicing in the UK as a Clinical Psychologist (NHS or private practice).

Do I have to take part?

It is up to you to decide whether or not to take part. You are free to withdraw at any point during the survey by closing the window, without giving a reason and no responses will be retained. Withdrawal after the end of the survey (this is on the final screen and where responses are submitted) is not possible due to the survey being anonymous. This project does not offer anything in exchange for taking part.

What do I have to do?

Here is some important information if you decide to take part:

- You will be asked to complete an online questionnaire, which might take anywhere between 30 to 35 minutes.
- You will be asked to provide some basic demographic data which will include your age, gender, ethnicity and current area of work. You will also be asked whether you are currently engaging in leadership activities and if in the future you would be inclined to increase your leadership activities.
- You will be asked to complete a series of questions focused on each of the outlined characteristics. There are four separate measures involved.

What are the possible disadvantages and risks of taking part?

There are no expected disadvantages and risks. However, this project is likely to involve reflecting on your own personal qualities and characteristics in order to respond to the questionnaire. This may cause participants some distress, if this occurs please use this as a prompt for discussion in your clinical supervision, with a mentor or with peers.

What are the possible benefits of taking part?

There are no rewards for taking part in the research, but some participants may benefit from an opportunity to reflect on their leadership activities and personal characteristics. It is also hoped that participation will have benefits for the profession in terms of adding to the research base on clinical leadership.

Use, dissemination and storage of research data

This data collected from this project will be written-up and form a thesis submission as part of my Doctorate of Clinical Psychology at the University of Leeds. Once the thesis submission has been examined it will be published on the university repository as an e-thesis. The data may also be written-up for publication into a peer reviewed journal.

The questionnaire data produced from this project will be stored electronically on the university's secure server for 3 years.

What will happen to my personal information?

No identifiable information will be collected as part of this project, some demographic data relating to your age, gender, ethnicity, and current area of work will be collected.

Use, dissemination and storage of research data

This data collected from this project will be written-up and form a thesis submission as part of my Doctorate of Clinical Psychology at the University of Leeds. Once the thesis submission has been examined it will be published on the university repository as an e-thesis. The data may also be written-up for publication into a peer reviewed journal.

The questionnaire data produced from this project will be stored electronically on the university's secure server for 3 years.

What will happen to my personal information?

No identifiable information will be collected as part of this project, some demographic data relating to your age, gender, ethnicity, and current area of work will be collected.

Research Participant Privacy Notice

This Notice explains how and why the University uses personal data for research; what individual rights are afforded under the Data Protection Act 2018 (DPA) and who to contact with any queries or concerns.

The notice can be read in full on the following website:

https://dataprotection.leeds.ac.uk/wp-content/uploads/sites/48/2019/02/Research-Privacy-Notice.pdf

Contact for further information

My name is Megan McTiffin (ummmc@leeds.ac.uk) and I am the lead researcher undertaking this project. If you have any questions, then please do not hesitate to contact me on the above email address.

This project is supervised by Dr Fiona Thorne (F.M.Thorne@leeds.ac.uk) and Dr Jan Hughes (J.Hughes@leeds.ac.uk), who are clinical and academic tutors on the Doctorate at Leeds. Both can be contacted on the above email addresses.

Ethical approval has been sought and approved from the School of Medicine Research Ethics Committee at the University of Leeds (SoMREC application reference number: MREC20-036).

Next >

How are Self-Efficacy, Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists?

16% complete

Page 2: Demographic Questions

1. How would you describe your gender? * Required

- ○ Female
- ○ Male
- ○ Prefer to Self-Describe in Another Way

2. What age group do you belong to? * Required

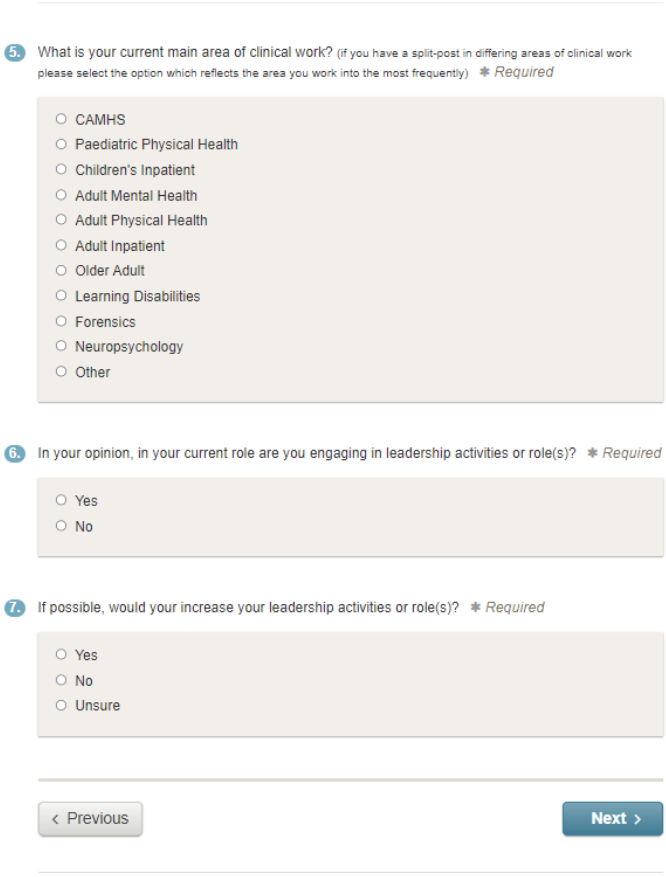
- ○ 18-24
- ○ 25-29
- ○ 30-34
- ○ 35-39
- ○ 40-44
- ○ 45-49
- ○ 50-54
- ○ 55 and over

3. What is your ethnicity? * Required

- ○ White British English
- ○ White British Scottish
- ○ White British Welsh
- ○ White Irish
- ○ Other White (not specified)
- ○ Indian
- ○ Pakistani
- ○ Bangladeshi
- ○ Other Asian (not specified)
- ○ White & Asian
- ○ White & Black African
- ○ White & Black Caribbean
- ○ Other Mixed (not specified)
- ○ African
- ○ Caribbean
- ○ Other Black (not specified)
- ○ Middle Eastern/North African
- ○ Chinese
- ○ Other Ethnicity (not specified)

4. What type of service do you currently work in? (e.g. if you work into a service more than half of your working days such as the NHS please select this option) * Required

- ○ NHS
- ○ Private Sector
- ○ Third Sector
- ○ Split Post (e.g. NHS & private sector)



5. What is your current main area of clinical work? (if you have a split-post in differing areas of clinical work please select the option which reflects the area you work into the most frequently) * *Required*

- CAMHS
- Paediatric Physical Health
- Children's Inpatient
- Adult Mental Health
- Adult Physical Health
- Adult Inpatient
- Older Adult
- Learning Disabilities
- Forensics
- Neuropsychology
- Other

6. In your opinion, in your current role are you engaging in leadership activities or role(s)? * *Required*

- Yes
- No

7. If possible, would your increase your leadership activities or role(s)? * *Required*

- Yes
- No
- Unsure

‹ Previous Next ›

MLQ-5X measure not included as outlined due to copyright restrictions

LEQ measure not included as outlined due to copyright restrictions

Page 5: Leadership Self-Identity Measure (LSI)

Please rate the extent to which the following statements describe you, using a scale from 1 *(not at all descriptive)* to 5 *(extremely descriptive)*.

75. I am a leader. * *Required*

- 1 - Not at all Descriptive
- 2 - Mostly Not Descriptive
- 3 - Occasionally Descriptive
- 4 - Mostly Descriptive
- 5 - Totally Descriptive

76. If I had to describe myself to others, I would include the word "leader". * *Required*

- 1 - Not at all Descriptive
- 2 - Mostly Not Descriptive
- 3 - Occasionally Descriptive
- 4 - Mostly Descriptive
- 5 - Totally Descriptive

77. I prefer being seen by others as a leader. * *Required*

- 1 - Not at all Descriptive
- 2 - Mostly Not Descriptive
- 3 - Occasionally Descriptive
- 4 - Mostly Descriptive
- 5 - Totally Descriptive

78. I see myself as a leader. * *Required*

- 1 - Not at all Descriptive
- 2 - Mostly Not Descriptive
- 3 - Occasionally Descriptive
- 4 - Mostly Descriptive
- 5 - Totally Descriptive

How certain are you about the ratings you gave for each statement above? Please rate from 1 *(not at all certain)* to 5 *(extremely certain)*.

79. I am a leader. * *Required*

- 1 - Totally Uncertain
- 2 - Mostly Uncertain
- 3 - Somewhat Certain
- 4 - Mostly Certain
- 5 - Extremely Certain

80. I see myself as a leader. * *Required*

- 1 - Totally Uncertain
- 2 - Mostly Uncertain
- 3 - Somewhat Certain
- 4 - Mostly Certain
- 5 - Extremely Certain

81. If I had to describe myself to others, I would include the word "leader". * *Required*

- 1 - Totally Uncertain
- 2 - Mostly Uncertain
- 3 - Somewhat Certain
- 4 - Mostly Certain
- 5 - Extremely Certain

82. I prefer being seen by others as a leader. * *Required*

- 1 - Totally Uncertain
- 2 - Mostly Uncertain
- 3 - Somewhat Certain
- 4 - Mostly Certain
- 5 - Extremely Certain

Think about your overall self-concept. How important are each of the statements to your self-identity. Answer the following questions below, from 1 *(not at all important)* to 5 *(extremely important)*.

83. I am a leader. * *Required*

- 1 - Not at all Important
- 2 - Mostly Unimportant
- 3 - Somewhat Important
- 4 - Mostly Important
- 5 - Extremely Important

84. I see myself as a leader. * *Required*

- 1 - Not at all Important
- 2 - Mostly Unimportant
- 3 - Somewhat Important
- 4 - Mostly Important
- 5 - Extremely Important

85. If I had to describe myself to others, I would include the word "leader". * *Required*

- 1 - Not at all Important
- 2 - Mostly Unimportant
- 3 - Somewhat Important
- 4 - Mostly Important
- 5 - Extremely Important

86. I prefer being seen by others as a leader. * *Required*

- 1 - Not at all Important
- 2 - Mostly Unimportant
- 3 - Somewhat Important
- 4 - Mostly Important
- 5 - Extremely Important

Page 6: Motivation to Lead Scale (MTL)

How well do the following statements describe how you feel?

Imagine a typical work situation where you are working in a group or team, and the question is raised if someone should be appointed as group leader. Assume for now that everyone in the group has roughly the same level of training, knowledge, and experience on the job. Please read each statement carefully and choose the one answer that best describes your agreement or disagreement using the scale below. There are no right or wrong answers. Please answer honestly and frankly.

Answer scale:

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree

87. I am definitely not a leader by nature. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

88. Most of the time, I prefer being a leader than a follower when working in a group. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

89. I have a tendency to take charge in most groups or teams that I work in. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

90. I am the type of person who is not interested to lead others. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

91. I believe I can contribute more to a group if I am a follower rather than a leader. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

92. I am the type of person who likes to be in charge of others. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

93. I usually want to be the leader in the groups that I work in. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

94. I am the type who would actively support a leader but prefers not to be appointed as leader. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

95. I am seldom reluctant to be the leader of a group. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

96. I would only agree to be a group leader if I know I can benefit from that role. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

97. If I agree to lead a group I would never expect any advantages or special benefits. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

98. I would want to know what's in it for me if I am going to agree to lead a group. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

99. I am only interested to lead a group if there are clear advantages for me. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

100. I have more of my own problems to worry about than to be concerned about the rest of the group. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

101. I will never agree to lead if I cannot see any benefits from accepting that role. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

102. I never expect to get more privileges if I agree to lead a group. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

103. I would agree to lead others even if there are no special rewards or benefits with that role. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

104. Leading others is a waste of ones personal time and effort. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

105. I have been taught that I should always volunteer to lead others if I can. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

106. I feel that I have a duty to lead others if I am asked. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

107. I was taught in the value of leading others. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

108. It is not right to decline leadership roles. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

109. I would never agree to lead just because others voted for me. * *Required*

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

110. It is an honour and privilege to be asked to lead. * Required

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

111. I agree to lead whenever I am asked or nominated by the other members. * Required

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

112. People should volunteer to lead rather than wait for others to ask or vote for them. * Required

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

113. It is appropriate for people to accept leadership roles or positions when they are asked. * Required

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neither Agree or Disagree
- 4 - Agree
- 5 - Strongly Agree

‹ Previous Finish ✔

Debrief and Thank you

How are Self-Efficacy, Self-Identity, and Leadership Style Related to Motivation to Lead in Newly Qualified Clinical Psychologists?

Thank you for participating in this doctoral research project, as part of the Doctorate of Clinical Psychology training programme at the University of Leeds.

Your responses have now been submitted. This means that you are now unable to withdraw any responses as these were anonymous, and the researcher has no way of identifying which responses were yours.

If participating in this project has resulted in any distress or difficult feelings then please discuss this in your clinical supervision, with a mentor, or with peers. There are no known charities or support groups for further support.

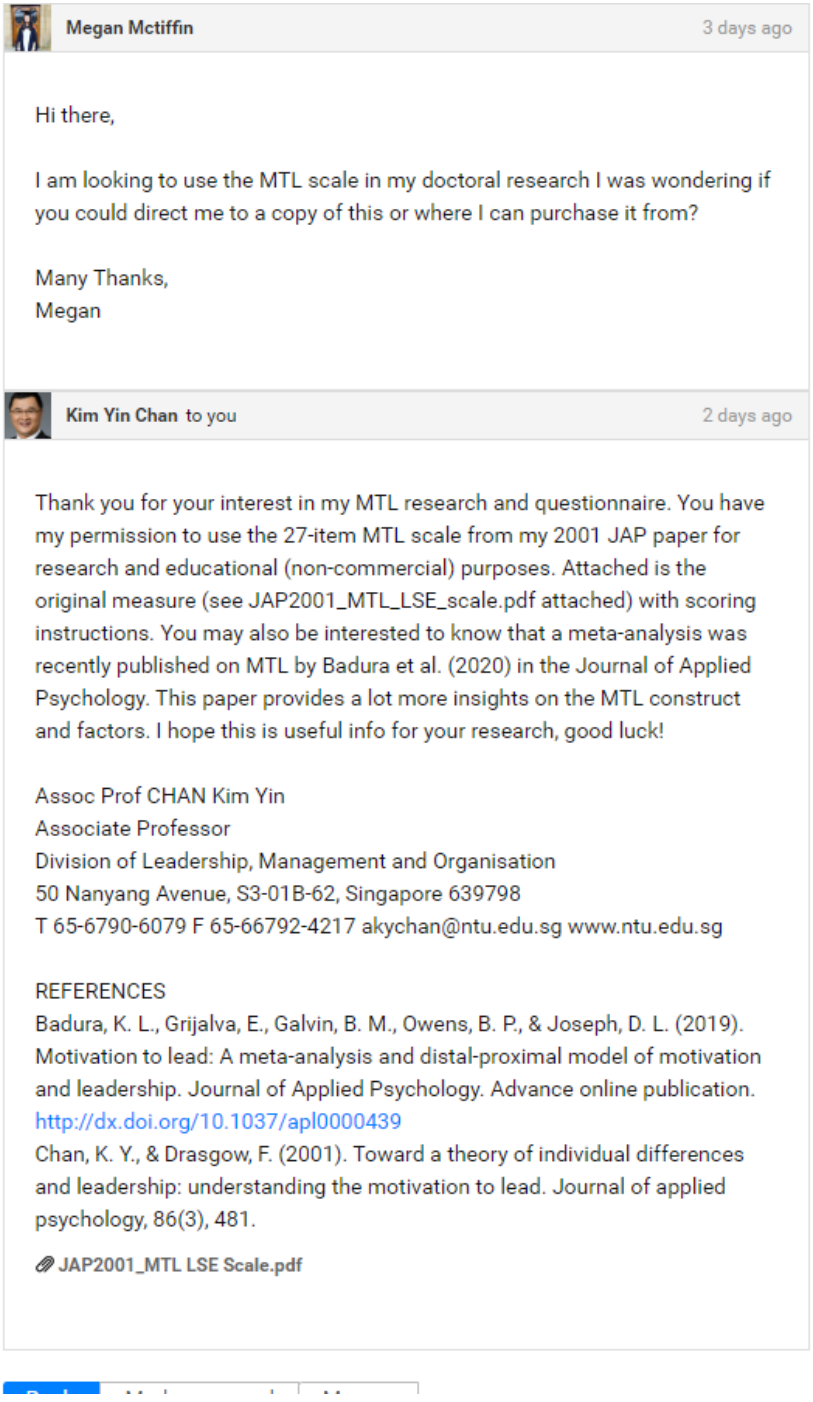
If you have any questions or queries, please do not hesitate to contact me or my supervisors on the emails below:

Megan McTiffin (ummmc@leeds.ac.uk) – Lead Researcher

Dr Fiona Thorne (F.M.Thorne@leeds.ac.uk)

Dr Jan Hughes (J.Hughes@leeds.ac.uk)

Appendix E – MTL Measure Approval



Megan Mctiffin 3 days ago

Hi there,

I am looking to use the MTL scale in my doctoral research I was wondering if you could direct me to a copy of this or where I can purchase it from?

Many Thanks,
Megan

Kim Yin Chan to you 2 days ago

Thank you for your interest in my MTL research and questionnaire. You have my permission to use the 27-item MTL scale from my 2001 JAP paper for research and educational (non-commercial) purposes. Attached is the original measure (see JAP2001_MTL_LSE_scale.pdf attached) with scoring instructions. You may also be interested to know that a meta-analysis was recently published on MTL by Badura et al. (2020) in the Journal of Applied Psychology. This paper provides a lot more insights on the MTL construct and factors. I hope this is useful info for your research, good luck!

Assoc Prof CHAN Kim Yin
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Division of Leadership, Management and Organisation
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T 65-6790-6079 F 65-66792-4217 akychan@ntu.edu.sg www.ntu.edu.sg

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Badura, K. L., Grijalva, E., Galvin, B. M., Owens, B. P., & Joseph, D. L. (2019). Motivation to lead: A meta-analysis and distal-proximal model of motivation and leadership. Journal of Applied Psychology. Advance online publication. http://dx.doi.org/10.1037/apl0000439

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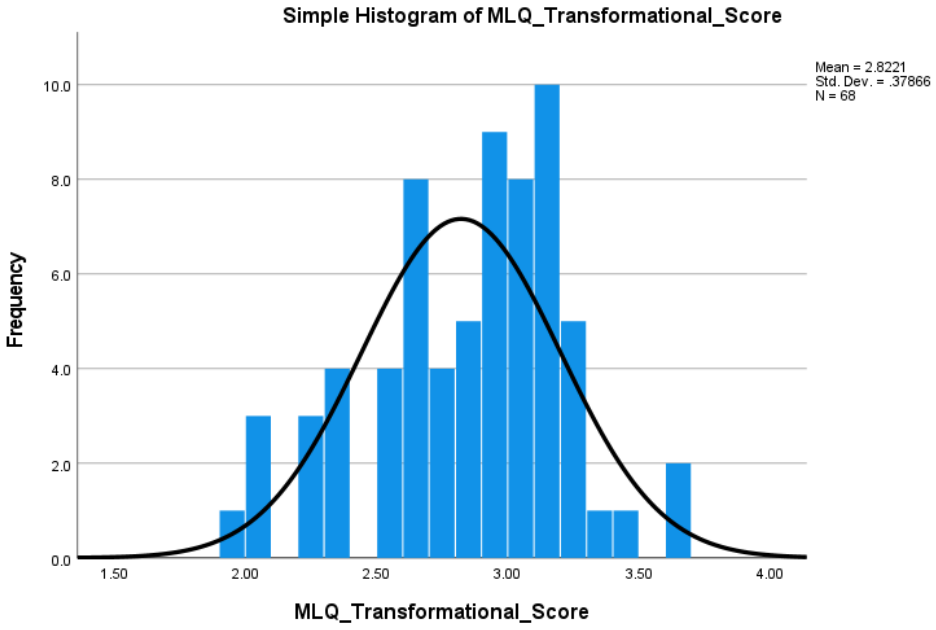
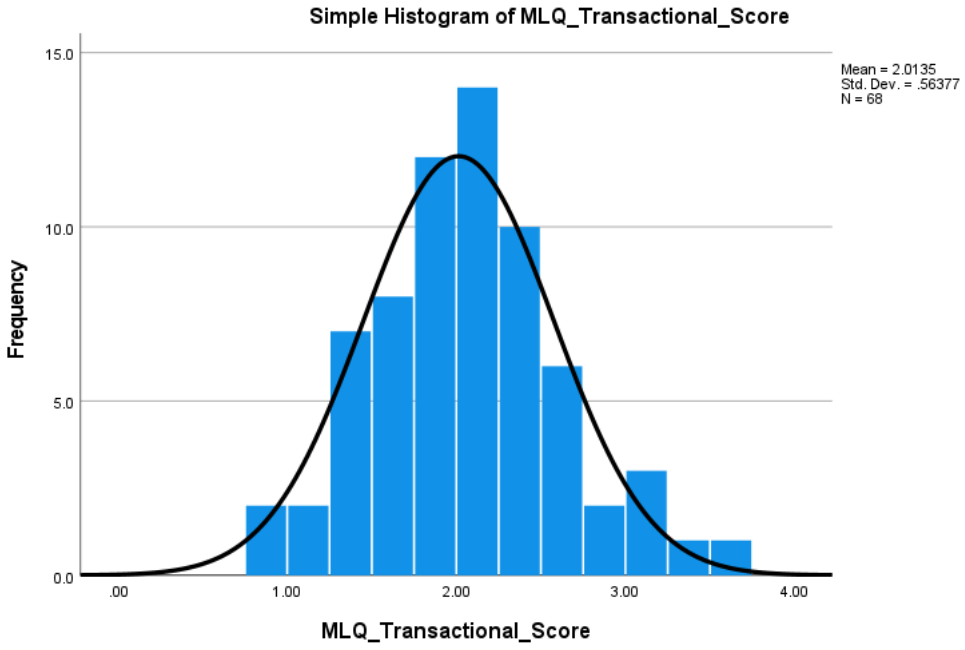
JAP2001_MTL LSE Scale.pdf

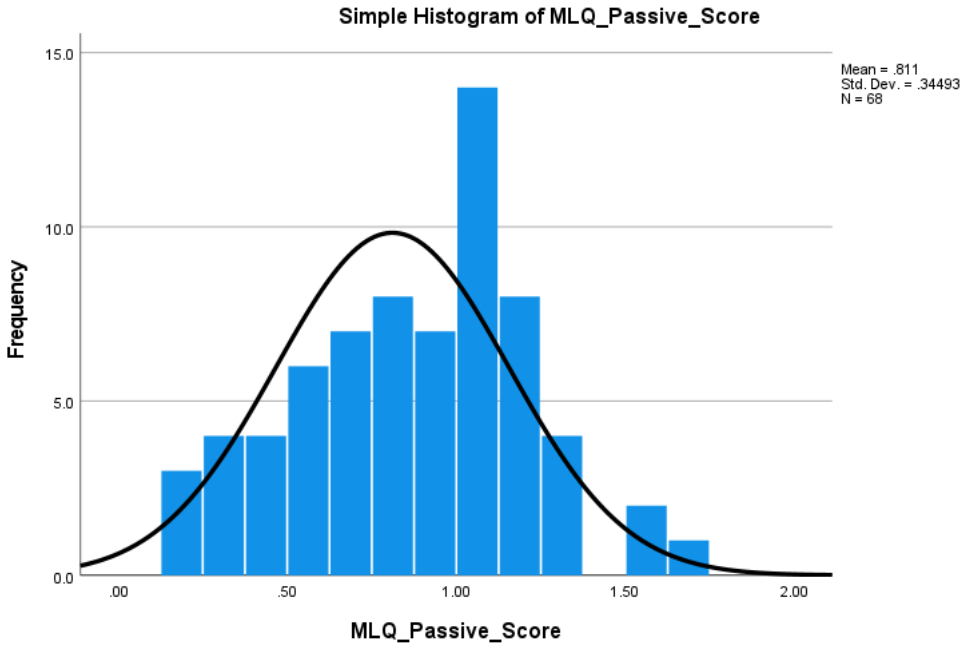
Appendix F - SPSS Data Analysis Outputs

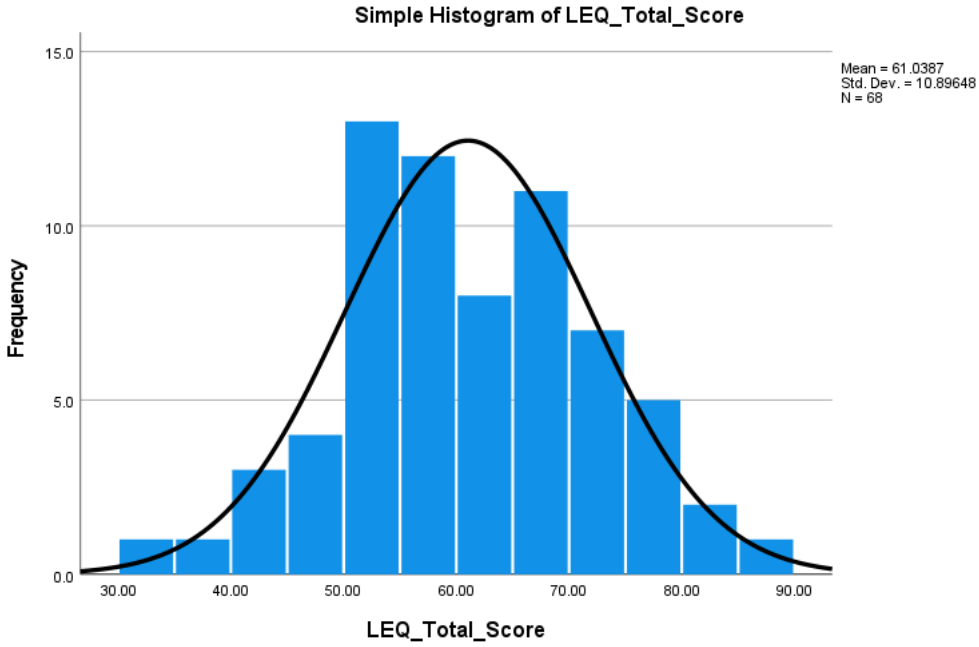
Descriptive Statistics

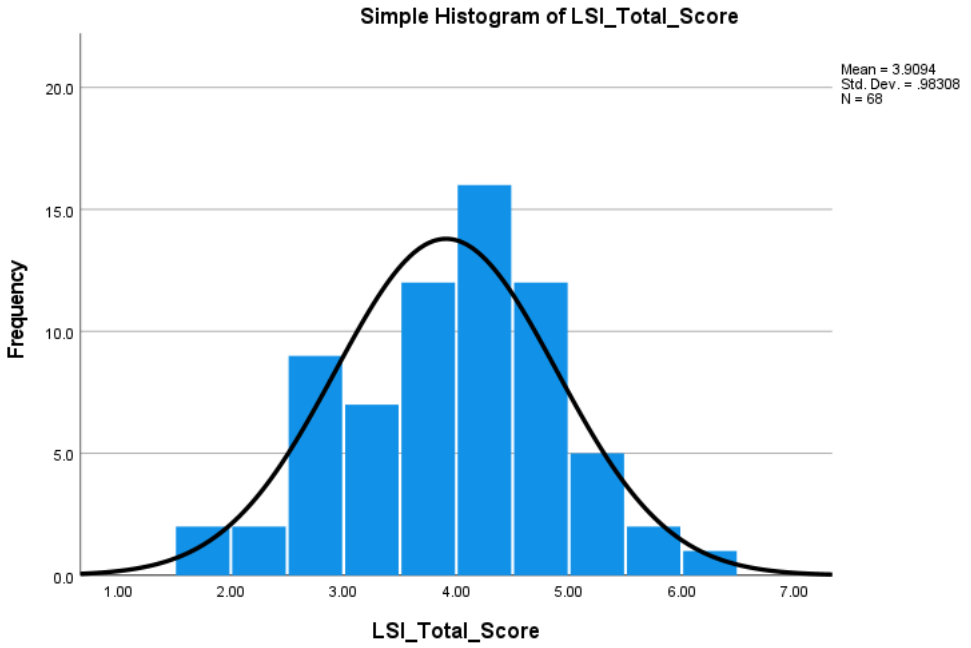
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
MLQ_Transformational_Score	68	1.70	1.95	3.65	2.8221	.04592	.37866	.143	-.434	.291	-.091	.574
MLQ_Transactional_Score	68	2.75	.75	3.50	2.0135	.06837	.56377	.318	.283	.291	.187	.574
MLQ_Passive_Score	68	1.50	.13	1.63	.8110	.04183	.34493	.119	-.112	.291	-.379	.574
LEQ_Action_Score	68	60.00	21.43	81.43	55.8232	1.53048	12.62065	159.281	-.593	.291	.362	.574
LEQ_Means_Score	68	55.72	37.14	92.86	64.4118	1.62209	13.37608	178.920	-.052	.291	-.840	.574
LEQ_SelfReg_Score	68	63.75	30.00	93.75	62.8860	1.63477	13.48067	181.728	-.239	.291	-.177	.574
LEQ_Total_Score	68	53.15	32.86	86.01	61.0387	1.32139	10.89648	118.733	-.070	.291	-.309	.574
LSI_Descriptive_Score	68	4.12	1.38	5.50	3.5543	.13679	1.12797	1.272	-.160	.291	-.867	.574
LSI_Importance_Score	68	5.63	1.00	6.63	3.8804	.16248	1.33982	1.795	-.185	.291	-.465	.574
LSI_Certainty_Score	68	4.87	2.13	7.00	4.3587	.16261	1.34088	1.798	.135	.291	-.857	.574
LSI_Total_Score	68	4.50	1.75	6.25	3.9094	.11922	.98308	.966	-.140	.291	-.270	.574
MTL_Affective_Score	68	30.00	13.00	43.00	27.8235	.87996	7.25637	52.655	.141	.291	-.882	.574
MTL_Social_Normative_Score	68	22.00	23.00	45.00	35.7500	.55803	4.60167	21.175	-.289	.291	.375	.574
MTL_Noncalculative_Score	68	21.00	23.00	44.00	31.9559	.55609	4.58562	21.028	.575	.291	.042	.574
MTL_Total_Score	68	18.00	23.67	41.67	31.8434	.47003	3.87597	15.023	.253	.291	-.299	.574
Valid N (listwise)	68											

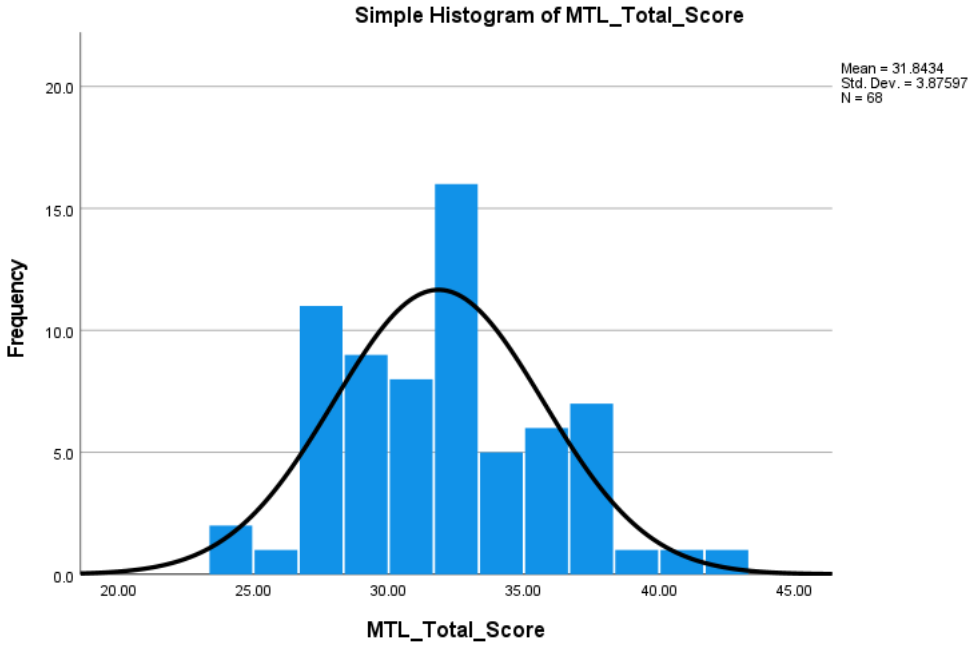

Simple Histogram of MLQ_Transformational_Score
Mean = 2.8221
Std. Dev. = .37866
N = 68
Frequency
10.0
8.0
6.0
4.0
2.0
0.0
1.50
2.00
2.50
3.00
3.50
4.00
MLQ_Transformational_Score


Simple Histogram of MLQ_Transactional_Score
Mean = 2.0135
Std. Dev. = .56377
N = 68
Frequency
15.0
10.0
5.0
0.0
.00
1.00
2.00
3.00
4.00
MLQ_Transactional_Score


Simple Histogram of MLQ_Passive_Score
Mean = .811
Std. Dev. = .34493
N = 68
Frequency
15.0
10.0
5.0
0.0
.00
.50
1.00
1.50
2.00
MLQ_Passive_Score


Simple Histogram of LEQ_Total_Score
Mean = 61.0387
Std. Dev. = 10.89648
N = 68
Frequency
15.0
10.0
5.0
0.0
30.00
40.00
50.00
60.00
70.00
80.00
90.00
LEQ_Total_Score


Simple Histogram of LSI_Total_Score
Mean = 3.9094
Std. Dev. = .98308
N = 68
Frequency
20.0
15.0
10.0
5.0
0.0
1.00
2.00
3.00
4.00
5.00
6.00
7.00
LSI_Total_Score


Simple Histogram of MTL_Total_Score
Mean = 31.8434
Std. Dev. = 3.87597
N = 68
Frequency
20.0
15.0
10.0
5.0
0.0
20.00
25.00
30.00
35.00
40.00
45.00
MTL_Total_Score

Correlations

		MTL_Total_Score	MLQ_Transformational_Score	MLQ_Transactional_Score	MLQ_Passive_Score	LEQ_Total_Score	LSI_Total_Score
Pearson Correlation	MTL_Total_Score	1.000	.460	.118	-.308	.388	.456
	MLQ_Transformational_Score	.460	1.000	.520	-.252	.502	.185
	MLQ_Transactional_Score	.118	.520	1.000	-.117	.329	.142
	MLQ_Passive_Score	-.308	-.252	-.117	1.000	-.425	-.275
	LEQ_Total_Score	.388	.502	.329	-.425	1.000	.107
	LSI_Total_Score	.456	.185	.142	-.275	.107	1.000
Sig. (1-tailed)	MTL_Total_Score	.	<.001	.170	.005	<.001	<.001
	MLQ_Transformational_Score	.000	.	.000	.019	.000	.065
	MLQ_Transactional_Score	.170	.000	.	.172	.003	.124
	MLQ_Passive_Score	.005	.019	.172	.	.000	.012
	LEQ_Total_Score	.001	.000	.003	.000	.	.193
	LSI_Total_Score	.000	.065	.124	.012	.193	.
N	MTL_Total_Score	68	68	68	68	68	68
	MLQ_Transformational_Score	68	68	68	68	68	68
	MLQ_Transactional_Score	68	68	68	68	68	68
	MLQ_Passive_Score	68	68	68	68	68	68
	LEQ_Total_Score	68	68	68	68	68	68
	LSI_Total_Score	68	68	68	68	68	68

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.647[a]	.419	.372	3.07223	.419	8.928	5	62	<.001	1.977

a. Predictors: (Constant), LSI_Total_Score, LEQ_Total_Score, MLQ_Transactional_Score, MLQ_Passive_Score, MLQ_Transformational_Score

b. Dependent Variable: MTL_Total_Score

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	421.357	5	84.271	8.928	<.001[b]
	Residual	585.193	62	9.439		
	Total	1006.550	67			

a. Dependent Variable: MTL_Total_Score

b. Predictors: (Constant), LSI_Total_Score, LEQ_Total_Score, MLQ_Transactional_Score, MLQ_Passive_Score, MLQ_Transformational_Score

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	13.716	3.931		3.490	<.001	5.859	21.573					
	MLQ_Transformational_Score	3.939	1.282	.385	3.074	.003	1.377	6.501	.460	.364	.298	.598	1.672
	MLQ_Transactional_Score	-1.435	.786	-.209	-1.827	.073	-3.006	.135	.118	-.226	-.177	.718	1.393
	MLQ_Passive_Score	-.491	1.246	-.044	-.394	.695	-2.982	1.999	-.308	-.050	-.038	.763	1.311
	LEQ_Total_Score	.073	.043	.205	1.693	.096	-.013	.159	.388	.210	.164	.642	1.558
	LSI_Total_Score	1.498	.402	.380	3.724	<.001	.694	2.302	.456	.428	.361	.901	1.110

a. Dependent Variable: MTL_Total_Score