Gender, Art and Architecture: An A/r/tographic Exploration of the Built School Environment for Latina High School Girls

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Dedication

For all girls, everywhere, who dream of better spaces and places.

Abstract

This research set out to understand the lived experiences of 26 underrepresented high school girls on the outskirts of Bogotá, Colombia, during the 2022-2023 academic year. Specifically, the research question was: “What is the lived experience of Latina high school girls of their built school environment?”.

Through a methodological framework employing feminist participatory action with arts-based research, specifically a/r/tography, participants analysed data to cultivate awareness and meta-cognition around how their school’s built environment impacted them. Participants revealed how their built school environment illustrated Lefebvre's spatial triad (1974/1991) and Foucault’s theories on the panopticon and biopower (1967/1984). Memories from childhood, patriarchal suppression of participants’ voices, ineffective design choices in communal areas, concerns and competitiveness over body image, a lack of menstrual health care leading to stigma and shame, and poor mental wellbeing from academic pressures and environmental discomfort were all raised as detrimental factors to the daily lives of the girls. The girls also revealed that warm spaces were important to them, natural light created a sense of safety and engagement, and quality time in nature was liberating. This is shown in their artwork, which appears in the thesis. The research reveals the daily experience of the participants in their built school environment is composed from physical, psychological and emotional dimensions, aligning with the theories of feminist geographers such as Massey (2005), Rose (1993), and Weisman (1994).

Presented as a piece of a/r/tography that challenges the tensions between research conducted through the arts and traditional doctoral writing, the thesis seeks to combat research epistemicide (Santos, 2016/2018) and contribute to the democratisation of knowledge. Recommendations for further research centres on investigating the impact of a built school environment’s architectural, pedagogical and social features on girls, as well as the future use of a/r/tography as an empowering methodology in educational research with children.

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Declaration

I, Rajwant Kaur Saghera, confirm that the Thesis is my own work. I am aware of the University's Guidance on the Use of Unfair Means (www.sheffield.ac.uk/ssid/unfair-means). This work has not previously been presented for an award at this, or any other, university.

Chapter 1 - Introduction

Figure 1

R.K. Saghera (2024). Self Portrait: Rhizomatic Self Study [Pencil on Paper, Collage].

1.1 Introduction to the Study

In an era, which is defined by young people experiencing swathes of their lives in a digital universe (Khalaf et al., 2023), this study is wholly based in the physical reality of our world, and how we experience this world through the body. The research for this thesis followed twenty-six Colombian teenage girls over an academic year (2022-2023) as they reflected on their experience of their built school environment (BSE) through walking, talking and creating art. This introductory chapter outlines the origins, aims and structure of the thesis. The origin of this study does not sit firmly within the realm of education but straddles the worlds of architecture, feminist geography, school design, girlhood, and life in the Global South. This multifaceted nature also reflects the complexity of the positionality I hold, connected to the foundational beliefs that

education should be emancipatory and bring about social justice praxis in the world (Freire, 1970).

1.2 Positionality

Figure 1 is a botanical self-portrait, and within this portrait exists the belief system which I have developed over my lifetime (Bishop et al., 2002) and is shaped by much of what I have experienced and seen of the world. By proxy these experiences also shape the study. My identity is clearly laid out here: I am British Indian from first-generation immigrant parents, public school educated, cis-gender, heterosexual, and a non-disabled woman. At the time of writing, I also am a teacher of English literature to high school students, having studied English literature and education at higher level, and have more than fifteen years of experience in the educational profession. However, my childhood is also pertinent to elucidate in this research. Growing up as a child English was not my first language, although it is my primary language as an adult. I grew up observing the contradistinction of being surrounded by strong independent women who had to navigate deeply patriarchal cultures in both the workplace and at home. I was made aware of my differences in school from my majority white peers, experiencing occasional racist remarks. Furthermore, I am also aware of the privilege I have as someone who experiences the world as a non-disabled person, with a British passport, and accent. There are doors which are open to me, which many others cannot open. I am aware that when I travel, I represent both my birth country and my ethnicity, and because encountering an Indian woman in some parts of the world I have travelled in is still rare, I am also aware of the shouldering of responsibility this can have when you are seen as representative of an ethnicity. This is why, although there will be references to the location of the study in the thesis, I want to make clear from the onset of this thesis that the girls who have participated in this research and who have voiced their opinions, are not, and will not be expressed as representatives of a generalised Latina girlhood. This is to avoid falling into stereotypes where the participants are seen as embodiments of their nation (Antonsich, 2021), as opposed to the complex young women that they are.

Alongside my heritage and culture, what has shaped my lens of the world is simply how I have experienced living in the body of a girl, and woman. My girlhood consisted of taking on caregiver roles at a young age because of my gender and living with the expectation of being a

high achieving student but also being adept domestically. It was a childhood where I was deeply self-conscious of my body during a period where extreme fad diets were the rage, where girls were advised to follow cabbage soup diets, and to eat laxatives to help with weight loss, teenage years full of self-hatred because I read teen magazines which told me I was not beautiful because I was not ultra slim or white with blonde hair, and a childhood of being encouraged to be a good girl, but where I was simultaneously hypersexualised by adults.

I have also lived as a woman who has been accused of being bossy when suggesting improvements at work, where I am told I am intimidating because I voice myself unflinchingly and dare to take up space, and where I have been passed over for promotions for younger, whiter, men who have less experience than me. I have and continue to experience micro-levels of sexual assaults on a near daily basis not just from men, but teenage boys too, and where I have been accused of being a bad partner for 'chasing' a career, and where I know from statistics proven over and over again that in a heterosexual relationship, I, as the woman, will lose income, health and personal time when in a relationship (Gash & Plagnol, 2020). This is not yet counting the vast disparities of income and health I will experience if I should have a child (Kahn et al., 2014). I list these experiences not to claim victimhood, but share the reality of my life, and to disclose my positionality as a woman who has experienced assaults because of my gender from a very young age. These experiences influence my research and underpin the feminist led praxis at the heart of this research.

My positionality shapes my research irrevocably from theory to method and has also framed some of the reflections and emotive experiences I have had during the research process for this thesis. Acknowledging the personal connections to the thesis is a process which Finlay (2002) describes as personal disclosure, but I have also done so to not fall into excessive self-analysis in the research when I want the focus to be on the participants and their experiences. Fox & Allan (2013) also iterate the importance of reflexivity in research as "when we research and when we write, our selves are inextricably involved and our interpretation of what takes place is informed by our points of view" (p.102). In participating in the process of reflexivity and claiming my positionality during the process of research I aim to avoid what Rose (1997b) describes as the researcher's "false sense of neutrality" (p.2). In essence I want to be aware of, and counteract,

what Berger (2015) refers to as becoming fixated with the researcher's own agenda, and thus not leaving space for the participants to share their experiences.

1.3 Origins and Rationale of the Study

After a haphazard fall in the summer of 2021, I fractured my tibia. The initial break reverberated through my leg with enough force that it caused additional breaks in my fibula, ankle and patella. The breaks required extensive emergency surgery and the post-operative recovery from the accident was lengthy and arduous. During my recovery space, architecture and the built environment became a focal point of my daily lived experience. For several months I was housebound and unable to move without assistance. After re-learning to walk I returned to work, but I still could not participate in many day-to-day activities teachers are involved in. I also could not access much of the school space as it is consisted of classroom blocks connected on steep slopes only accessible via outdoor staircases. The ground was uneven, and when it rained the soft earth became a slippery torment for my still weakened balance. I was happy to be back at work, but became acutely aware of the walls around me, the steps above me and was filled with dread every morning and afternoon as I navigated the uneven path to the exit. Having never broken a bone before I was humbled with both the realisation that I had lived in ableist privilege, being ignorant to how difficult the built environment is to navigate and how there is very little patience and care for those who are disabled. This experience is clearly evidenced in a recent viral video from Jennie Berry, a disabled content creator and wheelchair user, who videoed having to crawl upstairs at a London underground station after the station had a broken lift and no other recourse for accessing the exit (Berry, 2024). After my own accident I realised how space can become emotionally charged, deeply affecting the psyche and the body. It is this last point, the emotional impact space can have, which I combine with my struggles of girlhood and womanhood, that inspires this thesis research.

The research conducted for this doctoral thesis explores how a group of Colombian high school girls experience their Built School Environment (hereafter BSE), and the challenges and opportunities to be found in the BSE for them. Rose (1993), in *Feminism and Geography,* documents feeling a sense of fear of space as a woman, of existing in a space which feels like it belongs to the world of men, and her desire to use academia as a channel to bring to light these

feelings in an effort to counteract them for women (p.143). What is poignant is that more than twenty years after Rose (1993) published her book, many of the experiences that Rose discussed: fear of space, fear of moving alone in dark places, fear of attack and so on, are feelings and thoughts which are still strongly felt by women today. These are not irrational fears, but speak to the very real experiences women face in their built environments and I go into detail about the dangers of space for women in my theoretical framework (Chapter 3).

This research is rooted in the somatic experience of girlhood in the BSE, but it is also a somatic exploration of the research, through the arts, for myself as the researcher which I have attempted to document in various ways. This is done to take accountability of, and embrace, my own positionality in the research and how this positionality shapes the study and direction of the research. Horton & Kraftl (2006) expand on how noting, accepting and using the researcher's somatic experiences influence and shape research, stating:

> An attention to bodies ought to make us reflect more on our own embodied experiences [...] for the embodied acts and experiences of doing research are too often hushed up. [...] Moreover, academic writers rarely own up to a fact which most of us know implicitly: we never quite get over who we are; more than anything we never quite get over who we were when we were growing up, whatever that was. (p.78)

The hope is that this research adds to the emerging and evolving discourse around space and safety.

1.4 Gender, Schools and Space - A Brief Overview

In 1900 Miss Georgia Bacon, President of the private Worcester club in Massachusetts, claimed that woman was no longer confined to a narrow sphere, that in fact the whole world belonged to her (Landes, 1984), yet I would argue, as did Foucault (1986), that the anxiety of our era is fundamentally to do with space. The built environment, in school spaces and in public spaces, leaves much to be desired for women and girls and a host of examples of this are set out in the

literature review (Chapter 2) and theoretical framework (Chapter 3). This research investigates how girls experience this space "as it is used, occupied and transformed through everyday activities" (Rendell et al., 2000, p.101). This is to fully explore how architecture in all its facets: materials, divisions, space, and movement (Grosz, 1991/1995) shape the daily lives of girls in the BSE. I contend in this research that to understand the lives of girls and women it is necessary to explore comprehensively what constitutes a built environment and look past the school space as a space constructed solely of physical buildings. The research itself does not focus on design as a realm for architects and designers, but investigates how girls can claim and use space which leads to understanding the rich meanings behind space for them (Spain, 2001). The thesis does not shy away from being an overtly feminist analysis of the BSE and this is to combat what Rendell (2012/2016) describes as a retreat on overt analysis of feminist architecture theory. Rendell speaks of the danger that unless the references to feminism are made clear, we might 'unwrite' architecture's feminist genealogy (Rendell, 2016). This is not to criticise the research being conducted on space currently which is not explicitly labelled as feminist research, but to contribute to a reassertion of the use of overt feminist analysis of space in the research sphere.

The United Nations Sustainability Goals specify a goal being to "build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all" (UNESCO, 2023). For this to happen schools must be built in developing nations which serve basic needs to the student population, but there also needs to be investigation into how children are experiencing their built environment in all types of schools to identify commonalities and areas which are successful and areas which need evolving and further thinking. Our inhabited environments constitute a major part of the spaces in which we experience our lives, with 90% of inhabited environments being designed by architects and designers (Goldhagen, 2019). This means that the way one sees the world, and the way the world shapes behaviour, is intrinsically linked with our built environments. The built environment shapes mental and physical health, however whether one is aware of the fact that many emotional and physical problems experienced on a daily basis are connected to the built environment is unknown. The majority of researchers in the field of study of the built environment state users of the built environment are unaware of its effects (Evans, 2003; Pragati et al., 2021; Karakas & Yildiz, 2020). Arguments are also laid out as to the ethical responsibility

designers and architects have now that much research points to how the built environment can create wellness in a population (Sussman & Hollander, 2015). Koolhaas, the famous Dutch architect and architectural theorist, explored the impact that the built environment can have on the mind when describing the encounter, he had with the Berlin Wall being his first experience of architecture having a profound confrontation with the self and identity (Dehaene & De Cauter, 2015, p.79). Ellard (2015) postulates that even if users are aware of how the built environment shapes mental health and emotions, they are not in control of it, and nor do they have the time to think of changing or shaping the built environment to better suit needs. Space and place are emotionally coded, and they are investigated in this research to bring the value of studying emotions to the forefront. Furthermore, Ellard (2015) does point out that the current epoch we live in, with its problems of over-crowding, climate change and global warfare displacing millions of people, is the time to be re-thinking our built environments to resolve some of these issues.

Weisman (1994) concentrates on re-designing the built environment from a feminist point of view, insisting that a reshaping of our environments is possible, but challenging, and requires addressing how the built environment is inherently sexist (p.73). The analysis of space is also only part of understanding how space is impactful and how space can be evolved to become more inclusive. The absence of architectural elements also impacts the everyday lived experiences of women and girls, just as much as architectural elements. This can come in the shape of the absence of well-lit public spaces, lack of breastfeeding areas in public spaces, lack of space to accommodate sanitary needs for girls and women, and lack of quiet spaces for those who are seeking safety and shelter.

Voicing, sharing and exploring the lived experience of space harkens back to the Feminist slogan of the 70's 'the personal is political' first officially referenced in text by Carol Hanisch (1970). 'The personal is political' worked as a slogan to identify women's discontent as not a form of neurosis but a serious result of institutionalised patriarchal values which constituted gender inequality through the personal everyday experiences of women (Hartmann, 1979). This doctoral research embraces the personal as political, and the opportunities and challenges of discussing the personal, even intimate, which can reveal social and architectural structures impacting the

lives of the girls in this study in their BSE. The study is investigating what de Beauvoir (1959) labelled as the "second nature" of humans (p.70) i.e. gender, and how gendered customs exist and interplay in the BSE for the girls participating in the study. The study aims to align with Martin (2008) who argues that continual analysis from a feminist perspective is still needed so that there is a clear understanding of how as a society we have arrived at the point we are at. In the case of this study an analysis of the BSE contributes to this understanding, and hopefully contributes to a knowledge bank which furthers the cause of gender equality through better design in educational spaces.

One of the aims of the UN Sustainable Development Goals (2023) may be to achieve effective learning environments for all, but this requires a concerted effort by multiple disciplines and professionals working in collaboration to achieve. The deconstruction and reconstruction of the built environment stretches beyond the realm of architects and requires an analysis, understanding and reshaping from an interdisciplinary perspective, involving the user at the centre of this process and analysis of how the built environment is used, occupied and transformed in everyday life (Rendell et al., 2000, p.101). This regarding the built environment as something that is beyond design and building work is echoed by Lefebvre's (1991) concept of the spatial triad which highlights the importance of understanding space as a socially constructed entity that reflects and influences social relations, power dynamics and lived experiences. Lefebvre's *The production of space* (1991) emphasises the need to see the built environment as space constructed with social meaning and not as neutral. This is further explored in the theoretical framework (see Chapter 3).

When I think back to my memories of school it is a mixture of moments with friends, school tasks that I felt I excelled at, moments of realisation about a concept that engaged me, flickers of memories of being told off by teachers, and many memories of time spent in recreational moments. Hertzberger (2008) contends that it is the memories of hallways, window views, space, friendships, crushes and what you succeeded or failed at (p.7) that is recalled best when thinking about these large periods of childhood. The research conducted is aimed at discovering the opportunities and challenges that arise in the BSE and thus this means focusing not just on how the physical environment; its materials, shapes and structures affects the participants but how

they also experience their daily lives in those spaces. This echoes the sentiments of Fisher (2004) who claims that it is in the formal and informal environment that architecture is lived, learnt and experienced. What cannot be underestimated is the long-term impact that the BSE has on a person's life. It sets up how we learn to navigate space, what we expect from space and the understanding, or lack thereof, of how the built environment shape's identity and society. Public space has been identified as a vector for propagating gender inequality for young people (Shaikly & Mella Lira, 2022) and Matthews (1995) comments on the near invisibility of studies on the built environment and teenagers, with the majority of research being on children under the age of eleven. Transport for Scotland recently published a report which argued that when research is conducted with teenagers about how they experience space, genuine trust is built, public space is improved, with a particular improvement in how teenage girls experience the safety of their environment (Wood & Hamilton, 2023, p.6).

The intransigent nature of school design, discussed in detail in the literature review (Chapter 2), and the importance of school to what Dudek (2012) refers to as our personal history, can make imagining the BSE differently a peculiar experience, however this does not mean it should not be attempted. Regardless of future designs and spatial theory, what is certain is that "space and identities are co-implicated" (Valentine, 2007, p.19). Valentine (2007) strongly argues for a renewed vigour in feminist geography studies in the study of space and how structural inequalities of power appear and develop through experiences of the built environment and can be seen when analysing the intimate daily lived experiences of users of space. The research mentioned in this brief discussion, and in detail in later chapters, indicates that to achieve inclusive and empowering environments for girls in educational spaces a renewed feminist effort must be made to address the gap which exists in researching how adolescent girls experience their BSEs. Through addressing this in research such as this thesis the BSE can be analysed for gender disparities and lead to new insights into how to achieve equitable learning spaces for all users.

1.5 Identifying the Gap

Using the framework set out by Miles (2017) around the taxonomy of the seven key research gaps (evidence, knowledge, practical-knowledge, methodology, empirical, theoretical, population) I have identified three key gaps which this research will help to fill:

1. Population gap - The participants are Colombian teenage girls, aged between 16 to 18. Furthermore, the girls come from an affluent background and are bilingual speakers of Spanish and English. This makes them a unique subgroup of Latina girls who are under-represented in research in Latin America, let alone discussed in the Global Northern context.

2. Methodological gap - The research uses Arts-Based Research, specifically using a/r/tography to research into the BSE. The research uses the principles of a/r/tography to not only collect data from participants but also as an additional layer of exposition in the thesis. This is further explained later in the introduction (1.11) and in the methodology chapter (Chapter 4).

3. Knowledge gap - Adolescent girls and the daily experiences they have of their BSE is an area of research paucity. This gap is explained and explored in detail in the literature review (Chapter 2).

1.6 Scope of the Study

The research took place in a private, fee-paying school located in a protected area of natural beauty on the outskirts of Bogotá, Colombia. The school serves approximately 500 students ranging from age 4 to 18, and is divided into three sections: Lower School, Primary, and High School. While the school's location is unique and picturesque, the buildings themselves are fairly conventional; constructed primarily from cement, with classrooms arranged over three to four stories across the campus. Each classroom is equipped with standard furnishings such as desks and whiteboards. The High School section is situated at the back of the campus, with some buildings accessible only by steep outdoor staircases. Although the school's setting is atypical for Colombian schools, its physical layout and structure reflect common characteristics found in

educational institutions throughout the country. The majority of teachers are Colombian nationals, and the language of instruction is bilingual, with both English and Spanish used across the curriculum.

The participants were split into three groups, averaging around nine participants per group. The participants were all self-identifying girls between the ages of 16 to 18, in their last two years of school. The research took place over a period of one academic year. Each group spent just under two hours with me every week, for approximately 16 weeks each. The context of the school is unique as it is based in a protected mountain range, and the school embraces this outdoor environment in their teaching and learning. Students are bilingual Spanish-English speakers and their curriculum is based around US and British curricula. The participants come from affluent socio-economic backgrounds. This is vital to point out as a key objective for the study is to share the existence and opinions of this rarely discussed sub-grouping of Latina girls. The participants volunteered to take part in the research as part of an elective course which would focus on an exploration of how the BSE and architecture is experienced, expressed through different types of arts. The participants all were students I had taught previously, or was currently teaching at the time of the research. The complexity of the ethics behind this is detailed in the methodological chapter (Chapter 4).

The research is inductive in nature (Liu, 2016) and thus the definition of ‘the built school environment’ I give in the introduction is not a fixed definition as the participants have their own interpretation of what this means for them. Over the 16 weeks in which the research took place for each group, thinking and reflection space was given to the participants in the research process to define the boundaries of what they consider to be their BSE. Furthermore, what the participants constituted as the BSE changed throughout the study as the study took place over several months and thus their conscious understanding of what the built environment in their school space is for them changed with their reflections and artistic investigations. At the commencement of the research the ‘BSE was taken as the physical space of a school, the buildings which exist in it, and its boundaries. However, the participants showed that their BSE was constructed from more than physical architectural elements, but also included a social context, the interactions which take place in their BSE, and their experiences of teaching and

learning. The results from the research indicate what the participants understood as their BSE and what they consider to make up their lived experience.

1.7 Epistemicide and Researching in the Global South

After my initial review of the literature around my participants I came to realise that this particular demographic of girls: Colombian, teenagers, bilingual, and upper class, are minimally mentioned in research and literature. The struggle I experienced with searching for literature around the participants has led me to question not only the lack of representation of this subsection of society, but also how I could embody the thesis research with authenticity and praxis to render what is invisible, visible. The research aim is to not only inquire into the lived experience of the BSE, but to do so in a way which contributes to the reversal of what Santos coined epistemicide (2016). In *Epistemologies of the South* (2016) Santos exposes the destruction and de-valorisation of non-western forms of knowledge and labels it as epistemicide. Santos (2016) posits that a continual bi-product of colonisation is the endurance of the destruction of knowledge coming from countries which were colonised, referred to as the Global South. This devaluing of knowledge systems, I would state, is a continuous form of colonial oppression and violence, and to have the research share authentically the complex ideas around the lived experience of an ethnic minority, there needs to be a reflection on epistemicide and the epistemology to be used within the thesis structure. Santos (2016) asserts that to counteract this destruction of knowledge there needs to be a confrontation with dominant epistemologies so that the current monoculture of valuing scientific knowledge, primarily expressed in colonial languages, is debated and critiqued.

My reading around epistemicide has led to a bout of reflexivity as I question my identity as a researcher. I would argue that epistemologies of the south are needed to combat colonial, capitalistic and patriarchal points of view and this lays the foundational principles for the methodological choices made in the thesis, which are explored in detail in the methodology chapter. Embracing the idea of combatting epistemology is connected with my own positionality but also an effort to authentically think about intersectionality (Crenshaw, 1989) and how this thesis can share the experiences of an underrepresented group in research and education. This is an attempt to counteract what Zinn et al. (1986) documented as feminism which cites itself as

feminist when only including the experiences of white, non-disabled, adult, middle-class women. The research conducted for this research investigates into the lives of adolescent Latinas, in the Global South. This is done to further contribute to the field of feminist studies in human geography, which is often research conducted into women's experiences and disregards teen girls. Furthermore, the research is aimed at combatting what Mohanty (2003) identifies as the Global North's creation of the monolithic third world woman subject who fits into a paradigm of poor in wealth, health and education. On the contrary this research has participants who are born and raised in the Global South, but who come from what can be considered wealth, good health and who are highly educated. Although I reference the context of Colombia, Bogotá and research into Latina teens in various spaces in the thesis, this is done to place certain concepts into their contextual backgrounds, and not to be taken as information which is 'typical' of the experiences of Colombian teenage girls. Rather, I want to emphasise strongly in this study that the research conducted highlights the complexity of identity these girls exist in, and where their lives are more similar to girls in the Global North due to their background. Nigerian author Ngozi Adichie discusses this in her now famous Ted Talk "The danger of a single story" (Adichie, 2009). Adichie (2009) elucidates the danger of reducing complex individual identities into single, homogenous, stereotyped traits. The generalisation and assumptions of women in the Global South, that they are: religious, traditional, unsophisticated, illiterate, domestic (Mohanty, 2003, p.40), is something this research wishes to counteract. Horton & Kraftl (2006) reiterate the point that women and children's everyday lives are mostly unobserved and it is this oversight which needs more attention from researchers, especially in respect to the Global South which needs to be taken more seriously in research (p.71).

This research has attempted to use methodologies and theories which focus on inclusivity and empower the participants. Helgreen & Vasconcelos (2010) argue that oversights in research consist of children, who are silent subjects of history, and transnational research which can provide researchers with frameworks of thinking. The girls in the study fit both in children's studies and women's studies, being on the very cusp of what is classified as womanhood, whilst also being considered children. The use of arts as a data generation method in this research is not just to challenge more traditional methods of data collection in educational research, but also to liberate participants from the confines of language and to embrace what Aitken (2018) refers to

as the potential of youth to imagine an understanding of the world around them which adults can allow by taking a step back (p.12). Singh (2021) considers girlhood studies as a vehicle for addressing the epistemic injustice the Global South faces, highlight that girlhood studies has its roots in women's and gender studies, but can be pushed to explore interdisciplinary epistemologies, methodologies and methods to challenge epistemic injustices (p.13). The intention of the study is to use methodologies and theories which amplify the marginalised participants and contribute to the body of knowledge around a sub-group of girls from the Global South.

1.8 Aim and Objectives

1.8.1 Aim of the Research

The overarching aim of the research was to gain and share an understanding of how the participants of the study, a sub-grouping of Latina girls who are underrepresented in research in general, experience their BSE, through arts-based research. In this research the definition of the BSE presented here is a result of the participants having their own understanding and definition of the BSE which they explored in the research process and consists of but is not limited to: the architecture of buildings, infrastructure, outdoor areas, and the boundaries of these spaces.

1.8.2 Objectives

There are dual objectives to the study. The first objective is the inquiry into the lived experiences of Latina high school students of their BSE. This objective investigates how the participants see their environment, how they experience it, and how they feel it shapes their identity and everyday lives. The hope is that this brings about an explicit awareness for the participants of how their built environments impact their everyday lives. This objective involves the participants identifying the opportunities and challenges which lay in the BSE. The research focuses on this identification of opportunities as a key component of the study to investigate marginalised spaces, for marginalised students, which they are using as spaces of opportunities to resist, dissent and subvert. This echoes the ideas of hooks (1989/2015) who argues that "marginality is much more than a site of deprivation [...] it is also the site of radical possibility; a space of resistance" (p.206). Whilst the research highlights areas of the BSE which challenge and oppress the participants, the research does not wish to paint the participants as passive victims to their

BSE, hence the desire to highlight, celebrate and share the spaces which are liberatory and subversive for the participants.

The second objective, with equal importance placed upon it as the first, is an attempt to contribute to the reversal of the dominance of the Global North in research in education and researcher epistemicide. This reversal involves two strands. The first strand is the exploration, identification, and sharing of the knowledge which an underrepresented subgroup of participants uncovers within the greater academic field. The second strand of this objective is to conduct the research through the methodology of a/r/tography; creating writing, drawing, painting, collaging, photographing and more. A/r/tography is a methodology of research data generation which is rhizomatic in nature and concept, signifying a research methodology which emphasises the collaboration of artist, researcher and teacher within its framework to achieve data generation (La Jevic & Springgay, 2008). Springgay et al. (2005) state that to be engaged in the practice of a/r/tography is to investigate into the world through a practice of art making and writing which leads to a life that is contiguous by nature (see Chapter 4).

1.9 Research Questions

During the initial planning stages of the thesis, I had several research questions which would have analysed the methodological impact of the research on participants, identified the boundaries of the BSE from the perspective of the participants, as well as attempting analysis of the participants lived experiences of their BSE. A key question from the research was presented to the participants in the beginning and end of the research: “What is the Built School Environment?”. This question was presented to participants so that it could help define in the participants’ own minds what they considered the BSE before they could explore their experiences of the BSE. Additionally, this question was repeated at the end of the research to ascertain whether the participants’ definitions changed once they gained a deeper understanding of their experiences as a tool to enable participants’ sense of meta-cognition. However, after some reflection and re-centring on the participants and how best to serve their voices, I decided to reduce the research questions and the central focus of the research. Thus, although this key question underscores the participants’ evolving definitions of the BSE, it is not analysed as a research question in the thesis, but used as a part of the methodological design and is discussed

further in the methodology chapter (see section 4.6). This choice to reduce research questions would allow the research to be feasible in length and allow for in-depth exploration of the phenomena through a/r/tography. Furthermore, the removal of additional research questions honed the purpose of the research, removing competing foci. Refocusing on the participants' voices allowed space within the doctoral project for emerging themes to be explored deeply.

Thus, the following research question is the focus of the research:

> What is the lived experience of Latina high school girls of their built school environment?

1.10 Chapter Organisation

The remainder of the thesis is organised into six further chapters. The literature review is split between Chapter 2 which weaves together the literature around girlhood and school design, and Chapter 3 which sets out the theoretical framework of the research primarily based on the key principles, philosophies and research conducted in the field of feminist geography. The theoretical framework also explores how space is a multifaceted mechanism as explored by Foucault (1979; 1967/1984) and Lefebvre (1974/1991). The division between the two chapters is to separate out literature which is based more on educational spaces and girlhood, and the theoretical discussion which occurs in Chapter 3 where theorists do not necessarily explore schools or girlhood, but where the theories presented are fundamental in understanding the built environment and the experience of women historically in-built environments.

Chapter 4 is an exploration of theory behind ABR and an explanation of how the choices of data generation methods were made during the research process. The chapter also details the ethical considerations of the research and the stages of the data generation and analysis conducted by the participants. Chapter 5 invites the reader to engage with the artwork created by participants and myself before the data discussion so that the reader can explore their own thinking and reflections without researcher analysis and interpretation. Chapter 6 contains participant led data analysis, researcher data analysis, and a discussion around key findings and themes which have emerged from the study. Chapter 7 concludes with a summary of key findings of the research,

connections and contributions to theory, concluding thoughts on the research process, and thoughts on future research projects connected to the thesis.

1.11 A Note on the Artwork

The nature of the thesis is an artistic exploration of feminist praxis in educational research. Whilst the thesis has been written with the thought of meeting specific criteria to pass a doctoral examination, it is also meant to be seen as a collaborative piece of a/r/tography which lends to expanding viewpoints on what is high quality research that is not solely based on text form. As a result, each chapter of the thesis begins with a researcher-created collage (Chapter 5 being the exception) which embodies my experiences through this research journey, and which summarise and share my thoughts on that chapter in ways which I feel the written word cannot fully express. Furthermore, in Chapter 4, 5 and 6 the text has multiple photographs of the research taking place, and has collages created by the participants embedded into discussion. Additionally, I created a photobook which contains the collages created by myself and all the participants, alongside photos. The photobook is an a/r/tographic piece which can be viewed alongside the thesis to enhance understanding of the thesis or be viewed as a standalone piece of a/r/tography.

The above choices were made for multiple reasons which I lay out explicitly here for the reader:

1. To show that scholarly ideas can be shared beyond text in different fields of research. Here it is to complete my EdD journey and to acknowledge the principles of anti-epistemicide research.
2. To fully immerse myself in the arts-based methods of data generation which the participants experience in the research by using the same methods to collate, analyse and share the insights and art created. This is to gain deeper insight into the emotional traversing participants have experienced whilst in the process of investigation.
3. To fully embrace, respect and abide by the philosophy of a/r/tography (Irwin, 2013; Irwin et al., 2017).
4. To show the reader the process of thinking, analysing, synthesising and creating which I have gone through in this research.

1.12 Chapter Conclusion

This research has been complex for multiple reasons, crossing over many themes, theories and subjects in the field of educational research. It is also deeply reflexive in regard to my own life experiences as an ethnic minority woman and has led me to understand my own experiences in the built environment, past and present, more profoundly. My hope for the reader is that they are able to follow these different threads in the research and emotionally connect with the experiences of the participants, reflect on their own relationship with the built environment and listen to the unique and insightful experiences of this group of girls who have taught me so much about the shaping of my world and theirs. This research realizes in text and art that for girls and women the personal - be it body shaming, light and sound, fear, movement, periods, pain, sexism, mental distress - is in fact always political.

Chapter 2 - Literature Review

Figure 2

R.K. Saghera (2024). Girls and School Design: Under the Ice [Collage].

2.1 Introduction

This literature review analyses the current research and thoughts on the topic of school design and how it impacts the lives, minds and bodies of children. Figure 2 attempts to show how by looking closely at girlhood, and girls lives in the BSE, the intricacies of girlhood reveal themselves. This includes contested definitions of girlhood, the experiences the bodies of girls go through in the BSE and how the BSE is interwoven inextricably with definitions of girlhood.

The process of including and excluding literature from the review was an iterative process, being conducted alongside and after the research data generation process took place. The starting place for the literature review began as a generalised reading and writing of school architecture and its development over time, however as the research developed this focus became less important with more space in the literature review being given to literature around key definitions and the major ideas and themes which were reoccurring. The literature review explores how the concept of girlhood has come about and what possibilities research into girlhood has to embolden and further the cause of equitable learning spaces for girls.

2.2 Definitions of Girlhood

'Adolescence' and 'girlhood' have contested definitions. For the sake of this research adolescence is being defined as the period where children are aged between ten to nineteen years, as defined by the World Health Organisation (World Health Organization, 2023). The traditional definition of adolescence in the Global North is often considered under the age of eighteen, where many countries consider young people to have passed the threshold into adulthood and where adult laws apply to them. This is often connected to a very simplistic and biologically based definition of adolescence. However, this biological definition discounts the social construction of adolescence and does not take into account that cultures around the world hold differing views on what constitutes this period of childhood (James & Prout, 2003). For the sake of cultural sensitivity and to be more inclusive to girls around the world, I have applied a sociohistorical framework to apply the definitive ages of what constitutes adolescence in this study. Lesko (2012) points out that the sociohistorical account of adolescence emphasises the varied contexts around this period for young people and takes into account that adolescence is a cultural construct usually based around economic dependency on parents for support, and

prolonged time in educational spaces (p.6). As these two things often vary in different parts of the world, the defining period for adolescents in this research is taken as the more extended approach the WHO describes as it is more culturally relevant to Colombia where the research has taken place.

Understanding that gender, and therefore being a 'girl', as socially constructed (Butler, 1993) is one way to look at a complex set of socially established ideologies which form what it is to be a girl; class, race, ethnicity, and citizenship. Furthermore, gender and disability researcher Amanda Todd argues that her definition of 'girl' is defined not by the body, but by the experiences held by young people who identify as girls (Girls Museum, 2009). To further complicate girlhood in many Latin cultures the Quinceañera, a celebration of a girl turning fifteen, also marks the biological transition into womanhood, whilst in other Latin cultures it is a symbolic entry into the beginning of a girl's journey into womanhood (Plummer, 2007). The Quinceañera ceremony, with its ritualistic elements of father-daughter dances and ballet shoes being exchanged for heels, reinforces family identity and performative gender roles (Napolitano, 1997), but also places girls in a liminal space of girl-not-yet-woman. Furthermore Valdivia (2022) highlights the privilege it is to be a girl and have an actual designated girlhood, with girlhood often being given by ruling members of a society to a girl as a luxury and not as a given right. Valdivia (2022) also contemplates the fact that 'girl' can be used as a calling sign to any female by a patriarchal figure, including women who are considered adults. Kearney (2009) expands on this in their research and considers the location of the body in a set moment in time as connected with being identified as a girl. Kearney (2009) argues this can be seen in older women grouped together referring to each other as girl, and the use of girl as a given designation between gay men and their women acquaintances.

Girl is not simply a female child, but a complex terminology laden with societal, cultural and patriarchal heritage. Gonick et al. (2005) consider the act of defining girl and girlhood as a dangerous task as in the process of defining there is a limitation and constriction of the boundaries of girlhood and they instead consider girlhood as something which has porous and intersectional boundaries that signify the experiences of a girl in a lived childhood. In this research a girl is being considered as a young person, under the age of 19, who self-identifies as

a girl, and girlhood as the lived experiences of being a girl. In this research I refer to the participants as ‘girls’ as they are still in school and thus are considered to be children in research and in an educational context, but I am also acutely aware that they are young women, some being eighteen, and also experiencing their lives as women. This is important to note as the experiences of women in space are heavily explored in the theoretical chapter (Chapter 3) because of this liminal space that the participants exist in and their close proximity to being labelled as ‘women’.

2.3 The Dynamics of Girlhood Studies

Whilst researching for this literature review, a notable takeaway has been the sparsity of research into the lived experiences of girls in the Global South. I argue that this reflects on the somewhat newness of girlhood studies, but also reflects on the earlier discussion on the difficulties on defining girl and girlhood, and intersectional girlhood. When reflecting on my own experiences as a student, educator and researcher I have not come across a course, module or unit of study which focused on girlhood, although some references to girls have been mentioned, albeit mostly combined with thoughts on feminist theory. Aguilo-Perez & Reid-Walsh (2022) highlight that girlhood studies is a growing field, but that in academia it is yet to be considered as a standalone and autonomous department (p.viii). Bettis & Adams (2005a) criticise the historical conflation between feminist theory and girlhood studies which leads to an inaccurate understanding of the lived experience of girls, and misidentification of areas for further research. Furthermore, they contend that research into girlhood requires scholars to investigate into the daily routines and habits of girls; including what may seem trivial to the adult scholar, such as discussions between girls about personal hygiene, who is to be liked and not (p.3) and so on. It is these ‘mundane’ moments of a girl's life that can lead to new explanations and theories on girlhood. Reddy (2009) asserts that in the field of gender studies, the concept of girlhood and research into girlhood has been a minimal feature, and that in the Global South the research has been scarce because research has primarily focused on gender at the expense of girlhood (p.80). Tolman (2005) concurs with Bettis & Adams (2005a), stating that spaces for girls are needed where they can talk to each other, and adult women, about their questions, fears, experiences and expectations about adult life (p.190). Although research into girlhood is a developing field, there are clear

attempts being made to expand the field so that discourses can be constructed around the experiences of girls in their daily lives.

The importance of girlhood studies is not to be underestimated as girls experience unique challenges and provide insightful understandings of gender construction, identity formation, and an understanding how patriarchal societal control is inflicted on girls from a young age. Tolman's (2005) research, exploring teenagers' viewpoints on sexual health matters, highlights that girls' experiences of schooling and society are often riddled with unease, lack of safe spaces and a lack of space to share dialogue, contradicting the dominant narrative in educational discourse which is focused on the decline of boys' attainment. Kumar (2017) explains that the state, which is responsible for the majority of public schools in the world, sees equality as a balance of boys and girls in the classroom and individual experiences are disregarded (p.15). In reality, the experiences of girls, as Tolman (2005) elucidates, is one where girls are still constrained by archetypes used to control behaviours. Tolman (2005) particularly highlights the educational experience for Latina girls being one where they are hyper-sexualised, amongst other class and racial stereotypes (p.196).

A discourse around educational attainment for boys detracts from the very real inequality and injustices that girls still face when leaving education. These sentiments harken back to Gill (2007) who pertinently stated, "that everywhere, it seems, feminist ideas have become a kind of common sense, yet feminism has never been more bitterly repudiated" (p.xi). Clarence-Smith (2023) calls to attention the outpacing of boys by girls, and theorises it is a result of: girls taking education more seriously, a lack of male role models for boys, and over-emphasis on promoting the achievements of women. Furthermore, Sommers writes in *The War Against Boys* (2015) that there is no girl crisis, that girls outperform boys and that they have high levels of self-esteem, however research explored later in this literature review and the themes identified in the research suggests otherwise. A key takeaway from Stannard (2022), who writes about the benefits for single-sex education for girls, calls attention to the fact that girls lack self-esteem and although girls now outperform boys in test results and general performance in school, once leaving school wage gaps begin to form with men still outpacing women in salary and positions of management (p.71). Chadwell (2010) also argues against those who consider equal spaces as being imbued

with ‘gender-blindness’ stating that it is not the same as ‘gender-equality’ (p.10). Additionally, Hyams (2000) calls attention to the paucity of research into girlhood in Latina/o studies and concludes that in the absence of blatant sexist educational practices there is a misconception that gender and race are no longer notable factors in academic achievement.

The popular discussion point around how well girls are doing in school carries an underlying assumption that gender equality has been achieved in education, and even, perhaps, that boys are now the ones experiencing gender inequality, as evidenced by gender attainment gaps. From a Colombian context The World Bank data suggests more girls complete high school than boys in Colombia (The World Bank, 2024), but research conducted by Abadía & Bernal (2017) shows that girls are underperforming in all areas. Raby & Pomerantz (2016) contend that it is a failure in education to not recognise how girls are oppressed in their school environments (p.68). This has dire consequences for girls as not only are dangers such as sexual assaults in the BSE going unreported, but it also leads to a focus of time and money being redirected to boys who are seen as disadvantaged and therefore requiring further attention, funding and interventions in the school environment (Gill et al., 2016). Blackmore (2000) states that this is a result of media-generated feminist backlash and the overt politicisation of education and gender in the current global world (p.474) and Stannard (2022) notes that policy makers and educators ignore the correlation between high performing girls suffering from high anxiety (p.5). Girlhood and girls' experiences in their BSE is inherently becoming depoliticized in favour of politicising the underachievement of boys. This has resulted in policy which was written by feminist theorists and activists, educators and researchers in education being taken away (Blackmore, 2000) and a decrease in research conducted into girlhood and the educational experiences of girls (Gill et al., 2016).

The discourse around girlhood studies has the capacity to develop into a strong field of praxis led policy making in education, if the voices of girls are taken seriously. The experiences of girls in schools are anything but examples of ‘gender-blindness’ or ‘gender-equality’ but, as Bettis & Adams (2005a) claim, if the world of girls is understood differently and girls’ lives are taken seriously, then educational spaces can be seen as spaces where girls can network, share and help build policy for the purpose of social change (p.276). However, a caveat to this is that the

responsibility to change education to become more inclusive and equitable is laid at the feet of girls. Wrigley (1995) asserts that schools are microcosms for society and that structural, gendered inequalities in school spaces exist where boys and girls have different experiences of educational spaces, with boys benefitting overall. Girlhood studies may be attempting to create social change, but this means that the work of creating change is brought about by the oppressed, in this case girls, and thus the suppressed group must "raise the consciousness of those who are more privileged than themselves [...] allowing the privileged to maintain their position and evade responsibility" (Wrigley, 1995, p.149). Whilst Wrigley (1995) and Bettis & Adams (2005a) have opposing views on whether girlhood studies should be a vehicle of social change and praxis, the research conducted here takes into consideration concerns about girls having to take responsibility for social change and also embraces the idea of praxis. A priority in this research is for the girls participating in the research to become explicitly aware of the impact their school environment has on them, and how architecture and built environments could be used to ameliorate their future lives.

A key difference between girlhood studies and studying gender is that girlhood studies draw out the importance of sharing the voices of girls as a central tenant to the field. Mandrona (2016) concurs, asserting that the starting point for research which is conducted through the field of girlhood studies begins with research and engagement with girls, rather than on girls, for girls, to bring attention to their voicelessness in areas such as space and place which affect their lives. Brown (2008) expands on this further, writing in an autobiographical account the shift they have made from researching and theorising on girls, to advocating for and with girls. A girlhood-centric approach aims to focus on systems of oppression which girls suffer from (Almjeld, 2022, p.100), whereas Bettis & Adams (2005b) focus more specifically on girls daily lived spaces, including hallways, bedrooms, the internet, and other important sites of identity construction (p.xiv).

This echoes the aim of the research conducted for this study, which aims not to speak of the experiences of all girls, nor the experiences of Colombian girls, but points out loose patterns amongst this specific set of girls. Allen & Green-Barteet (2023) concur with this line of thought in their research, stating that girlhood studies take care to account for the experiences of girls

whilst not asserting those claims as universal (p.615). They highlight that the deeply intersectional nature of girlhood studies intersects with a myriad of other fields. This certainly rings true for this research as it intersects with research on Latina girls, in education, about architecture and geographical spaces, through ABR. Furthermore, Green-Barteet (2023) reiterates, as others have, the core tenets of girlhood studies should revolve around girls understanding how normative gender roles oppress them in different ways, but also on how girls resist oppression (p.616). Bettis & Adams (2005a) note that although it is important in girlhood studies to foreground different intersectionalities at play with girls in research, it is also pivotal to not represent girls as solely oppressed and valorise this survival of oppression (p.3). Mandrona (2016) also asserts that girlhood studies are part of a movement which wishes to surpass seeing girls as victims of hierarchies in society and celebrates their agency and disruptive practices girls engage in to resist and subvert prevailing hegemonic control (p.15). The opportunities to assess school design from a girl's perspective is difficult as school design is laden with ideological and pedagogical pillars which have changed little since the inception of the modern-day school. These ideological and pedagogical pillars and their connection with school design are analysed in the next section.

2.4 The Intransigent Nature of School Design

In 2006 Sir Ken Robinson became an internet phenomenon when Ted.com published a video of Robinson's talk titled "Do schools kill creativity?" (Robinson, 2006). Robinson speaks to the audience of the intransigent immovability of education around the globe. In this section of the literature review I will be recounting the various ways school design is portrayed in research and policy, and how it is a far more important matter in education than currently considered in mainstream educational discourse. Jeffs (1999) puts it succinctly, stating that the importance of school design and all that it entails: decoration, equipment, structure, cannot be overlooked as it is just important as pedagogy, or as the teacher.

Mumovic et al. (2009) highlight that although there have been waves of school building, beginning with the transformation of churches into gothic-like schools to educate the masses in the 1800's, the key components of school architecture remain the same globally. The intransigent nature of school design is emphasised by Hertzberger (2008) who notes that "there can be few

building types that have so poorly evolved during the past hundred years as schools" (p.9). Baker (2012) also highlights the tenuous and often contradictory research into how school design affects, or does not affect students, using research from the 1970's as an example which had indicated students were unaffected by windowless classrooms, in comparison to research post 1970s which showed windowless rooms had a direct negative impact on student health (p.20). Research into school design and the built environment is vital and needed, but also has to be replicated with results as design choices can have long term impact.

The consequences of colonialism and Victorian school architecture on a global scale is still in effect today (Cryer, n.d.), showing the built environment's durability and power on influencing societal norms and ideologies. The creation of schools in the formerly colonised countries of the U.K. has led to a sense of colonial presence being a permanent imprint on many formerly colonised countries. Oduku (2000) analyses this in detail, commenting on Victorian school design across formerly colonised countries being seen as a carrier of western knowledge and superiority in many countries today. Victorian school design has cast a long shadow across continents as the ideal physical structure of a school and thus also the pedagogy, learning, and behaviours of a 'civilised nation'. Oduku indicates that although there may be a downplay on the importance of school buildings and school environments in the current Global North, the formerly colonised nations of the world inherently value the symbolism of Victorian era school design and thus British inspired education is "still grounded in an inherited colonial institutional framework" (2000, p.46). This connection between quality education and design is not to be taken lightly and has consequences for schools attempting to break from this colonial mould, with Oduku (2000) pointing out that schools which attempt design and pedagogy as something other than a traditional British design are seen as untrustworthy and lacking in rigour.

This sense of global supplication to the ideal of Victorian education in design and pedagogy can be seen not just in post-colonial Africa but also in Colombia where the research is conducted. As of 2018 57% of education in Colombia from primary to tertiary level is private, with only 30% of the student population enrolled in public education (World Bank Organisation, 2018), and personal expenditure per GDP on education ranks as one of the highest in the world (OECD, 2021). I would argue these stark facts paint a picture of a vast number of Colombian children

attending private schools. From my own experience living and researching in Bogotá, Colombia, where the research for this thesis took place, private schools capitalise on the colonial framework which Oduku (2000) sets out. An example of this is the dominance of the International British Curriculum, I.G.C.S.E's and British values which are lauded in private schools. The very naming of many of the private non-international schools in Bogotá reveal a telling picture of this colonial influence, examples being: "The English School", "Colegio Anglo Colombiana", "The Victoria School", "The Cambridge School", "Colegio Gran Bretana", "The Knightsbridge School", "St George's School", and "Colegio Oxford".

The fundamentals of what makes a positive learning environment for children has been researched extensively and there are factors which are considered universal in good school design. Clark (2002) details a few of the most important considerations being: properly daylit classrooms which improves behaviour and information retention (p.146), minimal overhead lighting, minimal use of plastic/metal chairs and a warm environment all contributing to higher engagement and learning outcomes (p.11). Clark (2002) argues that well-ventilated classrooms which are softly furnished (curtains, cushions, natural light) all contribute to an environment which produces a sense of comfort and safety for students (p.10) and that built environmental factors can impact student progress by 25%. Clark (2002) concluded that an inadequate BSE has become the norm in the U.K. (p.10). The overlooking of school design, the BSE and the necessary refurbishment of older schools has resulted in what the Royal Institute of British Architects (RIBA) described as a school system which was poorly designed and crumbling (Booth, 2016). This analysis has proven to be quite literally true, as seen in the current school infrastructure status with schools quite literally falling apart, being seen as a risk to life, and closing around the U.K. (Helm, 2022). Svensk et al. (2005) consider the importance of analysing school conditions and temperature in winter months as poor heating systems and ventilation designs result in cold draughts and discomfort for all those within that built environment (p.4). Clark and Uzzell (2009) focus their research on adolescents and the experiences of adolescents with their lived built environments and discover that adolescents prefer spaces of quiet reflection away from what they consider to be parental and school control (p.185). They repeated the study in Finland and discovered that for adolescents' space was most important for self-regulation: relaxing, socialising, and a feeling of togetherness (p.187).

The research on how students experience school design is sparse in Bogotá, Colombia, where the research takes place. However, Maldonado et al. (2023) have conducted a mixed-method research project in several schools in Bogotá. The research required students to analyse technical maps of their school and identify where they experienced a set of pre-selected emotions. They found that students felt physically safe in the classroom and they felt the most unsafe in bathroom areas, stairways and entrances and exits of the school grounds. The common discovery from their research pointed to students feeling safer in spaces in which adults were present. It is difficult to apply this research to the research conducted for the thesis as Maldonado et al. (2023) conducted their study in public schools in the urban sectors of Bogotá, whereas the research for this study was conducted in a singular private school, following different pedagogy, located in a rural setting. This again highlights the importance of not pigeonholing the research as research conducted on Colombian girls as the contextual background of the participants is very different from the experiences of other girls in the city. The study conducted by Maldonado et al. (2023) is powerful because in the schools they conducted their research students were engaged in talking with the researchers and moved beyond this, using mapping visuals and emoji icons to have students inquire deeper into their emotions in the BSE. The creation of an ideal BSE is compounded by the limited agency students have over their own learning environments which Maldonado et al. (2023) attempted to reverse.

Additionally, research conducted in Australia shows that future orientated school builds run into similar problems as schools in the U.K. and Colombia, and that regardless of the design of the space, conditions inside the classroom are dictated by the teacher and not the learner, and thus remain traditional (Kim and de Dear, 2018). This leads students to become passive recipients in their learning environments, unable to address issues such as thermal temperatures and ventilation issues. Kim and de Dear (2018) also highlight the important factor of the discrepancy between research into how children experience their learning environments as comfort levels, acoustics and ventilation are all designed around the research conducted on adults in office spaces, and their requirements, but then applied to children's environments without much consideration to children's needs (p.1). Schneider (2019) on researching students' academic performance in different types of academic facilities reported that students best perform mental

tasks when the temperature of a room ranges between sixty-eight to seventy-four degrees Fahrenheit and that lacking control over thermal comfort leads to poorer performance and dissatisfaction for both students and teachers (p.6).

Student perceptions of their environments were considered to be vital in the success of a new school build during the Building Schools for the Future (BSF) Programme (Department for Education and Skills GB, 2006), but this acknowledgement of the need for student input does not result in serious conversations with students about their built environment. Regardless of the evidence from across the world that students require specific environmental conditions to excel in performance, the former government of the U.K. had expressed disinterest in students' opinions on their environment for learning, with Michael Gove, the former Secretary of State for Education (2010-2014), dismissing findings around students benefiting from thoughtfully designed school-built environments as a waste of taxpayers' money (Booth, 2012). In 2010 Michael Gove cancelled the Building Schools for the Future Programme (BBC, 2011), citing it as overly wasteful and bureaucratic, leaving plans axed for 735 schools which had applied for funding to improve school facilities and built environments. In 2016 during an interview Gove admitted that the cancelling of the programme was a mistake (Marrs, 2016). The long-term consequences of the disinvestment in school buildings continues, with students wearing coats and gloves indoors, in schools which had indoor temperatures of less than 7 degrees and a school in Manchester at risk of closing due to toxic sewage gas which could implode at any moment (Sheikh, 2024). Suffice to say, the evidence points to a dire need for governmental policy to enact and support student voice in school building projects, if projects are to be future orientated. Studies such as those conducted by Maldonado et al. (2023) could be used to investigate how girls experience their BSE.

2.5 The Built School Environment and Ideology

The BSE is far more than buildings and Hertzberger (2008) posits that an analysis of the ideologies at play within the built environment is a micro representation of the macro environment of cities. This can reveal the complex power dynamics which can be found in the BSE. The BSE is seen by some as neutral, however Heath (1983) pointed out that the school has never been a neutral and objective arena as it is an institution which has the goal of changing

people's values, skills and knowledge bases. Baker (2012) states that schools are not just empty shells, but icons and symbols for the values of a society (p.3) and Collins and Coleman (2008) concur that schools become the ground where many "adult debates and adult produced ideologies play out" (p.295).

The use of school buildings as political instruments is highlighted by Wood (2019) who echoes Baker (2012), arguing that "there is no neutral form of school" (p.475) as school buildings are often used as instruments to enact long term policy agendas. Wood (2019) calls attention to the semiotic nature of the BSE as buildings are icons of institutional longevity which form "collective meaning-making" (p.466). Wood maintains that to understand the semiotic nature of school space it is necessary to consider the physical space of school buildings and spaces through the actions of people. This includes the actions of those who are involved in funding, urban planners, government policy creators and designers who think about smaller spaces in the school (p.472). Cook and Hemming (2011) concur with Wood (2019), arguing that educational spaces cannot be considered in isolation from other spaces, and that educational spaces are dynamic and active forums which cannot be fully understood apart from their "wider social, cultural, political and economic contexts" (p.4). Aitken (2004) develops the thinking that children's geographies, including schools, are integrally linked with social reproductions but rarely studied to understand the dynamic context behind them. Children's geography is, according to Freeman & Tranter (2015), a subsection of geography which explores the connection between children, young people and space. Often children's geographies, and the analysis of the social inequities which they can reveal, are hidden by moral panics such as teen pregnancies and school violence (Aitken, 2004, p.579). This can lead to an overlooking of how school buildings shape the lived experiences of students in their BSE.

Neglecting how the BSE shape's identity is also neglecting an understanding of how buildings shape our society. Gieryn (2002) highlights the danger of this, pointing out that buildings themselves stabilise social life and give durability to social norms (p.35). This makes them a powerful agent for those who can design the buildings of schools as the buildings themselves administer extended command over the behaviours of the occupants. Fisher (2004) details how power is shown through the architecture of schools, pointing out that elite sandstone private

schools are often based in leafy suburbs, whilst in industrialised areas of cities state schools often are akin to prison-like architecture (p.34). McGregor (2004a) also repeats this line of argument, positing that the connection between the built environment and schooling is viscerally clear to those who take up leadership in independent schools across the globe where schools have ivy clad quadrangles and sufficient outward appearance of wealth. According to Fisher (2004) school design formalises and ensures compliance with authority and school design cements the power dynamics between people in respect to their societal status (p.34). The crumbling walls of a state school reflect back to its occupants that they are less worthy than the occupants of a private school which is built as a monument to wealth and exclusivity. The immutable and silent role classrooms and school buildings play in the controlling of its inhabitants has remained unchanged since the Industrial Revolution.

The school is a semiotic symbol which endures not just through the buildings of a school space, but also through the lived experience of material objects and their uses in that space. McGregor (2004b) discusses that materiality goes beyond buildings to objects like textbooks and writing boards, which although not as permanent as buildings, have a sense of durability (p.348). According to McGregor (2004b) the teacher, object, classroom triad results in the sense of the classroom being unchanged and is based upon political inertia and desire to retain hegemonic power relations within the classroom. These power relations are sustained then via the physical space of the school, the objects within it, teachers, curriculum and pedagogy, and the way the school timetable uses space and time during the day (Mayo, 2014). There are multiple layers of control which students are exposed to, to keep checks and balances and sustenance of hegemonic power discourses and which are discussed in detail in the next chapter (Chapter 3). Additionally, McGregor (2004a) argues that when considering the axiomatic relationship between the built environment and teaching and learning there is very little research (p.2). Clark and Uzzell (2009) pinpoint more specifically that whilst children's environments in general have been reported on from a psychological perspective, the use of space by adolescents and their experiences of space has received minimal attention (p.176). More importantly to this study McGregor (2004a) highlights a lack of discourse about the use of buildings and environment to assert and maintain power dynamics, which leads to a barrier to "understanding and democratic spaces" (p.3). This last point is one which I aim to address in my research, with the hope being that by engaging in

activities which call attention to how the participants are experiencing their BSE, the participants will begin to reorient their understanding of how the environment shapes their lives in the future, and help make sense of their daily lived experiences.

2.6 Girlhood and Perceptions of Educational Spaces

The dearth of research into girlhood is notable when considering the experiences of girls in educational spaces. Bachman et al. (2009) conducted a review on the literature around girlhood and educational spaces and were particularly concerned with the use of outdated references around the topic that are still in use today to inform educational policy (p.7). Unterhalter (2023) investigates gender-based equality in education and highlights the co-opting of feminist arguments for improving gender equality in the classroom by non-educators, such as politicians who have alternative agendas, as a primary cause of a deceleration of gender equality in the education system (p.146). In researching into developing girls' agency Kirk et al. (2010) consider the failure of the lack of progress in girls' education across the globe as a fault of: government, poor policy making, and divided attention by organisations who have a poor understanding of how gender ideologies are played out in educational spaces (p.22). Kirk et al. (2010) also argue that the divided attention of policy makers and the complexity of educational spaces can be rectified with the focus of research into educational gender equality emphasising the need to write girls' voices into policy. However, this does not take into account the difficulties that feminist researchers experience in fighting what Unterhalter (2023) considers entrenched, covert and overt resistance to uncovering privilege, injustice and gender inequality in education (p.146). Additionally, Bachman et al. (2009) argue that identified gender inequities in education can quickly become outdated in research as a result of unfolding changes which have occurred over time and have not been researched, as well as teacher interactions with students which go unseen but give rise to profound inequities and affect student self-esteem (p.1). This can be seen currently with outdated school policies which can endanger transgender students through hostile environments and lack of safe spaces in schools (Rafferty, 2018).

Wrigley (1995) calls for a renewed focus on examining gender discrimination and the experiences of girls in schools through a feminist lens as in the past this has highlighted a set of discriminatory practices towards girls in education. Wrigley (1995) argues that this set of

discriminatory practices would then bridge over from the micro-school environment to the macro-public sphere and affects women (p.7). A resurgence of analysing gender inequality and its multiple facets needs to be implemented according to Chapman (2021) who argues that there is a need to trouble the notion of 'gender-neutral' learning environments following qualitative observation of a group of early years educators. The research they conducted in an early years setting identified gender biases amongst the educators, however at the discussion stage of the research educators either were not aware of their bias, or became very uncomfortable about the topic. Chapman's (2021) research is echoed by Lang (2010) who takes issue with the idea of 'gender-neutral' learning environments. Lang (2010) posits that globally educational facilities are imbued with cultural norms and few women have influence at design and policy level, thus educational facilities are inculcated with gender bias which educators, students and administration would rarely question as being out of the norm. This further emphasises the importance of research into gendered experiences of school space, with Bachman et al. (2009) asserting the need for a call to action relating to research conducted in educational settings (p.7). The hope is that this research will become a part of this call to action.

Harris (2004) considers school spaces as historically imbued with sexist beliefs about girls, citing the original argument for the integration of girls into the education system which was to steer girls away from their hypothesised natural moral weaknesses and sexual corruption (p.99). Ironically sexual harassment and sexual violence towards girls in U.K. schools has become a longstanding issue (Weale, 2023). The Women and Equalities Committee pointed out that misogynistic attitudes toward girls were growing in the U.K. (2018) and a trend of negative attitudes towards gender equality and girls' equity in education during and after the coronavirus pandemic (Morrison, 2021). Furthermore, a recent study in Colombia showed a 47% increase in reported cases of sexual assault and abuse in school since 2020 (Loaiza, 2023). What is lacking in research is detailed investigation into how sexual harassment and violence is committed in schools and in which spaces.

The BSE does not just play out as a dangerous space for girls, but also as a space of conflicting tensions and stressors for adolescent girls who consider themselves to be academically successful. Raby & Pomeranz (2016) conducted interviews with girls who consider themselves

to be academically successful and identified that the girls faced day to day experiences in school with sexist teachers, stress inducing situations and complex social interactions with peers, teachers and the school space in general (p.68). This indicates that a complex set of structures feed into gender inequality and negative experiences for girls in their BSE. Bachman et al. (2009) assert that the teacher plays a considerable role in the conserving of gender inequality in schools, with teacher expectations of students, role modelling and verbal and nonverbal communication all playing a role in the persevering gender stereotypes and norms which girls experience (p.4). It is important to note here that many educators may not be aware of gender bias in their teaching, or may be uncomfortable addressing the issue. To complicate matters, teachers may not be aware of policies in place at their institutes with Pinkett & Roberts (2019) noting that in the research they conducted 64% of teachers were unaware of any kind of policy against sexism (2019). This reflects the day-to-day experiences of teaching in mixed gender schools, where teachers, inundated with ever changing government and school policy changes may not even think about gender bias at all. Kirk et al. (2010) note that girl-friendly approaches such as group work are promoted in teacher training but rarely take into consideration the needs and wants of girls (p.24). Additionally, methods promoting girl-friendly teaching may quickly become outdated or ineffective, with Robinson-Cimpian et al. (2014) noting that regardless of the push for girls to be more involved in STEM their research showed that teachers were still encouraging and overestimating maths abilities in boys, and underestimating it in girls. A possible solution for this is for gender equity training to be implemented as a core competency in teacher training courses. However, research conducted by Battey et al. (2007) on 170 equity building training programs for teachers found that the courses themselves lacked long term impact. This does not negate the importance of continual gender equity professional training as vital as inequality continually changes and appears in different ways.

Globally it seems teachers are not wholly aware of the differences between the ways girls and boys experience school. Francis & Skelton (2005) analysed classroom interactions of teachers with boys and girls and included teacher interviews in the USA. Francis & Skelton (2005) take note from their observations that girls have a preference for collaborative learning and discussions and reflective tasks, whilst boys prefer competitive learning styles and whole class teaching. El-Haj (2003) draws on ethnographic work conducted in the past 24 years on how to

improve school equity and also concludes that girls prefer cooperative classes, especially in STEM based classes, which girls find to be hierarchical, less interactive and goal based. Although these findings may change the way teachers design lessons and teaching strategies, I suggest deeper research is needed to ascertain why girls prefer small group work and collaborative learning, rather than assuming that is what they prefer a priori. Isaacson et al. (2020) have led a project in Israel which had twenty high school students connect with women researchers at university to work on STEM collaborative projects to interest the girls in the field. Results indicated that 87% of the girls were encouraged to further participate and said having female staff was very important to them (p.162). This reflects research by Kirk & Sommer (2006) in sub-Saharan Africa who note that girls have little chance of being taught by female teachers, limiting their exposure to adult women who can give them spaces to discuss topics of their choosing like menstrual and sexual health. Kirk & Sommer (2006) particularly mention male teachers not always understanding the needs of their girl students, especially around sensitive topics like period care and needing to use the bathroom for menstrual care needs (p.8) as problematic and in need of addressing. Period care is discussed later on in this chapter in more detail.

2.7 Girls in School Space

The construction of space and place and the experiences of girls in the BSE is highly dependent on individual buildings, environments, school policies, and cultures. However, the literature identified and reviewed in this subsection around the topic of "girls experience of the BSE" or "girls experiences of school architecture and space" has noted trends, which I discuss below.

What Cairns (2008) identifies about how children experience and develop their gendered identity is that children make sense of themselves, their gender and the world around them through continuous negotiations of masculinities and femininities in and through the spaces they inhabit (p.655). Considering the sheer amount of time students spend in schools in their lifetime, across the globe, school space then becomes a prime determinant of how children understand and see their gendered identities. Furthermore, organisational bodies such as governments, architects or administrative employees of a school space which control the BSE become the regulating forces of identity formation in children. Additionally, spaces can be controlled by multiple agents and

in schools there may be spaces which are controlled by administrators, teachers and students co-currently, with control being exerted on different groups of people, by different groups of people. The enduring point is that whoever has the ability to spatially organise (Wood, 2019) has the ability to assign function to said space and maintain power dynamics. Bettis & Adams (2005a) contend that school spaces: hallways, lunch areas, stairwells and other liminal spaces, are areas which are constantly in flux in regard to who controls which areas and for how long. It is also pertinent to note that children have their own set of unwritten societal norms which dictate how they experience space, and it can be very difficult for researchers and educators to understand how those power fluctuations come to be and are maintained.

Rose (1993) states for girls "being in space is not easy [...] at its worst this feeling results in a desire to make ourselves absent from space" (p.143). This is relevant as according to the research in the BSE girls are often at the bottom of the pyramid of spatial organisation and control, and this impacts and shapes their everyday experiences. Clark & Uzzell (2009) identify that by the age of sixteen girls use school space differently to when they were younger, with the majority of break-times used for socialising. Furthermore, they note a clear distinction between the way boys and girls use the school space, with boys using more of the school space, more actively, from the age of eleven (p.187). Weisman (1994) asserts that this is because boys are raised to be spatially dominant in a multitude of ways: they are encouraged to adventure, to explore unknown spaces, to use dominating body language to control space, and encouraged to be verbally assertive (p.37). Wrigley (1995) also indicates that boys' dominance over space begins at a young age with playground games being separated strongly by gender, with the majority of school play areas being dedicated to boys' use (p.126). This echoes Massey's (1994) personal commentary on her experiences growing up and observing swathes of English countryside being dedicated to boys' playing football. Additionally, Wrigley (1995) also notes that boys do not only spatially dominate school spaces but also invade the spaces of girls explaining that "women and girls take up less, and their space, and talk, are more violated and interrupted" (p.133). What is clear is that girls live complex lives in their school space as they navigate a social landscape where they are infantilised yet hyper-sexualized, expected to be kind but strong, and assertive without being domineering. This set of contradictions must be navigated through the built environment where girls often have little say.

Mitchell & Rentschler (2016) argue that girls and young women live in a contentious reality which shapes their lives and girls and are in a constant state of struggle to claim their right to spaces and territory, extending to places of leisure, study, work and consumption (p.2). This means that they must branch out into areas which they struggle to make their own and can often face opposition from institutions (p.2). The Make Space For Girls organisation (Make Space For Girls, n.d.) addresses the need for girls to have safe spaces in the public sphere and focuses on partnering with institutes to further research into how to create safe spaces for girls. The organisation, together with researchers at the London School of Economics, investigated how a group of young women experienced public space in their town in a participatory research project. The project discussion highlights that the young women felt unsafe, judged and that they valued spaces where they feel a sense of autonomy (King & Theocharides-Feldman, 2022). Bartky (1990) parallels this thinking, showing how the behaviours built in girlhood further develop in womanhood where deference and graciousness are requirements of the woman in the workplace, regardless of inner thoughts (p.68). For Bartky (1990) the space that women occupy is not a free space, but a space of confinement (p.67). I would argue that sense of confinement begins not in womanhood, but in girlhood, primarily in the confines of the BSE.

Epstein et al. (2001) studied the use of recreational spaces in the BSE and observed that in the world of sports in schools girls were considered inferior to boys and disallowed from entering areas of sports, such as the football field, but boys were allowed to enter spaces which girls used regardless of what was occurring in that space. The only possibility of a girl joining the football, with the permission of boys, was if she was better than them and thus qualified as an honorary boy (Epstein et al., 2001, p.163). Furthermore, boys who were considered not good at sports and did not display the required levels of aggression were located at the margins of the playing fields, with the girls, thus demonstrating the dominance of football and aggression in the BSEs as a toxic space for girls and boys (p.158). Wrigley (1995) identifies that ten times more playground and recreational spaces are controlled by boys than girls. There are a few organisations working on improving school recreational space. The U.K. Opal Primary Programme is a mentor supported school improvement programme which focuses on improving primary school

playgrounds to be more welcoming and inclusive spaces for children to be more active in (OPAL, n.d.).

Tolman (2005) considers the lack of safe spaces for girls to be highly problematic as it invalidates girls' rights to spaces where they can share their experiences with adults and each other about the difficulties they face navigating the often contradictory and confusing social norms mandated to them (p.192). In *Future girl: young women in the twenty-first century* (2004) Harris analyses girlhood in the twenty-first century and argues that girls in the modern day may still be playing with barbies but they also may be playing football, exploring sciences and being more assertive. However, she also contends that the construction of spaces for girls to be together have been diminished and taken over by concepts such as citizenship studies, commercialisation and a hyper-surveillance state (Harris, 2004, p.148). Although Harris makes an argument for the future girl in her text, the text itself is an example of how quickly research and theory around girlhood becomes outdated as girlhood in this current epoch is dominated by social media and digital spaces. The research conducted for the thesis does not aim to explore how the digital space of girlhood affects girls lives but the fast-paced development of technology requires research into those spaces. Regardless, girls must forge spaces of their own and it is in these spaces that girls will be able to express, resist, dissent and build societal norms that they wish to present to the world. This is distinctly important for girls who do not fall into heteronormative norms, disabled girls, and girls who are from ethnic minority backgrounds. Hyams (2000) supports this point and has concluded from research conducted in a high school with majority Latina students that Latina students face socio-spatial BSEs which are hostile to their needs and norms on multiple levels (p.636), whilst Stannard (2022) advocates for single-gender schools which are designed to maximise the potential of girls. According to Stannard (2022) this means emphasis on informal learning spaces, a change of the time of the school day to better suit how girls learn, curriculum content and pedagogy which focuses on collaborative learning and leisure and landscaped areas which encourage girls to adventure and explore (p.61).

Baker (2008) contends that the media attention to girls' success in schools reflects the changing socio-political climate surrounding the BSE. This brings to light the point that girls do not exist in a vacuum, and that media stories influence policy, which directly influence the everyday lives

of girls. Perhaps instead of framing girls as successful in schools, the narrative should become about girls succeeding despite their experiences in their BSE. The narrative around girls succeeding, possibly at the demise of boys, does not point out that the educational space is very much still dominated by boys. Gill et al. (2016) state that their research in schools points to an intransigent male order which requires girls to make themselves invisible and voiceless (p.190). Gilligan (1982), after observing girls in a single-sex school in New York, argued that this sense of invisibility of voice for girls in schools happens because boys want to be heard the loudest, but girls communicate and express ideas without wanting to dominate the given discourse. This harkens back to a sense of nostalgic gender normativity which is taking over mainstream media and influencing boys' perceptions of girls, the results being a global trend of boys regressing to being more sexist and less supportive of women's rights (Silverman, 2024; Booth, 2024).

The quieting of the voice and disappearing into the background is not a natural development in girls, but is conditioned into them over time, with Richards & Posnett (2012) showing that boys and girls aspirations in primary school are the same, diverging once joining secondary school, with girls' aspirations falling behind boys by the time they reach high school age. These sets of aspirations and self-esteem issues reflect attitudes to work and self-estimation later in life, with Reilly et al. (2022) noting the phenomena of 'male hubris, female humility' where men provide higher self-estimated levels of intelligence than women do. Howe (1997) concluded from their research that girls tended to defer to boys in learning environments which included: whole class interactions, desk-based group work, STEM based work and oral presentations. Gill et al. (2016) point out that this leads to girls being forced to accept a world of competitiveness and individualism (p.194) which negates the ideals of feminist arguments.

2.8 Girls' Bodies in Educational Spaces

The architecture of schools not only influences how teaching and learning is experienced by students, but also affects the relationship between the school and the body that is inhabiting the school space. To build school environments which are holistically enriching environments for students there needs to be a reconsideration of how students experience their environment physiologically and psychologically.

Parts of the school outside of the classroom also construct the daily lived experiences of the BSE (Burke, 2005). Clark's (2002) in-depth study on how the school environment can shape behaviours of children considers that childhood memory, including those of school life, is constructed from experiences in the body, about the body, and through the body (p.87). Colls & Hörschelmann (2009) argue that the body has been absent in research in the field of children's geographies, and this is problematic because it means that opportunities to draw attention to spatial constraints and opportunities that young people may face (p.4). These cognitive blueprints built during formative years then shape the way one remembers the built environment into adulthood.

The long-term effects of the built environment reach into adulthood. McGregor (2004a) highlights that hallways, play areas and other physical spaces in the school environment are taken for granted spaces which are rarely questioned or challenged, to the point of being instantly recognisable when entering school spaces as adults (p.2). The memory of a school, with its common features, becomes a core element of how humans navigate architectural elements from schemas built in the mind as children and adolescents. Barrett et al., (2013) hypothesise that the emotions and memories developed in spaces lived in childhood embed into memories as adults and shape how adult identities are formed and the narratives, we tell ourselves to understand our world better (p.38). Putting it succinctly, Goldhagen (2019) states that "our very sense of who we are and have been is inextricable from our sense of where we have been" (p.83). Research has also identified that colour in our environment affects our emotions, with both cool and less saturated colours calming and warm and saturated colours energising (Humphrey, 2006). This also applies to education with tests being administered in spaces rich in saturated colours, such as red, scoring less well (Sternberg, 2006). Likewise, environments which overstimulate the body such as built-up suburban areas, and vice versa under stimulate the body, such as poorly designed school corridors, can cause stress, mental exhaustion, boredom and sadness (Dunham-Jones & Williamson, 2011). School design can be further analysed through the field of psychogeography which Ellard explores in the book *Places of the Heart:The Psychogeography of Everyday Life* (2015). Ellard (2015) calls attention to human beings' preference to visually observe objects' curves, avoid sharp edges and straight corridors, be calmed by views of nature and be in settings which are complex and engaging (p.98).

Rose (1993) focuses on the shame girls experience and asserts that this sense of shame of being woman or girl and all that encompasses makes women and girls feel like the spaces they embody feel like “a thousand piercing eyes” (p.146) which makes space a precarious realm. Furthermore, Rose details that in the field of women it is often the sense of being watched by other women which discomforts the most (Rose, 1993, p.145). Gill et al. (2016) have chosen to focus their research on how adolescent girls self-check before they are fully participating in the world of women. They discovered that the majority of girls self-monitor and monitor each other constantly and this results in a continual sense of needing to be a better version of themselves in terms of friendship, physical perfection of the body, school grades and in likeability (p.186). Harris (2004) details the seamless transition girls experience with constant surveillance and regulation in the school space to the workplace as women. The school environment, according to Harris (2004), builds in girls the idea that to be successful one must have total control of the body and mind, and this total control will continue on in the workplace post-education (p.111). A failure to achieve this sense of perfection then becomes not a failure on the part of family, friends or schools but the individual girl who has lost control. This can lead to extreme feelings of anxiety, but this is overlooked by schools as girls are seen as unproblematic, whereas in reality they are experiencing intense levels of anxiety about grades, their bodies, their friendships and likeability, and how their teachers and peers perceive them (Stannard, 2022).

The research on how the BSE impacts the body of students in school spaces can be used to bring school design into future thinking. However, it cannot be overlooked that when entering school spaces, the user is what Wood (2019) refers to as being subjected to someone else’s design (p.469). Wood (2019) argues that when the dialogue around school buildings turns to how schools are built, the conversation of why they are built, and therefore the design elements to achieve the why, are lost in political and financial discourse (p.472). Barrett et al. (2013) conclude that school design has an impact of 25% on student’s learning and is a vital feature to consider when designing classrooms. Their study was conducted across schools in the U.K. with 751 students taking part. However, Barrett et al. (2013) note that research into school design is exceptionally difficult to generalise, and apply to policy making, as the environment and its effects on learning are highly individualistic.

Understanding the lived experience of the BSE requires an exploration of how the body of a girl occupies school spaces. Focusing on analysing the experiences of girls through their bodies can provide insights into the ways schools shape and effect the bodies, and the lives of girls. Bordo, in her seminal text *Unbearable Weight: Feminism, Western Culture, and the Body* (1993), considers the societal preoccupation with women's bodies, eating disorders, and the idea of the perfect body as violent assaults on women's bodies and minds and as a powerful way of controlling bodies (p.186). The body is then never neutral, and the self-monitoring required by women leads to a battle with the self. Lalik & Oliver (2005) analyse media content and girlhood, and describe the pressures faced by girls when it comes to their bodies, stating that in the current world of digital media girls' bodies are highly fetishized simultaneously as innocent and erotic, and that girls are hyper aware of this dichotomy and the persistent regulation and surveillance of their bodies (p.86). Gill (2007) argues that media influence has developed a narrower and narrower conformity of the ideal female body, and that femininity is achieved through a 'sexy body' which requires constant "surveillance, discipline and remodelling" (p.6). Bohnet (2016) contends that the influence of mass media on girls should not be underestimated as what girls see and hear on mass media becomes what is normalised. Evans (2006) interviewed and observed high school aged girls and concluded that girls feel immense pressure to construct bodies which they consider pleasing to the male gaze (p.557). Furthermore, the girls participating in their research commented on the different layers of pressure to conform their bodies they felt, with a pressure to appear appealing to boys and a separate pressure they feel when with other girls (p.555). This is a major theme discussed by the participants and is explored in Chapter 6.

Latina students particularly feel societal pressure as they live in a double bind of being stereotyped as sexually alluring, whilst facing a cultural pressure to remain as being seen as innocent to avoid the 'bad girl' trope that befalls 'fallen' girls (Tolman, 2005, p.171). Latina participants went further and explained that control of the body was seen as feminine and an indicator of whether a girl would be successful in school achievements (Hyams, 2000, p.635). This ties in with the Latina tradition of Quinceñera mentioned earlier as it indicates to girls their maturity and symbolic sense of self-control and to lose sight of this self-control and to give in to 'desires' is to signify a total loss of control of the self (Hyams, 2000, p.640). This use of emotion

and fear of shame is what Ahmed (2004) states as a method of using emotions to reward or punish citizens for their adhering or disobeying the societal norms set out for them. Mandrona (2016) asserts that the body is the centre of girls' struggles with and against societal norms and expectations; whether through reproductive health rights, schooling policies, beauty standards or gendered socialisation (p.14). Beauty and the unattainable perfect body "render women as ugly and construct them as nothing but a body" (McDowell, 1999, p.179). The body of a girl is under constant discipline and watch from the self, peers, and institutions. The school space, especially in adolescence, becomes a space where girls become hyper aware of their bodies. Kumar (2017) concurs, stating that "fear and preparedness for submission are deeply etched in socially sanctioned girlhood" (p.15). Bettis & Adams (2005a) maintain that institutional regulation of bodies becomes particularly pertinent for girls during adolescence as they must battle with the contradicting message of being seen as the idealised sexual female form, but also become seen as bodies which are under suspicion in institutions such as the home, church and school (p.11). Bartky (1990) describes the use of school objects, such as desks and timetables, as tools for the relentless surveillance of students (p.64). Furthermore Bartky (1990) makes clear that the bodies of girls are controlled and regulated in schools by micro practices, such as: strict dress codes where the focus is often on girls' makeup usage, jewellery, dictation of acceptable hairstyles, and a shaming of showing skin which boys do not face.

2.9 The Experience of Menstruation

Researching into girlhood and girls' experiences of school space cannot be analysed without a discussion around menstruation. Menstrual health, sometimes referred to as menstrual hygiene management (MHM), is a known factor across the world for levels of absenteeism in girls' education (Sebert Kuhlmann et al., 2021; Vashisht et al., 2018; Davis et al., 2018) and which can lead to cultural practices which exclude menstruators from society, sometimes leading to death (Vaughn, 2019) as well as ingraining in girls a sense of shame about menstruation (Inthaphatha et al., 2023; Benshaul-Tolonen et al., 2020). This does a disservice to girls who menstruate as their experiences of menstruation and their lived experiences in the BSE are impacted by not only the physical toll of periods, but also the societal stress and stigma which surrounds it. The lack of physical and social support is further detrimental for those who menstruate but identify as boys/men, those with health conditions, and those with disabilities.

When navigating period care Fingerson (2005) argues that the topic of periods affects girls and women in similar ways, stating that in the workplace discussing periods is a taboo subject still with the topic seen as an individual "woman-issue" and not legitimate of study (p.117). Furthermore, Kowalski & Chapple (2000) show in their research how perspectives of the self also can change during periods as women perceive that men stigmatise them less when they are on their periods. However, menstruating girls have a different experience than menstruating women as girls must also navigate the lack of privacy in schools, toilet breaks which are strictly timed, and possible punishment from those in much higher positions of power for period related absence or lateness. Fingerson (2005) interviewed a group of high school girls and the girls shared that there was often not enough time in between classes to gather books, visit lockers, find the necessary facilities to take care of period related hygiene matters, spend the adequate amount of time needed in the toilets, and then go to class on time (p.121). Prendergast (2000) also concurs that the structure of schools does not provide adequate conditions for girls who are menstruating. There is an absence of literature on the sheer amount of time girls must spend pre-planning for the school day when on their periods and the stress and anxiety this can create. This is not to victimise girls, but to identify that the school environment can become deeply oppressive and stress inducing when menstruating. Furthermore, Fingerson (2005) identified that girls are very much embarrassed to talk about periods together, and that often boys will search the bags of the girls interviewed in search of period related care products to shame girls (p.123). In the interviews the girls expressed a desire to stay at home on certain days of their menstrual cycle to avoid the fear of leaking and to be able to cope with period related pain in comfort (p.124). The girls in the study indicated they wanted safe spaces and de-stigmatisation of periods, but when around male teachers, the male teachers would avoid the topic or be embarrassed about it (p.127).

Young (2005) comments on the lack of physical and emotional space where girls and women can reflect on reproduction and sexuality, highlighting that periods in the Global North have been reduced to a consumer role only, and in school addressed only when learning about reproductive processes (p.104). Young (2005) conducted interviews with women of different ages discussing the onset of menstruation and discovered that most of the participants remembered it as a time of

fear and anxiety, with focus being spent on hiding being on their periods at home and in school, and it being a time of annoyance and discomfort (p.101). This sense of hiding is often connected to the desire to contain the self to conform to societal norms (Liddiard & Slater, 2017). Kirk & Sommer (2006) state that because minimal significance is given to menstruation in the Global North menstruation becomes a taboo subject and something to hide, and thus is ignored by families and schools (p.2). Furthermore, they point out that the discomfort which comes with periods: back pain, nausea, cramps, leg pain, mood swings and bloating are often ignored in schools, with some girls feeling like they are accused of attention seeking behaviours when they ask for medical intervention to lessen the discomfort (p.3).

Bush et al. (2017) ran an early intervention program in New Zealand High Schools which was aimed at informing students about the signs and symptoms of endometriosis, and dysmenorrhea, a condition of abnormal amounts of blood loss during menstruation. The results of the educational campaign led to acknowledgement of the fact that 27% of the girls taking part missed school regularly because of period related issues and the campaign led to an increase of girls attending specialist clinics which focus on endometriosis health care. What Kirk & Sommer (2006) advocate for are teacher education programs, community work with the wider school community and with students around the topic of girls' health, and period care to de-stigmatize the topic culturally (p.13). Okamoto (2018) argues that change can only be achieved through governmental policy regarding how menstruation is addressed, stating that currently in the U.S.A. the way menstruation is taught negates the menstrual experience, from ignoring the very real pain that girls go through, encouraging shame through gender separate classes when discussing reproductive care, to ignoring sustainable alternatives to pads and tampons entirely. There is a need to take seriously the daily experiences of girls in the school spaces which impact their health and learning, and period care is a major factor in this.

2.10 Chapter Conclusion

The literature explored in this chapter shows that the designing and conceptualising of public and private spaces are created by a whole host of professionals, including but not necessarily focusing centrally on input from children and young people. Laughlin & Johnson (2011) concur that this is a result of young people being seen as lacking responsibility, experience and interest

in planning processes (p.440). According to Maxwell (2000) this is a fallacy as studies have shown that children as young as nine can articulate their experiences of their own built environments (p.273). Additionally, Chiles (2003) highlights that during a project discussing school design involving headteachers, teachers and students, the students, aged between eight and ten years, showed great interest and enthusiasm in the discussion, albeit the researchers had to overcome initial difficulties as the students did not have the vocabulary to discuss architectural concepts (p.248). The complexity of school design involves aspects such as: temperature, light, sound, materials, space, technology, design and more (Wright, 2004). The built environment can be a tool to oppress or maximise potential of girls, and all users, if thoughtfully constructed with the voices of the underrepresented emerging as driving forces behind design choices.

The literature around children's geographies and how girls experience spaces leans strongly towards different types of qualitative research, with focus groups and interviews being popular methods of data collection. The research conducted for this thesis focuses on participation with three groups of girls to engage the participants in thinking about how they experience their BSE. The literature review has identified that a key focus point of researching into girlhood is to acknowledge the unique experiences of girls and a need to not generalise the experiences of girls in studies. What the literature review reveals is that the lived experience of the BSE for girls is not just about school design but involves a complex interplay of design choices, environmental factors and oppressive societal norms. This is explored in the next chapter in the Theoretical Framework.

Chapter 3 - Theoretical Framework

Figure 3

R.K. Saghera (2024). Architecture and Gender: Panopticon by Design [Collage].

3.1 Introduction

The theoretical framework attempts to illuminate the controlling forces faced by women and girls in their built environment, as depicted in Figure 3, and bridges essential concepts from the field of feminist geography, particularly theories from: Matrix (1985), Weisman (1994) and Massey (1994). Lefebvre's spatial triad theory (1974/1991), and Foucault's discourse on biopower (1979), heterotopias (1984) and panopticons (1979) are also discussed for their influential analysis of the power dynamics at play in built environments. Whilst Lefebvre (1974/1991) and Foucault's (1979;1967/1984) theories on spatial dynamics create an underpinning for the theoretical foundations of this study, especially in regard to the controlling force schools play in society, the experiences of women and girls are not directly covered in their work. Feminist geography provides a frame of reference to critically examine spatial inequalities from the vantage point of women's experiences in the built environment, including the ways in which the built environment shapes the everyday lives of women through the lens of gender. These three frames of reference: feminist geography, Lefebvre's spatial triad, and Foucault's ideas on space, are used to elucidate the connections which exist between: the BSE, power, behaviour, and the lives of women and girls in this chapter.

3.2 Lefebvre's Spatial Triad

Lefebvre's (1974/1991) spatial triad is a seminal framework in the field of urban and critical geography as it forms a nuanced epistemological understanding of how space and the environment is constructed from a continual interplay between conceived space, perceived space and lived space. It is also used to explore how space is experienced in school with Mechlenborg & Neergaard (2024), Pipitone & Raghavan (2017) and Watkins (2005) exploring spatial practices through Lefebvre's (1974/1991) theories. At its core the triad establishes that space and behaviour belong to a symbiotic system, and that behaviour shapes space and vice versa, leading to Lefebvre hypothesising that space is something which is produced and evolves through social relations (1974/1991). This point of symbiosis is also emphasised in the works of Foucault (1979;1984) and of feminist geographers who concur with the concept of space as being constructed from a multitude of facets which exist in relation to each other, and which is discussed at various points in this chapter.

Lefebvre's spatial triad (1974/1991) consists of:

1. Conceived space: space as designed by those who are involved in mapping, plans, and design decisions.
2. Perceived space: space as understood through sensorial lived experience and emotions.
3. Lived space: space in which daily interactions, routines and activities take place, shaping community norms and behaviours.

The spatial triad underpins the research conducted for this thesis as this thesis explores how conceived space holds dimensions of power in relation to school design. Furthermore, the research conducted is an in-depth exploration by the participants of how their perceived and lived space is experienced. Lefebvre conceptualises space as something lived and fundamental to how humans understand, see and experience the world; including their experience of power structures and ideologies (1974/1991). Whilst the research for this doctoral thesis is inductive, the theoretical framework and Lefebvre's spatial triad (1974/1991) has allowed the research focus to have a sense of expansion when understanding space and built environments as more than just physical buildings.

Lefebvre's spatial triad (1974/1991) has been used as a framework for researching in education previously, with Mechlenborg & Neergaard (2024) using the spatial triad as a tool for designing research when investigating adolescents experiences of school life in two Danish schools. They formulated research questions which align with each section of the triad. They argue that attempting to split research into investigating only one part of the triad does not show how power and norms are constructed through a continuous relationship with all three elements of the triad together (Mechlenborg & Neergaard, 2024, p.2). Middleton (2016) concurs with Mechlenborg & Neergaard (2024), stating that "a space is at once conceived, perceived and lived. We 'live' spaces by attributing meaning to them: emotional, spiritual, historical or cultural" (p.414). Clark & Uzzell (2009) also consider the separation of space for analysis to make little sense when wanting to holistically understand lived experiences, arguing that individuals understand their environment in a multifaceted sense (p.179). This suggests that space should not be seen as purely the physical environment or social space and should be analysed not in isolation from its various different parts.

Brett (2024) has conducted research into educational spheres using the framework of Lefebvre's spatial triad through photo methodology to document the experiences of LGBTQ+ educators. Brett (2024) deconstructs the educational space for the participants into conceived space; consisting of the physical school space as designed by architects and administrators, perceived space; consisting of school values, cultures and routines, and lived space; consisting of the individual and subjective experiences of the participants of the conceived and perceived space. Mechlenborg & Neergaard (2024) specify why it is important to analyse and understand space through the triad, stating that understanding the experiences of the lived space requires an understanding of how it has come about as a result of the perceived and conceived space. Furthermore, Robertson (2009) highlights that spatial rules can be re-written, and that the spatial triad provides a tool in which educational spaces, which have layers of multifaceted and dynamic power relations, can be analysed to reveal new insights.

Lefebvre's ideas on the spatial triad can be expanded to include elements which he himself did not originally include. Fataar & Rinquest (2018) specify that an additional element which can be added to Lefebvre's spatial triad is the 'mental space'. This consists of a space where people derive from their experiences a sense of personhood which shapes their sense of reality (Fataar & Rinquest, 2018, p.37). Cook & Hemming (2011) expand on this further, identifying not only a 'mental space' which exists, but also a 'cultural space' which exists via "concepts, representations, symbols and ideas" (p.3). In addition to 'mental space' and 'cultural space', a crucial point of Lefebvre's which is most relevant to this research is Lefebvre's (1991) commentary on the body. The body can, and I would argue should, play a central role in the spatial triad. The body, according to Lefebvre (1991), is the site in which the spatial triad is experienced. Kinkaid (2019) cements their research firmly within the idea that space commands bodies (p.174) and that the bodily experience, in the context of the lived world, leads to an understanding of spatial norms and behavioural expectations in social space (p.176). Simonsen (2005) argues that theorising the body needs to include a focus on how the body somatically experiences the spatial triad. Additionally, Simonsen (2005) argues for the body to be at the centre of the spatial triad as it is the mediator in which one experiences space between the three dimensions, subconsciously or consciously, and thus shapes understanding of the self (p.7). Simonsen (2005) posits that Lefebvre's ideas around the body do not constitute a coherent theory

which can attempt to explain the somatic experiences in the spatial triad, and thus recommends using Lefebvre's ideas around space in conjunction with other theorists who focus in more detail on the body (p.9). This leads the theoretical framework to the works of Foucault, in an attempt to bring together the body and the experiences of everyday spatial life.

Lefebvre's (1974/1991) original work conceptualised and conceived space as a factor in how power can be felt through lived experiences. Contemporary theorists and researchers (Simonsen, 2005; Cook & Hemming, 2011; Fataar & Rinquest, 2018) have extended the work of Lefebvre to incorporate new thinking into the spatial triad, emphasising the pivotal role that mental space, cultural space and the body play in the experience of space and place. A holistic understanding of the theories of Lefebvre and his modern day counterparts provides the research with a foundational framework in how to observe, analyse and understand the power structures which intersect in the BSE.

3.3 Foucault: Biopower, Panopticons and Heterotopias

3.3.1 Foucault and Schools

Michel Foucault, through a series of talks presented and translated on the topics of space bodies and heterotopias (1979;1967/1984), created an influential and pervasive discourse (Ball, 2012; Pitsoe & Letseka, 2013) around the power dynamics and surveillance systems which are used to control and shape educational structures. Foucault referred to schools as "the great carceral continuum" (1979, p.297), which shows the strong parallels Foucault identified between prisons and schools. Foucauldian theory places the experience of power and oppression within the individual, and it is this, according to Pike (2008), which can provide insight into the agency of children and those working in the BSE, especially providing insight into the ways children encounter agency and subordination (p.420). Sullivan (2012) contends that the viability of using Foucault's theories to analyse spatial hegemony lies in the focus of Foucault to undercover how power and control is achieved over the individual, rather than a focus on what power is. Foucault's ideas around biopower, the modern day panopticon, and heterotopias provide a rich framework for analysing and understanding how girls and women experience societal control.

3.3.2 Biopower

Foucault explored intersections of power (1978/2008), especially focusing on the modern day controlling of the body and biological processes which he called biopower. Foucault argued that control of the population was "accomplished not only through consciousness or ideology but also in the body and with the body" (Foucault, 1980, p.137).

Bartky (1990) notes that biopower, as a method of disciplinary control, applies to institutions which contain within them a mass of bodies: the army, hospitals, prisons and schools (p.63). Ball (2012) goes further and argues that the bodies of children are hyper controlled in the school space. Ball (2012) cites the combination of the BSE and the physical presence of teachers, head teachers and inspectors as enforcing a new modality of state bureaucracy used to achieve docility, which leads to a population of students who are easy to control or persuade (p.41). This connection between docility and children's bodies is expanded by Evans (2006), who argues that one of the major hidden agendas of the school is to regulate and discipline children's bodies (p.22). Cook & Hemming (2011) posit that schools are a place of considerable application of Foucauldian theory as schools are a key site of government intervention and this is achieved through the heavy controlling of the student body. They give examples such as controlling movement, applying healthcare initiatives such as obesity control measures and vaccinations, and a pervasive controlling of the spaces in which the body can be placed in, and at what time of day (Cook & Hemming, 2011, p.3). Leask (2012) expands this point, commenting on the controlling of the bodies' reproductivity, sexuality and speech as a continual thread of control over young people in the school environment. Similarly, Bartky (1990) refers to these methods of enforced docility as "micro-physics of power" (p.63) and it is in the micro aspect of these forms of enforced docility that gives biopower its inherent 'power'; that which is its invisibility and ability to coerce behaviours without being seen to be an enforcing agent. Ryan (1991) details that docility of bodies in schools is achieved through various discipline measures and notes the use of: detentions, evaluations, behaviour policies, report cards, and parent meetings as a key factor in controlling the bodies of children (p.110). Foucauldian concepts such as biopower stress the power dynamics at play in the BSE, especially in relation to student bodies and somatic control (Cisney et al., 2016).

Whilst Bartky (1990) advocates for the use of biopower and Foucauldian theory as a framework for analysing the lived experience of space, they also rightly criticise Foucault for treating the body as one homogeneous, male body. Foucault does not address the use of biopower and hegemonic control over different gendered bodies, disabled bodies, and children and this is a limitation in his work. For this reason this research, which is centred around the experiences of girls, uses the principles of Foucauldian theories around biopower and space, but as a foundational supplement to the major part of the theoretical framework which centres instead on the ideas within feminist geography. Women's experiences of biopower differ to those of men and Bartky (1990) highlights the insidious nature of disciplinary power over women's bodies, with their being an appearance of freedom of movement for women, but also invisible enforced gender norms on women's bodies (p.80). This reflects Foucault's words in *The Production of Space* (1980), with Foucault stating biopower and panopticons lead to a "power which becomes a machinery that nobody owns" (p.156). Furthermore, Paechter (2003) remarks that gendered norms are constructed in schools, with adolescents uncertain of what constitutes correct behaviour for adult men and women, and thus observing the correct behaviours modelled to them in the school space (p.47). According to Paechter (2003) this positioning of schools as one of the primary sources of learned gendered behaviour leads to a continuation of gender stereotypes which leads to disempowered adults in the future (p.57). The key takeaway here for the thesis is that gendered and disempowering stereotypes are learnt through the body in the BSE.

3.3.3 Panopticon

During the late 1700's English philosopher Jeremey Bentham described a new form of prison structure, which he referred to as a panopticon, consisting of a form of spatially designed surveillance mechanisms where all could be watched by a central figure keeping check of prisoners (1791/1995). Bentham (1791/1995) argued that the power of the panopticon lay in the minimal need for human bodies to implement surveillance, as from a tall tower one surveiller could see all prisoners, and prisoners would not be able to see them. Consequently, the power of the panopticon is also based in the longitudinal idea that the prisoner will rehabilitate their own behaviour through the assumption of being watched by the panopticon, regardless of if they are being watched or not. Foucault elaborates on the idea of the panopticon and refers to it as a representational paradigm for modern day society (1979). In *Discipline and Punish:The Birth of*

the Prison (1979) Foucault details how governments amass power through diminished privacy of the individual, and increased continuous surveillance made possible through government institutions and new technologies which lead to mass surveillance. This then leads to control over a docile population who are conformed to behave by the pervading sense of being watched. Proudfoot (2021) develops Foucault's ideas on the panopticon further, contending that modern day surveillance is not the omnipresent force which Foucault describes, but is more akin to a metaphorical spotlight, where there are periods of invisibility available to citizens and escape from a sense of captivity and surveillance (p.824). This sense of invisibility becomes a major factor for the participants in the study conducted in the thesis and is analysed further in the data analysis chapter (Chapter 6).

Foucault's ideas around the panopticon indicate that the individual is unaware of being observed, and Piro (2008) argues that this sense of invisible surveillance structures forms a significant constitution of the makeup of schools (p.41). This is not surprising considering the history of school design and schools, as discussed in detail in the literature review (Chapter 2), having been rooted in surveillance and conformity for the masses. Collins & Coleman (2008) postulate that control, surveillance, and instilling behavioural norms, align with the original purposes of public schooling; the observation of working class children for any appearance of moral or physical threats that did not align with societal norms (p.288). Furthermore, Rich (2007) asserts that the use of panoptical surveillance has long term impact on bodies which move through the schooling process, where the minute observation of the self and others is trained into young people, who then continue with accepting mass surveillance and self-surveillance into adulthood (p.62). This sense of awareness of being watched forms an important role in schools, where bodies self-correct because of this.

The minute observations which Rich (2007) refers to are analysed in detail by Leask (2012) who asserts that the classroom becomes a space where behaviour is monitored for a host of aberrations: lateness, absences, undue interruptions, incorrect use of body and voice, perceived laziness or lack of attention, incorrect attitudes, lack of physical cleanliness, immoral thoughts to do with sexuality and the self, and more (p.59). Hope (2015) expands on the different panoptical forms of surveillance young people face in schools, citing: registers, uniforms, rules, timetables,

and punishments as discourses of control (p.37). Leask (2012) argues that the trend of surveillance over children deepens and intensifies over time as methods of surveillance become more sophisticated (p.58). This can be seen in current methods of checking children's use of the internet and digital footprints, and parents being able to track children's whereabouts through devices like smart watches and phones. In the context of the school where the research took place this can be seen with parents having access to tracking devices which update them on school bus locations. Additionally, in Colombia the Constitution passed laws to increase camera surveillance in Bogotá schools, including the installation of cameras in classrooms (Institucion Educativa, 2024). The pervasive sense of surveillance leads to young people being socialised into the idea of monitoring, including self-monitoring, as normalised, thus leading to a pervasive sense of compliance. This use of cameras is analysed by Hope (2015). Hope (2015) highlights that a powerful way to use Foucault's theory of surveillance is to engage with a self-analysis of how the body is monitored in different spaces and in different times to better understand behaviours of the self. Jefferson & Smith-Peterson (2022) concur with this use of Foucault's panopticon as a method to examine surveillance practices to identify power relations and the ways power is exerted over the body. They go on to point out that in educational research this can take the shape of studies which help young people observe their environments and assess how those environments affect their freedoms in different ways, an example being the use of desks and chairs to retain control over student's bodies. Although young people may be under the influence of panoptical methods of control, this is not to say that they have no sense of agency in the school space. Surveillance and student agency have a complex relationship, and modern interpretations of the panopticon can provide nuanced understanding of how the BSE can be a form of control which can be resisted by students in their own ways.

The panopticon also appears in different ways in the lives of girls and women which is left unconsidered in Foucault's work. The sense of self-surveillance can be particularly strong for girls and women, as argued by Duncan (1994), who comments on the proliferation of media: magazines, television, social media, in the inner lives of girls and women. Duncan (1994) argues that the self-surveillant gaze operates on a multidimensional level for women and girls, especially in contemporary western culture where women regard themselves through a male gaze and thus "train their evaluative gaze on themselves so that they are both spectator and spectacle"

(p.50). This means that women and girls turn the gaze onto themselves and thus the patriarchal gaze and surveillance is rendered invisible and difficult to identify, and therefore difficult to resist. This highlights Valentine's (2007) argument which claims that feminists, in a rushed desire to theorise intersectionality, have consigned to the side the importance of how space and surveillance is used to socially exclude and exert power over women (p.19). Next, I turn to how Foucault's ideas around heterotopias can provide insightful commentary on how girls and women can engage with space in a liberatory fashion.

3.3.4 Heterotopias

Foucault expands his ideas of the panopticon and biopower with an analysis of the multi-dimensional properties of space with his theory on heterotopias (Foucault, 1967/1984). Heterotopic spaces are spaces that act as counter-sites to hegemonic thinking, and which are counter-sites found within society (Foucault, 1967/1984). The theory of heterotopia lends a valuable lens through which to understand how girls can resist control and societal norms in the BSE. The concept of heterotopia can also help identify alternate spaces in the educational environment which girls can carve out for themselves.

Foucault (1967/1984) theorises that schools are simultaneously panopticons, where students are surveyed and self-check, and sites of heterotopias, having their own set of norms and being separated from society through exclusive entry and exit rights. Additionally, liminal spaces are plentiful in school spaces, ranging from hallways, bathrooms, recreational spaces, to eating areas. Johnson (2006) describes heterotopic spaces as spaces which aim to assert resistance and transgression against powerful customs and agents, in an effort to become spaces of liberation (p.82). Beckett et al. (2016) develop the thoughts of Johnson (2006) further, asserting that heterotopic spaces are spaces in which a person can think differently, be different and establish "alternative regimes of truth" (p.6). Thus, heterotopias have the ability to disrupt order, provide opportunities for self-determination, and are a space to break away from the panoptic gaze. Santos Junior (2014) connects heterotopic spaces with the desire for occupants to break away from hegemonic norms and create spaces of anti-capitalism through the temporal nature of heterotopias (p.156). Dehaene & De Cauter (2015) argue that heterotopias become known as spaces outside of the norm as those who choose to remain in spaces of heterotopia do so to

display deviant behaviours (p.77) resulting in heterotopic spaces which are seen as in need of eradication or control by authorities. This can be seen in schools where spaces like toilets, bike sheds and the backs of buildings become spaces where students gravitate towards, and end up being under hyper surveillance by teachers and administration. As a result, those who occupy heterotopic spaces can be seen as troublemakers and subversives.

Kannen (2013) describes Women's and Gender Studies classrooms as heterotopic spaces as they are spaces in which girls and women can come together, and problematize and expose layers of patriarchal control that dominate their lives (p.55). Although these spaces are integral to those who must navigate multifaceted layers of control in their environment, these spaces also exist outside of societal norms often. This can be seen in gender and feminist study classes as these spaces are currently experiencing backlash across the globe (Edström et al., 2024). An example of this is in Hungary, when in 2018 the government banned universities from studying gender studies (Pető, 2020) and can also be seen in research conducted in the USA which shows students in universities seeing Women and Gender Studies courses as irrelevant and outdated (Spoor & Lehmiller, 2014). The hostility and rejection of these spaces aligns with Foucault's theory that heterotopias, whilst liberating for their creators and users, are threatening to those outside of said space.

Kannen's (2013) ideas are particularly relevant to this study as the study itself could be seen as having created a heterotopic space for the participants where girls were able to come together and, over an extended period of time, problematize and think about how their BSE affects their lives on a daily basis. This aligns with Tamboukou (2004) who asserts that heterotopias are in themselves spaces of exclusivity, with often unsaid or invisible boundaries with a set of rules to be adhered to, to gain entrance (p.401). This certainly rings true for the research conducted for this thesis. If the research groups who took part in this thesis research are to be taken as heterotopias, then the heterotopic space of the research group came with a set of prerequisites: participants had to be part of the student body of a specific school, of a certain age, and gender, to be accepted in the research. Tamboukou (2004) also advocates for gendered heterotopias to be considered as powerful change making spaces, stating that collective heterotopias, such as a girls' schools and universities, and girls' clubs, where girls and women can convene, are

heterotopias in which “space, identity, and politics come forcefully together” (p.402). This is because, according to Haghighi (2020), heterotopias produce new ways of knowing as they clash with dominant, hegemonic forces and ideas. Pechtelidis (2016) considers heterotopias as vital spaces for young people to exert agency and spaces in which young people can form social movements and together to uncover new fields of thought and experimentation (p.15). Moreover, Sudradjat (2012) considers heterotopic spaces as spaces in which urban renewal can take place, arguing that heterotopias allow a framework which can analyse the complexities of modern urban space where those who are considered as ‘other’ can flourish (p.33). The emancipatory abilities of heterotopias are further explored by Ruitenberg (2014) who asserts that schools are environments where heterotopias naturally occur, mostly as a result of young people attempting to find spaces of liberation away from the pervasive panoptical gaze which encompasses daily school life.

While theorists such as Blair (2009) focus on analysis of heterotopias, citing that heterotopic spaces need to adhere to specific rites, rules and rituals to be considered heterotopic (p.95) others argue that the value of heterotopic spaces lay in their ability to give a sense of liberation to oppressed people. Saldanha (2008) focuses on this purpose of heterotopias, asserting that the focus around theories of heterotopia should not remain on interpretations of what different types of heterotopias exist, but the function of heterotopias as spaces which can propel society forward. This sense of heterotopias as spaces where people can come together, share ideas, and foster societal improvements, is one which the thesis research aimed to achieve.

3.4 Reclaiming Space: Matrix and the Man-Made Environment

Whilst the theories of Foucault (1979; 1984) and Lefebvre (1974/1991) focus on understanding how space and power are intimately connected, the connection between the design of the built environment and the experiences of women is a central concern for feminist geography. In this section of the theoretical framework there is an exploration of how gendered imbalance in design practices, and historical ideas rooted in the male body leads to inequitable design and space. Space is a key component in the way we organise our lives and society and Massey (1994, 2005, 2013) especially focuses on how geography and power are intertwined. Massey states that it is important to not overlook the fact that space is very much material and based on real land and

matter. Space is an active participant in shaping the lives of those that exist within it, however, as discussed when analysing Foucault (1967/1984), the body is also a player in this complex relationship for women and girls. Space and matter are imbued with meaning, but the body also must negotiate this very literal matter. Smitheram (2011) argues that humans have a complex and often invisible, to others and ourselves, relationship with space where "we negotiate the physical presence of these spaces, they make us feel - good, indifferent or even sad" (p.62). The body is not an inert object within space. The meaning of spaces are socially constructed but also personal, evolving, and malleable.

Matrix Collective (hereafter 'Matrix') formed one of the earliest architectural groups in the U.K. which took a feminist position in how they analysed, designed and worked in space, including a non-hierarchical membership structure (Matrix, 1984). The collective analysed the experiences of women in their built environments and the different ways in which the built environment is engendered with patriarchal norms, thus affecting the relationship women have with their built environments. Matrix argued that the built environment is created by its very nature and therefore is imbued with the norms of its designers, who then have the opportunity to dictate how one should behave. The collective argues that the design process is led by, and funded by those in power; often white men who think primarily about their own needs and wants from space. These design concepts are then fed to architects who, at the time when Matrix were active, were 95% men (Matrix, 1985, p.2). The assertion can then be made that the built environment has been a man-made construct which serves men, as opposed to women, and by proxy does not serve girls either.

The theoretical framework for this thesis echoes sentiments, such as those made by Elkin (2017), that space is not neutral and that it is in a constant state of flux, being made and unmade by those who are in power, to shape the values within those spaces. This creates divisions between those in power, and those who experience space as the user. Elkin (2017) makes this clear, stating that "we become so accustomed to this that we hardly notice the values underlying these divisions. They may be invisible, but they determine how we circulate" (p.284), alluding to the fact that women all over the world still cannot safely walk in their built environments. Whilst Matrix focused on the invisibility of women in design and architectural processes in the built

environment, this research is focused on rendering the invisible, visible, in terms of how girls experience their BSE, and the possible challenges they face in their lived experience of their perceived and conceived school space.

Boys (1984), a founding member of Matrix, states that design and architecture choices often embody a "built version of particular set of political, social and economic priorities where the resultant effects on women's position may be secondary" (p.27). Patriarchal design principles creating and sustaining gender inequality can also be seen in Bogotá, where the research took place. At an urban and social level Bogotá is geographically fragmented, reflecting the fragmented social divide, and which Saenz Quintero (2021) notes in their research results in urban fracturing negatively affecting women in public spheres. Furthermore, Sánchez Bernal (2012) documents that patriarchal cultural norms in Bogotá have resulted in women slowly leaving homemaker roles to work in urban areas, but the lack of safe public infrastructure leads to violence against women and has a detrimental effect on women leaving the home for the workplace. Structural inequalities exist and are seen in how women experience public spaces, and how they experience those struggles reflects poor city planning. The insecurity of women in the city reflects the high levels of male violence towards women in public spaces, and these adverse conditions lead to a hostile environment where women and girls are excluded from spaces and places (Cedeño Pérez, 2020).

The oppression of women through the design of place and space is a result of historical views of women belonging to the private sphere and men belonging to the public sphere (Ehrnberger et al., 2012). Recounting a childhood memory Massey (1994) describes being a young child growing up in Merseyside looking over the mass of the floodplain and thinking of the injustice of how this expanse of space had been given to the boys as a football field (p.194). The participants in this study for the thesis echo and repeat similar statements of the amount of school space given over to boys in recreational times, showing that Massey's childhood observations continue to persevere in the experience of young women, albeit decades later, in another continent. Massey contends that space and place, when taken into full consideration, are highly gendered and this gendering takes place on multiple dimensions, each creating a feedback loop to the other to cement gender discrimination. In the case of Massey, it is the sheer volume of space, which is

given to be natural, for the use of boys and men. This system of oppression via deliberate alienation has far reaching implications for women as those in the public sphere, historically being men, are able to design spaces. Ehrnberger et al. (2012) further note that the design of buildings, spaces and objects are able to be imbued with the codes of behaviour which society deems a social norm (p.85). This historical contextualisation of space and design is being made to point out that the oppression of women through space and the built environment is complex, being constructed of multiple aspects, one which is that those who design spaces and objects hold power, and historically they have been men. This reflects both Foucault (1980, 1967/1984, 1979) and Lefebvre's (1974/1991) theories on space as outlined earlier. Additionally, this means that the daily lives of women, the environment they are in and which shapes their behaviours is heavily influenced by the design of men (Schauer et al., 2023). This influence has rendered the needs of women in connection to the built environment as invisible (Shaikly & Mella Lira, 2022; Zhang et al., 2023).

Correspondingly when design is concerned, especially related to the body, often it is the 'human', or the male outline which is used to represent people as a whole, literally and figuratively (Agrest, 1988). Hosey (2001) expands on this, stating that it is man who becomes the "universal human, the harmony of bodies and buildings" (p.101), and it is man, and the body of the man, which becomes the standard to represent all bodies in spatial design. The very history of architectural design is deeply embedded within the assumption that man and the male body are the representation of all humans in their most perfect form and thus our most beautiful works of architecture, old and new, have grown and developed from this baseline (Agrest, 1988; Baugh, 2023; Bonazzi, 2020). This leads to an exclusion of bodies which are not biologically male and non-disabled. However, there are women who are architects, and the built environment continues to grow exponentially, as have the fields of human geography and sociology. Philosophers such as Braidotti hypothesise that the experience of 'humanness' now transcends the experiences of the body, and expands into the human as a living, digital person (Braidotti, 2013). The traditionally exclusionary practices of those who are able to conceive the built environment has rendered those bodies who fall out of the norm as being biologically male as invisible, however more inclusionary practices in design have been a centre point for feminist geographers.

The aim of this thesis is to reiterate a founding working principle of Matrix (1985); highlighting that the built environment has been a mostly male-centered construction which empowers men and disempowers women. Like Matrix (1985) I would argue that the key to counteract this disempowerment is to engage with women and girls, listen to their experiences of their built environments, share them, and engage in a conversation about how the built environment can be changed to serve the needs and purposes of women and girls.

3.5 Othering, Immobilisation and Fear

In this section of the theoretical framework the ideas of feminist geographers such as McDowell (1983), Rose (1993) and Young (1980/2005) are explored to ascertain how spatial design reinforces patriarchal norms via othering, restriction of movement and fear. Through investigating key feminist ideas around this trifecta an attempt is made to unearth the spatial inequality women and girls face and which must be tackled to create more inclusive and equitable environments.

3.5.1 Othering

The idea that the division of power and space is a natural division from gender roles is argued against by feminist geographers and parallels the thoughts of scholars like Butler (1993), who discusses how gender, and gendered spaces, are socially constructed. McDowell (1999) argues that space and the built environment are detrimental factors in the othering of women in society at large as the built environment is constructed for the use and comfort of the heteronormative male (p.68). This means that anyone who falls out of this category - women, ethnic minorities, disabled people, and anyone from the LGBTQ+ community - may feel unease in the space around them as they do not fit into dominant ideas of what is considered the norm in society.

Feeling as if one does not belong in spaces creates an estrangement within the connection of space and the body. Young (2005) theorises that the oppression of women and girls is based in the body whereby woman “lives her body as a burden, which must be dragged and prodded along” (p.36). This is a result of women, in their lived, bodily experiences of space being confined, objectified and inhibited in “the master’s world” (p.43). This constructed world of the master allows women to move in it, but only in particular ways and for particular purposes. In

her seminal text *Feminism and Geography: The Limits of Geographical Knowledge*, Rose (1993) elaborates on this point further, highlighting that it is the white, bourgeois, heterosexual man who can be a fully independent identity and who forms the built world and its social norms. This means that looking out from the centre the white, bourgeois, cis-gender, heterosexual man sees others as everything that is different from him; "he sees them only in relation to himself" (Rose, 1993, p.6). This othering multiplies as one begins to holistically observe this sense of displacement in space from an intersectional lens, whereby the further from the centre one is, the more one is perceived as other, and the more one feels estranged from spaces and places of power.

Rose (1993) expands on this sense of bodily estrangement, positing that it is through the body, and primarily women's bodies, in which this othering from the built environment occurs. According to Rose the male gaze is more akin to a societal threatening stare which provokes in women, and I would contend all beings who are othered, an intense self-awareness about the ways in which they are seen, and thus shapes behaviour to fit into the ideals of behaviour and norms set by the dominant presence in that space (p.146). Rose (1993) argues to achieve a built environment free of oppression feminists and feminist geographers have to focus on how women's bodies are controlled and oppressed, and realise that control is centrally focused around the female body in all its physicality, including but not limited to menstruation and pregnancy (p.29). This is not to say that women's oppression and the study of it should be the focus for feminist research, but to highlight that women's liberation is intimately connected to, and rooted in the body. The subversion of this oppression to achieve liberation for women therefore must be rooted in calling attention to the physicality that women have in a way which celebrates this difference from the bodies of men, instead of being othered by them. It is through understanding the experiences of the female body that its liberation can be analysed, deconstructed and reconstructed.

3.5.2 Immobilisation

One of the ways women and girls are controlled and shaped by their built environment is through restrictions of movements; a phenomenon of patriarchal control which can be seen throughout the world. This restriction of movement is not a natural thing and Matrix (1985) makes clear

their stance on the matter, stating restriction of movement and limiting the space one uses as a girl is socialised and taught to girls, whilst taking up space is encouraged in boys (p.41). This means girls are socialised from a young age to implicitly understand their access to space is different to boys' access to space, and their belonging and comfort in space is far less valued and far more tenuous.

The restriction of space for girls evolves into a way of living for women throughout their lives. Restriction of space from girlhood develop into womanhood and appear in similar and expanded ways. Where girls were limited in school playgrounds and given stricter curfews than their male counterparts, in a woman's older years she is restricted through access to different spaces in work and the city. McDowell (1983) discusses this in length, especially focusing on the ways in which women have been historically immobilised through corset usage, high heels, curfews, jokes about women drivers, gender discrimination in the job market, lack of public transport and a socialisation of the need for a male protector (p.59). Chant (2013) elaborates on this further, emphasising that restriction of space is physical, where women are encouraged to avoid certain spaces, areas and buildings, and where women are required to dress in specific ways to gain access to spaces (p.21). However, Chant (2013) also addresses the fact that restriction of space is a consequence of domestic workloads. The need for freedom of movement between spaces becomes limited when the time one has is limited, and to exacerbate the matter further the continual heavy domestic workload of women and girls engaged in child rearing responsibilities also corrals the movements to spaces which are required in these activities: grocery stores, schools, after-school clubs, and friends' homes. The inequalities in spatial design further prove problematic with Boys (1984) asserting:

> The spatial arrangement of high rise flats or new towns did not create the condition we now call high-rise or new-town blues, but in increasing the difficulties of getting out of the house with small children or transporting heavy shopping by steps and corners and endless ramps and paths, these layouts are much more likely to make childcare a pressure than a pleasure. (Boys, 1984, p.29)

Women are loaded with societal norms that dictate movements between spaces, in spaces and around spaces. Forbidden spaces and spaces where women do not ‘belong’ embody and signify how society expects women to behave and move in their built environment. The Covid-19 pandemic created additional layers of domesticity for some women, many of whom were working from home and also engaging in full time child-rearing, whilst many men in households waited for their partners to ask for help, assuming a secondary role in the caregiving (Carian & Abromaviciute, 2023). Hybrid-working then can be a place of entrenched misogyny, placing women back into the home where the role of the caretaker and caregiver becomes a primary focus (Haney & Barber, 2022). In Colombia during their Covid-19 lockdown domestic violence rates rose by 36% and there was a rapid incline in mental health crisis amongst adolescents (Yesid Jose & Milena, 2021). The Covid-19 pandemic revealed the reality in which women bear caregiver responsibilities with hybrid working, resulting in a continuation of the reinforcement of many gender stereotypes and entrenched patterns of misogyny.

3.5.3 Fear

Women’s safety and sense of security is a vital component of freedom of movement in the built environment. When women’s safety issues are not addressed, or taken seriously, combined with media portrayals of the outside world as dangerous and patriarchal beliefs of women’s movement rights, women’s own sense of safety becomes a major tool of control and oppression (Zufferey et al., 2016; Wilk & Fibinger, 2020; Stafford et al., 2007).

The notion of safety and the built environment being a significant issue is of considerable concern and not to be underestimated. The situation is perilous for girls and women in Colombia where the research takes place. The Attorney General’s Office of Colombia has recently released data showing a worryingly high statistic of femicides occurring in the country, with 410 women being victims within the last twelve months alone (Attorney General's Office - Colombia, 2024). The report states that a primary source of the femicide is the sexist and patriarchal culture which still prevails in the country, with women and girls considered as second-class citizens by male members of society (Attorney General's Office - Colombia, 2024). Additionally, since the start of the Covid-19 pandemic there has been a documented sharp increase in violence against

women and girls in the country and increase of sexual violence towards girls under the age of 18 (Alsema, 2022). Furthermore, Rubio & Romero (2023) have highlighted the average rate of femicide since 2018 is 51 women per month, not including the many cases which go unreported. The United Nations ONU department also focuses on violence against women and girls in Colombia, particularly highlighting that a major percentage of violence against women and girls in Colombia is committed against Afro-Colombians and indigenous communities (ONU - Mujeres, 2024). The organisation also states the data shows the age group which experiences the highest proportion of gender-based violence are adolescents aged between 10 to 15, followed by adolescents aged 15 to 18 (ONU - Mujeres, 2024). The Panamerican section of the World Health Organisation predicts that 15% of girls under the age of 18 in Colombia have experienced some form of sexual violence, and that is from the very little reporting and data they have, with the likely statistics being more than twice as high in reality (Organizacion Panamericana de Salud, 2021). These sobering statistics show that it is necessary to create a concerted effort to analyse girls' experiences of their lived built environments so that girls can live their daily lives without fearing for their safety.

Ahmed (2004) investigates how emotions and fear are used as a controlling force and how feelings of vulnerability and fear shape women's bodily experiences as well as how women inhabit space. According to Ahmed (2004) fear "works to contain bodies within social space through the way it shrinks the body through an expectant withdrawal from a world that might yet present itself as dangerous" (p.70). Fear is not implicitly existent in girls and women, it is taught and learnt. Ahmed explores this in an analogy, noting a child is not automatically afraid of a bear, it is the conditioning of its mentality by society to fear the bear that associates fear with the bear, and then with the lived experience of the bear attacking (p.7). It is not that girls and women are naturally afraid of their built environment, but it is through socialisation and lived experience that this fear builds. Fear echoes and wraps itself around "our inability to secure an undisputed right to occupy space" (Ahmed, 2004, p.70).

It is no wonder then that Sjöberg and Giritli Nygren (2020) note there exists an internal sense of fear that girls and women experience on a daily basis. In their research when women talked about other humans as a risk the person portrayed in their research was consistently male and

that the male body was “used as a synonym for hegemonic masculinity” (Giritli Nygren 2020, p.1261). Their research identified that the male body, and men, were considered to be a potential threat to women. This leads to women’s safety, the built environment, male bodies and public safety perceptions becoming politically and personally entangled and men becoming the de facto ‘danger’ in social situations. The concept of a ‘right to safety’ as a fundamental human right is at odds with the construction of, and the lived experiences of women in the man-made built environment.

Women’s fear of public spaces is not a women created problem and I argue that women should have the right to feeling safe in their built environment, rather than currently where a woman has to earn the right to feel safe in an environment through their clothing choices, behavioural choices, choice of route of travel and more. As Weisman (1994) puts it “women learn to be constantly on alert, both consciously and unconsciously, in order to protect vulnerable boundaries from male trespasses” (p.82). Young (2005) argues that girls and women are more acutely aware of what can cause pain as girls are conditioned from a young age to consider themselves as more fragile than boys (p.34). This has lifelong consequences as to how women move their bodies in space and their persistent unconsciousness thinking of pain and the body. Additionally, Starkweather (2007) highlights two points of contention used to create and control fear within women: gender role socialisation where parents are encouraged to see girls as innocents to protect from outside danger, and mass media imbibed with messages to maintain the patriarchy through sensationalising the danger women and girls face outside the home (p.56). This results in a pervasive and long lasting sense of fear from childhood to adulthood. Furthermore, as girls grow up there adds a new sense of ever-present fear in their daily lives of sexual assault and rape, and the consequences of those events. This sense of danger is inescapable as the home space is still a space of danger as it is the location where the most male to female violence occurs and where the most female homicides occur globally (UNODC, 2018) and where the design of homes, such as the domestic roles which each space requires, demands an abundance of time and energy from the female body. This is coming to light in popular media and is referred to popularly as the ‘mental load’ women take on, on a day to day basis (Brickman, 2022). Women live in a built environment, both public and private, which puts them in perpetual danger, and which is a product of both patriarchal intentions and the purposely built

man-made environment. This research aims to uncover whether this sense of danger and inequality is also apparent in the lives of the participants in a Colombian context, in their BSE.

Fear and vulnerability are used as controlling mechanisms in the built environment to contain women. To understand space and the lived experience of women and girls, space can be analysed through "seven different categories: physical, economic, time-based, fear-based, space and geographical exclusion, along with exclusion from facilities" (Mejía-Dorantes & Soto Villagrán, 2020, p.2). Lefebvre (1974/1991) argues that the spatial triad signifies how space is used to build social norms and shape individual behaviours, and fear is a part of that. Fear is not an immediate bodily response to an objective danger but a consequence to feeling vulnerable. The fight for a right to occupy space as inherent must not be forgotten and this responsibility lies at the feet of all society, including researchers and educators who, I assert, have a duty of care towards all children, including girls, and must question how girls can be given greater experiences of equality in their school environments.

3.6 Architecture, Feminist Design and the Margin

> This is an intervention. A message from that space in the margin that is a site of creativity and power, that inclusive space where we recover ourselves, where we move in solidarity. Marginality as site of resistance. Enter that space. Let us meet there. Enter that space. We greet you as liberators. (hooks, 1989/2015, p.209)

hook's call to meet at the site of resistance is echoed by feminist geographers (Weisman, 2000; Ellard, 2015; Young, 2005) who argue that to achieve spatial equality, spatial inequalities must be confronted. Weisman astutely notes one of the key reasons the built environment does not benefit women is that over 50% of the users of the built environment are women, yet the impact of women on the design of the built environment is mostly negligible (2000, p.4). Furthermore, Weisman makes clear that the emergence of new spaces, with women's lived experiences in mind, are a result of activism by women and women's movements, rather than a natural progression of design and thinking around the built environment. If the built environment is to change to benefit women, then women must take on the role of the architect and be aware of the built environment: how it works and how it can be used to serve a purpose. Ellard (2015) states

that occupations involved in building work must take responsibility for a building beyond its form as an art piece as “unlike a painting, a movie, or a sculpture, the finished building must be capable of playing a useful role in the lives of its users on a daily basis and over the lifespan of the construction” (p.221). What Ellard (2015) refers to perceptively is that architecture and the buildings that architects create have a duty to provide society and the built environment with a long-lasting positive contribution.

Young (2005) also identifies the lack of women in occupations controlling the construction of the built environment as problematic as although women are increasing in number in occupations around the built environment, building is still primarily a male orientated occupation. These occupations range from directors, architects, planners, engineers and construction workers (2005, p.126). According to statistics only 31% of architects in the UK are women (Waite, 2023) and ⅓ of architects in the UK are white men (Architects Registration Board UK, 2023). Worryingly only 16.5% of engineers in the UK are female (Women's Engineering Society, 2022). 14% of those working in the construction field in the U.K. are women, however this 14% is mostly down to office and admin work and thus the actual number of women in hard hats is much lower (Planradar, 2022). Whilst there are few female architects in the U.K., the situation is even more bleak in Colombia. According to the Colombian Chamber of Construction (Camacol) the number of women in the construction industry sits below 7% (Camacol, 2024) and the percentage of architects who are women is currently at 33.4% (CPNAA, 2020). Furthermore, Hernández (2023) argues that although the number of women in the Colombian building and design industry is increasing this should not be a deterrent from both the fact that architecture as it is understood today is a tool of hegemonic control over the Global South, and that Colombian women’s experience of the built environment is more important to highlight considering the level of violence women and girls in Colombia face. This has not always been a worldwide problem with Young (2005) noting that traditional communities in Asia and Africa have women leading the construction of living spaces of homes in various roles, however, with the growth of a capitalised globe and environmental destruction of land where these communities have existed there has been a movement of people from these communities to man-made cities. The nominal increase of women in the field and the predominance of male architects and engineers in the construction field in general highlights the ongoing imbalance and disparity within the profession.

Additionally, what feminist design could look like and does look like is also a factor in creating effective built environments which serve the needs for women. Matrix (1985) argued that if women led the design of buildings that suit their needs, then buildings are bound to look and feel different (p.90), however, from a post-modern intersectional lens the redesigning of spaces should not just be for the needs of women, but for all people, and therefore all voices have a need to be involved in the designing purpose. Brown (2011) states that feminism and new feminist critiques of spaces are needed to redesign and redistribute power divisions in the built environment as "designing through feminist critiques questions whose voice the designer ultimately represents, whose vision is being created" (Brown, 2011, p.4). How this feminist voice is supposed to infiltrate a field which is heavily dominated by men is a far more complex issue, but the hope is that this research can contribute in some way to the collective voice that continues to call for this much needed change.

Architectural historian Annmarie Adams (2004) describes what feminist led design could look like, using the Women's Library in London as an example. The library is one of the few public buildings in the UK designed 'for women'. That is not to say that it is not to be used by all people, but that the designers of the building approached the building design through a feminist lens. According to Adams (2004) the building has several features which create a holistically designed building: it is mindful of the space and history it occupies in London, it has places to meet everywhere emphasising the collective over the individual, and it is small in size with thick walls which is the opposite of the large open masculine spaces which have been newly constructed in London over the last few years. The building aims to deconstruct spatial hierarchies and attempts to do so with its size, light, sound, meeting spaces and more (Adams, 2004, p.101). The hope is that the library, and the theory behind it, can be used in future thinking around what feminist spaces could look like. This harkens back to the ideas of Jacobs (1961) who developed the Defensible Space Theory which advocated for better visibility on the streets, better lighting, and improved environmental design to lessen violence in communities. Urban planners have since used the theory to create safer urban environments showing that voice does matter and can change the built environment. A drastic improvement in who controls and who changes the built environment is needed and this does just come from more women in the fields

related to the built environment but it also “involves thinking about qualities which are hard to define and would be considered soppy on an architectural brief but are nonetheless important” (Matrix, 1985, p.100).

Although space and the built environment are factors which enhance inequality for women, this does not mean women are victims in the built environment entirely, and it is important to note that space, architecture and the built environment can also be used as a tool for subversion and resistance. Space also has the potential to be empowering in a multitude of ways, as Foucault (1986) discusses around heterotopic spaces. Although women are placed in the margins of the built environment and men at the centre, this does not necessarily mean that there is no power to be found in the margins. Existing in the margins of the built environment, as women do, can be a space of empowerment (hooks, 1989/2015; Leonard & Leonard, 1999). Writer, theorist and critical thinker bell hooks wrote the call to arms which is used in the beginning of this subsection in her book *Yearning: race, gender, and cultural politics* (1989). The statement embodies the idea that the margin holds within it possibility for resistance, but also for creativity. hooks develops this line of thinking throughout the book, highlighting that marginality may be a space of deprivation but it can also be the opposite, a space for counter-hegemonic discourses to bloom, specifically going beyond words and instead being shown through daily habits and ways of being in the everyday living of life.

Rose (1993) reinforces the sentiments of hooks (1989/2015), specifically discussing how although the private and public domain have been ruled by men, women are also able to use the private as a space beyond the reach of the patriarchy and instead use it as a resource for their own liberatory purposes (p.126). Hanson et al. (1950/2005) state that once there is a realisation that the movement from centre to margin exists, it is through the movement that power relations can be redefined. This can be applied through an intersectional lens where our positionalities come into play and where there is an identifier of the different levels of margin and centre one occupies individually. An example of this is my own positionality; I am in the centre as a British passport holder but exist in the margins as a woman and ethnic minority. However, there is power to be gained in this marginality as I may have access to participants of research who meet me at my margin as they come from a Colombian context, and through this connection there

exists power. This is both metaphorical and practical. However, Young (2005) disagrees with this and states that the idea of the margin holding power is a fallacy for women, as women may see movement between centre and margin as a space of "yonder" (p.41) but only in so much as a space which can be seen as a space of possibilities, to observe, rather than be moved in.

Weisman (1994) stated that the person who begins to consider how to make the built environment a more equal place for all people will quickly realise that "women will never be equal in the public or private sphere until it is redesigned to reflect the awareness that we are all responsible for the place in which we live" (p.16). The redesigning of space for women, and for equity, is not a simple process requiring some interior design refurbishment, it is a political and liberatory act that challenges those in status and power and therefore becomes a highly contentious issue. An example of this is the political discourse around equal access for trans-people to bathrooms. When societal norms are challenged, and attempted to be changed, resistance is felt on a personal and political level. Reshaping architectural norms and the built environment as we know it requires a reshaping of the symbols and signifiers of dominant norms and beliefs.

The ideas of Weisman (2000) indicate that women must act to drastically shape and change the built environment through feminist activism, which supports the needs, aspirations and realities of women's lives. Peake & Valentine (2003) comment that the field of feminist geography has done much to improve insight into women's relationship with place and space, but has made little progress to identify researchers and research, who do not come from a predominantly white background. This thesis is part of feminist activist praxis, highlighting the actual experiences of high school girls in their BSE, but emphasising the importance of the participants themselves embarking on a journey where they explicitly investigate how their BSE influences their lives.

Architecture becomes a historical record of what society deems valuable and important and by proxy what is not considered important or valuable. Spaces, architecture and the built environment are felt as part of patriarchal power (Rose, 1993) and to claim space back for women, and to make it equally as powerful for women as men, a process of radical building design needs to occur where there is a strong awareness of how the built environment shapes,

and in some cases, control society. This research embraces the concept of knowing one's built environment intimately, and facing its limitations and opportunities, as a stage in the process of women and girls empowerment within the built environment.

3.7 Chapter Conclusion

The research draws upon various theories within the field of feminist geography to analyse the spatial inequalities faced by women and girls. The theoretical framework has attempted to provoke the complex dynamics at play within the built environment, hegemonic patriarchy and gender divisions. Lefebvre's (1974/1991) conceptualisation of the spatial triad underscores the importance of understanding space as a dynamic structure which is founded in conceived, perceived and lived realms. With the application of theory with the ideas of contemporary theorists who investigate into the triad being extended to include experiences of culture, the body and mental, spatial understandings can become more nuanced. Foucault (1967/1984; 1979; 1978/2008) and Massey (1994; 2005) further develop the theoretical framework, applying an analytical lens on the body as the central figure which experiences spatial inequalities. The insights of Matrix (1985) into a heavily male dominated design and construction industry highlight the perpetuation of gender inequalities through the designs and the control laden within these designs. This domination by men of the built environment industry has continued in the UK and Colombia.

The everyday experiences of the participants in their BSE are a focal point of this research. The research applies the idea of 'the personal is always political' (Hanisch, 1970) to the BSE in an effort to assess the gender inequalities the participants face. This underscores the importance of raising awareness amongst the participants as to how they face injustices in their daily lives which hooks (1989/2015), Weisman (1994; 2000), and Massey (1994; 2005), emphasise as an important step in empowering women and girls to expose and challenge the gender injustices they face in their built environments. In this sense my research uses this theoretical framework to underpin the feminist geographical principle of using research as a tool for feminist praxis. To further cement this sense of emancipatory research the methodological choices for the research also stem from feminist philosophy and are detailed in the next chapter.

Chapter 4 - Methodological Framework

Figure 4

R.K. Saghera (2024). Feminist Methodology: Libre Beyond Words [Collage].

4.1 Introduction

To honour the complexities of individual lived experiences a methodological approach was needed which would evoke in participants a sense of safety and wonder, and which would allow for a holistic exploration of the BSE. In order to conduct the research sensitively the study takes a constructivist-interpretive approach. In this chapter I detail the chosen intersecting methodologies: feminist participatory action research and arts-based research. The chapter begins with an analysis of my ontological and epistemological stance, and then explores the feminist methodological framework which is applied to the research. Later the chapter outlines why interpretative phenomenological analysis is used to collect and analyse data and how arts-based methods, specifically a/r/tography have been employed. The chapter then sets out the process and methods used in this research and finishes with an account of the ethical considerations which have taken place during the research process.

4.2 Ontological and Epistemological Underpinnings

4.2.1 Introduction

The thesis's ontological and epistemological position underpins the framework of the research, influencing the methodological framework and data generation methods. This section of the chapter will focus on my own assumptions on the nature of reality and knowledge and outline the epistemological choices which shape the research design.

4.2.2 Ontological Beliefs

Kumashiro (2014) suggests what one chooses to research, and how, also defines what one is not. Thus, although some consider a positivist framework to be more truthful, objective, and factual (Rowell & Feldman, 2019), the nature of this doctoral research with its exploration of complex relationships, leads to constructivist ontology as a foundational base. This decision was not taken lightly as, in the position of a researcher, I felt some doubt on how serious my research and findings would be taken considering how subjective and unreproducible it is. Borda (1999) also criticises what they consider to be a "fetish-like idea of science as truth" (p.4), instead bringing attention to the socially constructed nature of objective scientific facts. Additionally, Santos (2016/2018) criticises the belief amongst researchers and writers that positivism is objective,

arguing that objective truths celebrated by positivists are often based in biased opinions. Furthermore, Leavy (2015) argues for the eradication of positivist research in the social sciences, stating that the human experience is far too complex to be objective and entirely knowable. The ontological assumptions which are held in this research are that there is no single truth to reality, and that perceptions of reality are constructed by interpreting lived experiences (Lincoln & Guba, 1985).

This belief of the social world as being constructed from developing and intertwined interactions and experiences is what Borda (1999) considers to be the greatest strength of constructivist ontology. Borda (1999) theorises that although researchers in the field of positivist ontological research may discover causal links between values, it is constructivist research which assesses and highlights the everyday plights that humanity faces. Consequently, ontological presuppositions place importance on the reflexivity of the researcher, and an understanding that the lived experiences are in a constant state of construction and deconstruction (Lincoln & Guba, 1985). The research aimed to understand the daily lived experiences of the participants in a particular space and time, and thus this aligns with what Crotty (1998) suggests is a constructivist belief that humans exist in a world in which they are continually making sense of it. Gerstenblatt (2013) further proposes that not only is understanding of the world in a constant negotiation with the self, but also that sense making is dependent too on time and place, and therefore ontic understanding changes according to the context of one's situation. Social constructivism is the chosen ontological underpinning for this research as social constructivism investigates into the values, norms and beliefs which constructs the understanding one has of the world (Berger & Luckmann, 1966) and aligns with this study.

4.2.3 Epistemological Beliefs

Given that constructivist ontology posits that an individual’s sense of reality is constructed from lived experiences and interactions, the epistemological lens which is applied to this research is an interpretive one. An interpretive epistemological perspective has been applied as the data from the research requires interpreting, and the design of the study implements this interpretation at multiple levels, involving participants and the researcher. This leads the research to bring together multiple bodies of people, to share multiple lived realities, and consequently is based in

real world interpretation leading to inductive research (Gray, 2014). Although interpretative research can be considered as research which involves human bias and therefore not replicable (Scheurich & Young, 1997), it can often provide insight into contexts and lived experiences that lead to research which is rich in narrative value (Denzin & Lincoln, 2011). Research which is epistemologically based in interpretivism as a framework focuses on understanding (Hiller, 2016) and this emphasis of understanding and interpreting contextually specific, lived experiences are at the heart of this research. This is important to acknowledge at the forefront of the methodology chapter to avoid what Hiller (2016) refers to as a "value of ignorance" (p.101) when researchers fail to place their research in its ontological and epistemological framework.

Furthermore, using an interpretive epistemological approach naturally lends itself to qualitative research (Thanh & Thanh, 2015). Saldaña (2018) summarises the unique factors which make the use of qualitative methodology vital in understanding lived experience, stating, "qualitative research is not just inquiry about other humans, qualitative research makes us human" (Saldaña, 2018, p.7). This highlights the transformative potential of qualitative research and connects to the desire for the thesis to involve empathy and praxis at the heart of the research.

4.3 Researching Through a Feminist Lens

4.3.1 Introduction

Augmenting the methodological design of the research, this section explicates how constructivist feminist theory superimposes and expands on the ontological and epistemological foundations discussed previously. Feminist geography, as discussed in Chapter 3, advocates for women and girls to be at the centre of the research process when researching into built environments. Therefore, the theories of: Pollock (1996), Boys (1984), Rose (1993) and Fisher (2011) are critiqued in this chapter to build a methodological approach which is emancipatory for participants.

4.3.2 Constructivist Feminist Theory

Constructivist feminist research advocates for the emancipatory inclusion of previously alienated voices in research who have been limited in their inclusion of knowledge production (Noel, 2016, p.458). Pollock (1996) frames why feminist research is important, stating that "feminism

stands here for a political commitment to women and to changes that women desire for themselves and for the world" (p.xv). Boys (1984) posits that research into women's experiences of architecture should not be analysed for women's place in society but in the different gendered experiences women have in architectural spaces (p.25). Additionally, Rose (1993) also considers space as a place of meaningful interpretation through feminist theory when investigating emotions and patriarchal power (p.146). Consequently, Fisher (2011) concurs with Rose (1993), suggesting that phenomenological methodology allows for exploration of being gendered as a lived experience with multiple layers (p.92).

Blidon & Zaragocin (2019) note that as feminist analysis becomes more popular it is important to create research opportunities globally for women and girls to speak on space and to build a network of solidarity. Additionally, Noel (2016) further expands on how feminist theory and methodology can become emancipatory, noting that research designers must think of ways to journey together in investigative research with participants to avoid a situation where the researcher is 'fixing' problems (p.464). This sense of working alongside participants is something which was embraced in this research, where I took part in some of the artistic activities the participants engaged in during sessions, but also created artwork and collages to develop and understand my own thinking around the research topic (see Appendix M). The intention behind using a feminist emancipatory framework is to open avenues of exploration which can highlight the power dynamics of the lived experience of the participants, whilst simultaneously empowering them through this knowledge.

The research for the thesis was conducted in an all-girls environment which Walters (2019) advocates for, stating that research with girls should be conducted in all-female environments, so that girls do not feel uncomfortable speaking of topics they don't want to discuss around boys or men. They justify this by using data collected from focus groups with girls in schools who commented on their increased comfort and security levels, enabling them to share thoughts that they would not if boys were present (p.366). Jones & Hughes (2016) also concur with the importance of safe spaces for women and girls so that fears and feelings can be expressed and generative conversations can organically take place (p.17). In addition, Jones and Hughes (2016) argue that feminist methodologies are needed in research so that there is a countering of the

"long tradition of educating girls and women to sacrifice themselves in service of others" (p.17). Jowett & O'Toole (2006) consider the academic reflection on methodology and method as a feminist trend which can illuminate for researchers how best to adhere to feminist ideologies whilst generating high quality data. They use the example of female only focus groups as a method for data collection which has previously worked well to generate qualitative data (Jowett & O'Toole, 2006, p.454). Furthermore, Hanson et al. (1995/2005) considers the use of feminist criticism in research as vital in uncovering complex power dynamics, however they argue that feminist research should be situated, and begin, in an autobiographical account (p.17). Helgren & Vasconcellos (2010) make clear their point of view, noting that "scholars who wish to uncover girls' voices must be methodologically creative" (p.4). Cañas (2020) concurs with this sentiment, stating that to encourage, build and develop sites of resistance creativity is required, with unconventional research methodologies and thinking needed to combine in ways to produce knowledge which can be unexpected, joyful and subversive (p.3).

Through the application of feminist theory, the research has aimed to create spaces which are safe, collaborative and respectful of the unique gendered experiences of the participants. This approach has enabled the research to adhere to its constructivist roots by emphasising and valuing the permutable nature of lived experiences. Additionally, the values of participatory action research weave their way through the research to ensure participants are provided ample opportunities to be empowered by the research. This is further explored in the next section.

4.3.3 Participatory Action Research

The research for this thesis embodies participatory action research as it aims to extend its remit beyond data collection, and tread into the realm of what Borda (1999) labels as research methodology which becomes life philosophy, leading to researchers who are "thinking-feeling persons" (p.17). To expand on this the research was not solely about researching the phenomena for data but also to empower the participants through empathy when listening to the stories of each other, and for myself to have the courage to connect emotions, empathy, and art work together when this can be academically challenged so easily. Intertwining feminist and participatory action research (PAR), through arts-based methods, is important to me as a researcher as they reflect my ontological and epistemological beliefs that research should be

based on the principles of improving individual lives for the good of all humankind, achieved through analysis and interpretation of the lived experience (Kemmis, 2010). Thus, the methodology which is used in this research, and the methods of data generation and dissemination, are aligned with the value system I hold, shown through the choice of ontological and epistemological frameworks. Leavy (2015) similarly forwards their research with a similar statement describing their research as using holistic approaches which "emphasizes the interconnections with epistemology, theory and methods" (p.vii). Baum (2006) notes that PAR can be a rich and empowering research methodology as the process of self-reflective inquiry in which researcher and participant take part in can lead to a better understanding of the systems and situations they live in (p.854). Baum (2006) also advocates for PAR to be used in conjunction with other methodological theories, such as feminism, so that lived experiences of research participants can be analysed and explored from specific lenses (p.20). PAR is also particularly useful when researching into the localised contexts of space, and the lived accounts of space and place in research, producing local knowledge which is rich in description (Pain, 2004, p.653). Accordingly, this thesis bases the research in PAR philosophy, through ABR methods.

4.3.4 The Emotional Turn

An aspect of the research which I chose to explore in an effort to build and advance on its emancipatory nature was the emotional dimension. Feminist theory and the emotional turn both consider how emotions are an understudied, but vital component to analyse to understand fully lived experiences. Within feminist geographers, Bondi (2006) notes the importance of understanding how the connection between emotions and place forms the identity of a person stating:

> A genuine emotional geography cannot just deal in feelings. It must try to express something that is ineffable in such objectifying languages, namely a sense of emotional involvement with people and places, rather than emotional detachment from them. (Bondi, 2006, p.2)

As highlighted in the literature review, space can shape knowledge and knowledge production, but connections between space, knowledge and emotions in academia are not yet fully investigated (Pereira, 2021). Parry (2015) argues that by not addressing emotions in research,

and by separating out the mind from body and emotions, there is a limiting of knowledge production. Ahmed (2004) claims that a response to the valuing of the rationale over the emotional is a focus of feminist research to be on emotion as emotion is what moves us and reminds us that "knowledge cannot be separated from the bodily world of feeling and sensation" (p.171).

Addressing and focusing on emotions and feelings in research is no simple feat for feminist researchers. According to Boler (1999) using emotions as methodology can be a risky business, especially for women researchers and those who are marginalised in academia (p.109). Critically Boler (1999) notes that declaring and analysing emotions with children about their lived experiences is a powerful way to have children understand how to fight oppressive structures (p.117). The feminist politics of emotions provides a means for women, children, and I would say all oppressed people, the opportunity to force a recognition of the lived experience as not just a privately felt ordeal, but a systematic function which hides and propagates inequalities. This combats the historical dismissal of othered bodies and their lived experiences. Ahmed (2004) advocates for the importance of the politics of emotions to be brought to light in the public sphere, as when emotions are sidelined to the private sphere the systematic nature of oppression, felt through emotions, can be hidden (p.198). Ahmed (2004) does also note the "messiness" (p.210) of investigating emotions and feelings which can be surprising or bewildering at times. Blakely (2007) also notes the difficulty of navigating the terrain of emotions in research as emotionally engaged research opens up spaces of dialogue, which can be challenging and insightful (p.65). Whilst grief has been discussed by Butler (2004), space and emotions by Rose (1993) and emotions in geography by Bondi (2006), Rodó-Zárate (2022) criticise the considerable emotionally barren terrain of geography as a discipline, arguing for a need of further exploration of how space, place and emotions are connected (p.677).

Aside from emotions and geographical space being a much-needed area of study, some researchers themselves are involved in the emotional turn. Gatyas (2022) defends emotion sharing and reflection in research as it becomes a form of empathy and care for participants' wellbeing (p.102). Emotion sharing can be a precarious place for researchers, with Wilcock (2024) sharing their personal reflection on a research project which involved participants sharing

deeply traumatic experiences, and documents feeling vulnerable to the emotions and experiences shared by participants (p.1). Blakely (2007) considers emotions as a natural part of inquiry and a source of untapped information (p.61), whilst Campbell (2002) cites an exploration of the emotional experience of the researcher as needed in emotionally charged research. Campbell (2002) also notes that this area is lacking in research due to the reluctance of researchers to admit that their work emotionally affects them (p.59). Hordge-Freeman (2018) considers the importance of confronting emotions in research by acknowledging how it pervades the entire research process arguing that "when you bring your whole self to the research process you are empowered to make new theoretical findings and discoveries that can never be made by others" (p.2).

Highlighting and investigating the emotional dimension of feminist research in this study has allowed for the creation of a research methodology which integrates emotions with space, identity and lived experience. Embracing the emotional dimension has been challenging in different ways, but, through a commitment to emancipatory and empowering research, this has allowed me to use the research to advocate for more empathetic approaches to knowledge creation.

4.4 Paradigmatic Positioning

4.4.1 Interpretative Phenomenological Analysis

The interdisciplinary nature of this research with its focus on educational spaces, emotions, girlhood, arts-based research and feminist PAR philosophy, did lead to a complexity in identifying which research methodology to employ. There are multiple research methodologies which I considered when designing this doctoral research; amongst them being narrative study (Wei, 2023), grounded theory (Stough & Lee, 2021) and ethnography (Adams & Herrmann, 2023; Ploder & Hamann, 2020). Lal et al. (2015) describe the inquiry and self-reflection around paradigmatic stances in research as a beneficial process which is often "glossed over" (p.16). Whilst they recommend the researcher to have advanced knowledge of research paradigms to critically assess and select appropriate methods for researcher studies, they also advocate for the researcher to explicitly describe this process of paradigmatic selection (p.16). This is done to maintain a coherent epistemological position. I explicitly and critically assess in the following

section the reasons why interpretative phenomenology was chosen, and how it adds another layer to the research, supporting research on emotions, feminist methodology and constructivist epistemology.

4.4.2 Origins

To fully grasp lived experiences Visse et al. (2019) posit that ways to illuminate human experience are needed which go beyond the standard use of language in the "ontic realm" (p.5). This sense of getting to the truth of a lived experience is advocated by Merleau-Ponty (1945), Gadamer (1960/2004) and Heidegger (1927/1962), founding figures in interpretative phenomenological methodologies, who emphasised focus on understanding people's lived experience based on prior perceptions and experience, and understanding the state of being 'dasein'. Horrigan-Kelly et al. (2016) consider the ontological concept of dasein as a tenet of interpretative phenomenological methodology as dasein defines the importance of understanding the self in the everyday lived experience (p.65). This plays a pivotal role in the thesis, and as Adolfsson (2010) contends, studies on women's experiences should be foregrounded by Heideggerian philosophy by focusing research on how women experience a phenomenon, through interpretation of their dasein in the past, present and future (p.78). What the three philosophers argued for was the development of phenomenology to go beyond surface level analysis of the lived experience and investigate into the historical, temporal and embodied dimensions of one's interpretation of reality.

4.4.3 Interpretative Phenomenology: From Theory to Process

Heidegger (1927/1962) focuses on phenomenology as a methodology which investigates the daily lived experience as there are hidden phenomena in the everyday and an investigation into the everyday requires an effort into the unveiling of things forgotten or hidden. This echoes Foucault's (1980) ideas on power and Lefebvre's (1991) investigations into the spatial triad. Whilst Cresswell (2007) notes that Interpretative Phenomenology (hereby IP) leads to inductive research, Frechette et al. (2020) note that a true study using IP theory must move beyond describing phenomena and contain an interpretation of the phenomena itself (p.3). Sandelowski (2010) also criticises qualitative studies which label themselves as interpretative phenomenology when they are mostly descriptive with interpretative undertones. To combat a possible slip into description rather than interpretation in this doctoral research, interpretation from participants of

the phenomena is layered into multiple methods of data analysis and data representation. This is explained in detail in the data implementation and sequence of activities section of this chapter (section 4.7).

The use of IP methodology allows for the discovery and interpretation of the phenomena from the perspective of the participants; thus participants can attribute meaning to their own experiences. However, phenomenology, according to Linde (2017), is also a powerful methodology which leads participants to self-exploration of space and place and is a process in which healing of the self can take place (p.8). To achieve a holistic and in-depth understanding of the phenomena being studied Tuffour (2017) argues that the researcher must employ open-mindedness, empathy, and flexibility when listening to the participants narration of their interpretations of their experiences, in their natural settings (p.2). Tuffour (2017) also highlights the inherent difficulties presented by using IP in research, commenting on the heavy burden placed on the researcher to be able to draw out and analyse respectfully from participants interpretations of lived experiences (p.4). I address these issues, which arose in this research, in the ethics section later in this chapter (section 4.8).

Tuffour (2017) and Høffding et al. (2022) advocate for the use of Interpretative Phenomenological Analysis (IPA) as interpretative phenomenological analysis specifically focuses on the participant voicing their own experiences in multiple different ways. Smith et al. (2009) define IPA as "qualitative research committed to the examination of how people make sense of their major life experiences […] exploring experience in its own terms" (p.1). Ismail & Kinchin (2023) assert that IPA can help elicit the detail behind not just how a single phenomenon exists, but the different angles of the phenomena for a holistic understanding, however this requires research which is carefully planned out, and as stated earlier a focusing on the emotional impact on both the researcher and participants. The selection of IPA to be included in the research's methodological framework came as a result of searching for a framework which would focus and place value upon the participants lived experiences, and the expression and interpretation of these lived experiences by the participants themselves. IPA aligns with the undertaking of this research to emphasise how the participants experience their lived experiences

via emotions, and feminist PAR principles. This has allowed a deeper understanding of the phenomena at study, not just for me as the researcher, but also for the participants.

4.5 Arts-Based Research

4.5.1 Introduction

Upon careful reflection on the purpose of the research, its ontological underpinning and feminist philosophy, Arts-Based Research (ABR) was chosen as the core approach for the discovery of findings in the research. ABR, imagined as a data investigation method in research, and championed by Eisner (1991/2017), has become known as a method which disrupts monolithic mindsets around positivist stances in research (Barone, 2006) and the reasons as to why ABR was chosen to form a part of the methodology are detailed in this section.

4.5.2 The Value of Arts-Based Research

Leavy (2022) outlines ABR as grounded in the recognition of truth as subjective which values multiple ways of knowing (p.195). Furthermore, Gerber et al. (2018) argue that the use of creative arts in research allows for accessing areas of knowledge which are on the periphery of consciousness and enhance self-awareness (p.2). Regardless of the value ABR can provide in research there is a certain de-valuation of ABR and arts-based output in academia (Richardson & Savage, 2019). Richardson & Savage (2019) document their struggles to attain tenure at their respective academic institutions, with their creative activity not being able to be included in their list of works (p.7). Clover (2011) concurs with the opinion that ABR is devalued, but from a feminist perspective, arguing that although women from all over the world have always used the arts to share knowledge and lived experiences, these expressions of arts are often marginalised due to oppressive, patriarchal societal structures (p.13). This leads to the arts in academia being continuously seen as “frivolous and trivial, banished in a flurry of contempt to an epistemological abyss” (Clover, 2011, p.12). Additionally, Goldman et al. (2022) consider ABR challenging for positive researchers to fully value as ABR requires the researcher to forfeit control over the process of data collection, and perhaps even data analysis (p.17), whereas Pauwels & Mannay (2020) describe one of the challenges of ABR being its range of methods.

Regardless of the challenges ABR faces, this research focuses on the ability it has to transcend the fixed boundaries of positivist-based research and to establish new ways of thinking about well-known environments (Svensk et al., 2005, p.5). Rendell (2012/2016) comments that interdisciplinary work is challenging intellectually, emotionally and physically, but that giving up the safety of well-known methods can be transformative work and destabilise power dynamics (p.8). Gerstenblatt (2013) concurs, asserting that the focus of ABR should not be on the lack of control the researcher has over process and outcome but on the fact that ABR is counter-hegemonic, advocates for multiple ways of knowing, and enables the formation of knowledge which shows alternate representation of realities.

ABR approaches may include the use of poetry, theatre, painting, music, dance, movement and more. The use of multiple ways of knowing, understanding and sharing in ABR methodology leads to what Rowell & Feldman (2019) call a reversal of intellectual colonialism and epistemicide as ABR does not value one method above another (p.1). This has been supported by Pollock (1988/2015) and hooks (1995), with Pollock (1988/2015) arguing for the transformative power of the arts, and the need for the arts to be created by a female gaze, for a female audience (p.81). This aligns ABR with feminist and IPA methodologies. Leavy (2015) has extensively written on ABR and posits that beyond being an extension of qualitative research ABR has the ability to be empowering for researchers as well as participants (p.20). This results in ABR being able to broaden the methods used by researchers to collect data, as well as bringing to light invisible power dynamics which shape the lives of participants (Leavy, 2015, p.51).

Both Elkin (2023) and Richardson & Savage (2019) argue that art can be a way for women, children and disabled people to write themselves into narratives in which they are often invisible. Jackson Foster et al. (2016) go further and advocate for the use of ABR with youth, and racial and cultural minorities (p.17) in an effort to encourage self-advocacy. Donoghue (2014) specifically critiques ABR as an insightful tool in education improvement, with the arts being used to gather insights into educational practice and conditions (p.4), as does Burke et al. (2020) who comment that children are currently failed with restrictive forms of expression, and through the arts their capabilities can be further explored. Leavy (2015) posits that the arts can be an engaging and illuminating method of data generation because they can tap into emotions, and

can create shifts in thinking, and understanding (p.13), whilst Woolner et al. (2012) note that visual methods in research, such as photography, mapping, and diagrams are ways for participants to have deeper interactions with the research topic.

Although ABR is seen by those stated above as a powerful agent of change, especially when combined with other research methodologies, it is also a diverse field when it comes to methods of data generation. Because of this complexity Pauwels & Mannay (2020) contend that ABR, specifically visual art, work well with multi-modal methods of research to help interpret and demonstrate meaning behind the visuals. Tarr et al. (2017) also comment that social researchers can use ABR to address methodological problems such as accessing knowledge, which is not easily expressed with words, and thus comment on the role of the researcher to clarify meaning for an audience. They also argue for shifting focus away from a final artistic product, with focus on process rather than solely product (p.38). Andrews et al. (2020) comment on how using a multimodal approach in ABR can help achieve research which resists othering the participants as it allows participants to move beyond linguistic representation of experience and diversifies ways of expressing (p.132).

Arts-Based Research (ABR) has been selected as an approach to collecting data in the research as it aligns with the research's ontological, feminist and IPA underpinnings. ABR, as noted by ABR advocates such as Eisner (1991/2017) and Leavy (2015), challenges positivist data collection methods and has the potential to transcend fixed boundaries in research method paradigms. By integrating IPA and ABR the research was able to allow participants to explore the phenomena at study through artistic methods and enable them to express their lived realities in methods which are inclusive and counter-hegemonic. Whilst ABR has been chosen as a research methodology due to its philosophical underpinnings, ABR itself is wide ranging and has broad applications. Specifically in this research a/r/tography, a practise-based approach to ABR, is used to inquire into the phenomena being explored.

4.5.3 A/r/tography and Rhizomatic Inquiry

Irwin et al. (2006) describe a/r/tography as an inquiry-based, arts-led, methodology which uses a mixture of written and visual arts, but also as a methodological approach which does not value

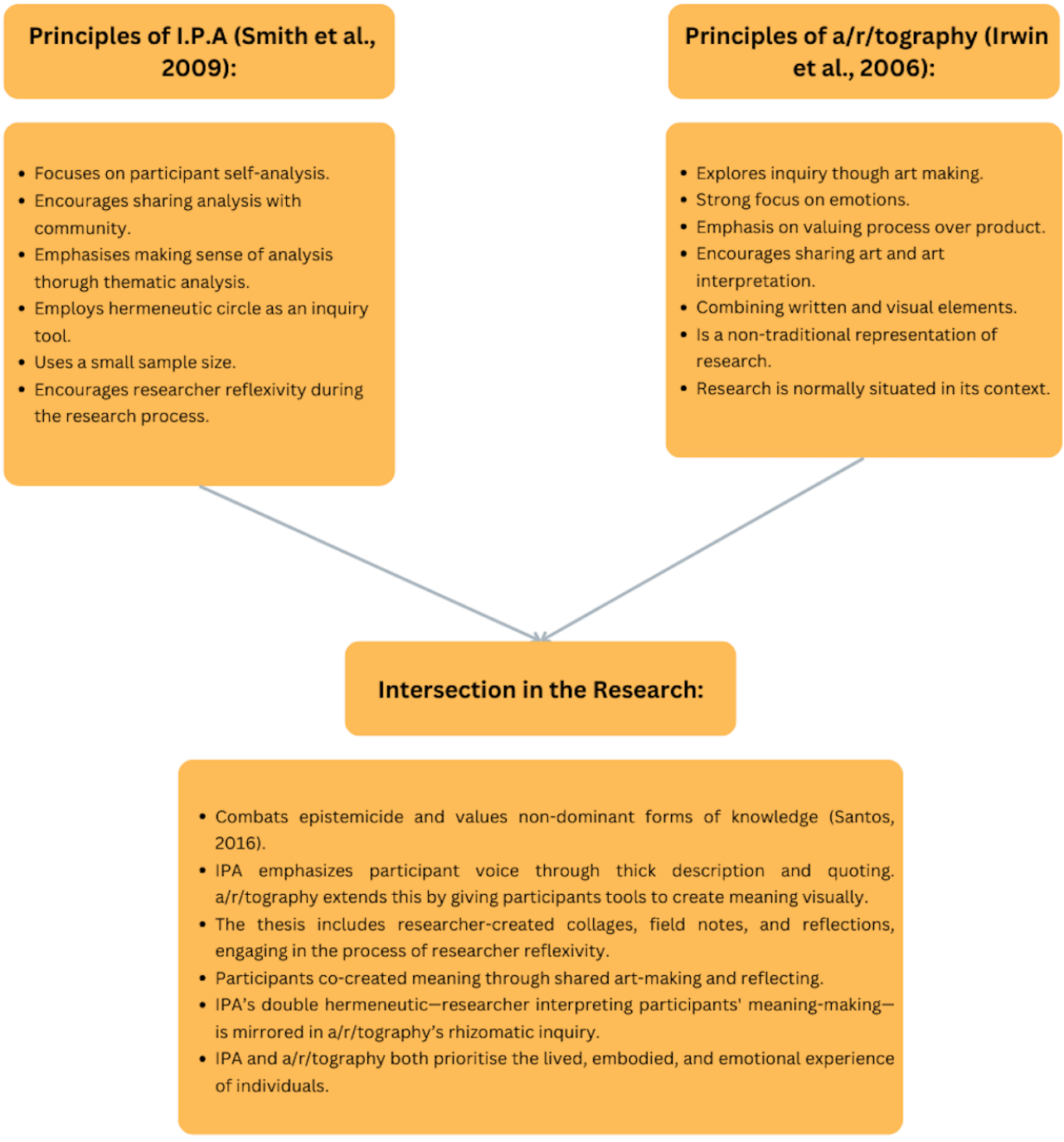
written over visual and vice versa (p.70). Specifically, Irwin et al. (2006) define a/r/tography as "an arts and education practice-based research methodology dedicated to acts of inquiry through arts and writing" (p.70). They continue and explain that a/r/tography shifts focus from who can be an artist to when one can become an artist, and when an experience is art research (p.70). Just as Lefebvre (1974/1991) discusses the complex and intertwined nature of the spatial triad, Irwin et al. (2006) discuss the rhizomatic nature of knowledge learning, and thus the rhizomatic relationships which a/r/tography also explores. This sense of rhizomatic inquiry and learning in the research process is reflected in the slashes in the name a/r/tography which mimics purposefully the doubling of identities, roles and meanings research can have (p.70). Elkin (2023) explores the use of slash in art methodology and states "the slash provides alternatives which sit together in impossible simultaneity" (p.xi). In the research for this thesis the manifold meanings in a/r/tographic work appears in the following ways: I myself am an artist, researcher and teacher by profession, but so too are the participants who become artists in this research, who research into the complexity of their school environment, and who, through the process of sharing and analysis, teach myself and those who read this thesis about those experiences. Furthermore, the art in a/r/tography does not place emphasis on the aesthetics behind the art, but more on the experience of creating art in a community, the role of the facilitator in the process of art creation, and the sharing of art within a community (Irwin et al., 2006, p.72). This makes a/r/tography particularly relevant to use in this research as it removes the pressure of creating art which is considered 'good' and shifts focus onto creation and sharing. Elkin explores the transgressions of boundaries of art and art making in *Art Monsters:Unruly Bodies in Feminist Art* (2023) commenting that when roles and boundaries are transgressed in art there is a creation of something which is beyond the realm of language (p.73). Kalin et al. (2009) explore the rhizomatic nature of a/r/tography as a co-existence between different art types and communities and thus reflects the fact that researchers, participants, teachers and artists should not be reduced down to one singularity (p.19). Springgay et al. (2007) describe a/r/tography as a methodology, through its rhizomatic nature, as one which recognises that meaning making through methods which embrace complexity and inquiry can lead to moments of realisation which are disturbing and unexpected (p.84). These moments, which Barthes (1981) referred to as moments of 'punctum', can give the viewer of the art a moment of unexpected realisation and insight, possibly profound and personal. Through the use of a/r/tography moments of punctum were

experienced not just by myself but also by the participants, described in the findings and discussion chapter (Chapter 6).

A/r/tography is particularly relevant to this study as its connection between space and meaning making has been explored in research into place and identity. Keefe & Gilway (2016) discuss the similarities between a/r/tography and expressive arts as both fields emphasise sensorial and somatic exploration and inquiry into the unknown to discover previously unimagined scenarios (p.170). Gonick (2016) also discusses the benefits of a multi-sensory approach to methods, arguing that it allows the exploration of hybrid spaces fully where often perceived disconnected ideas, in the case of this research art, school design and girlhood, can come together to achieve something surprising which is difficult to coherently explain (p.46). This gives the methods selected for this research a focus on exploring the somatic relationships between spaces and designs in the BSE to open up discussions on possible explanations for complex phenomena. These can, as Aitken (2018) states, be used to understand space deeper, and evoke transformation and social justice. Hannigan (2012) refers to a/r/tography as a living inquiry through which creative-artistic processes can help uncover the relationship between identity and place (p.95), achieved through a facilitation of artistic exploration between space, memory and imagination. This sense of exploring the physicality, memory and imagination is used to select the research methods as described in section 4.7 of this chapter. Figure 6 visualises how I.P.A. and a/r/tography intersect in the research.

Figure 5

Intersection of I.P.A and a/r/tography in the Research



4.5.4 Thesis as A/r/tography

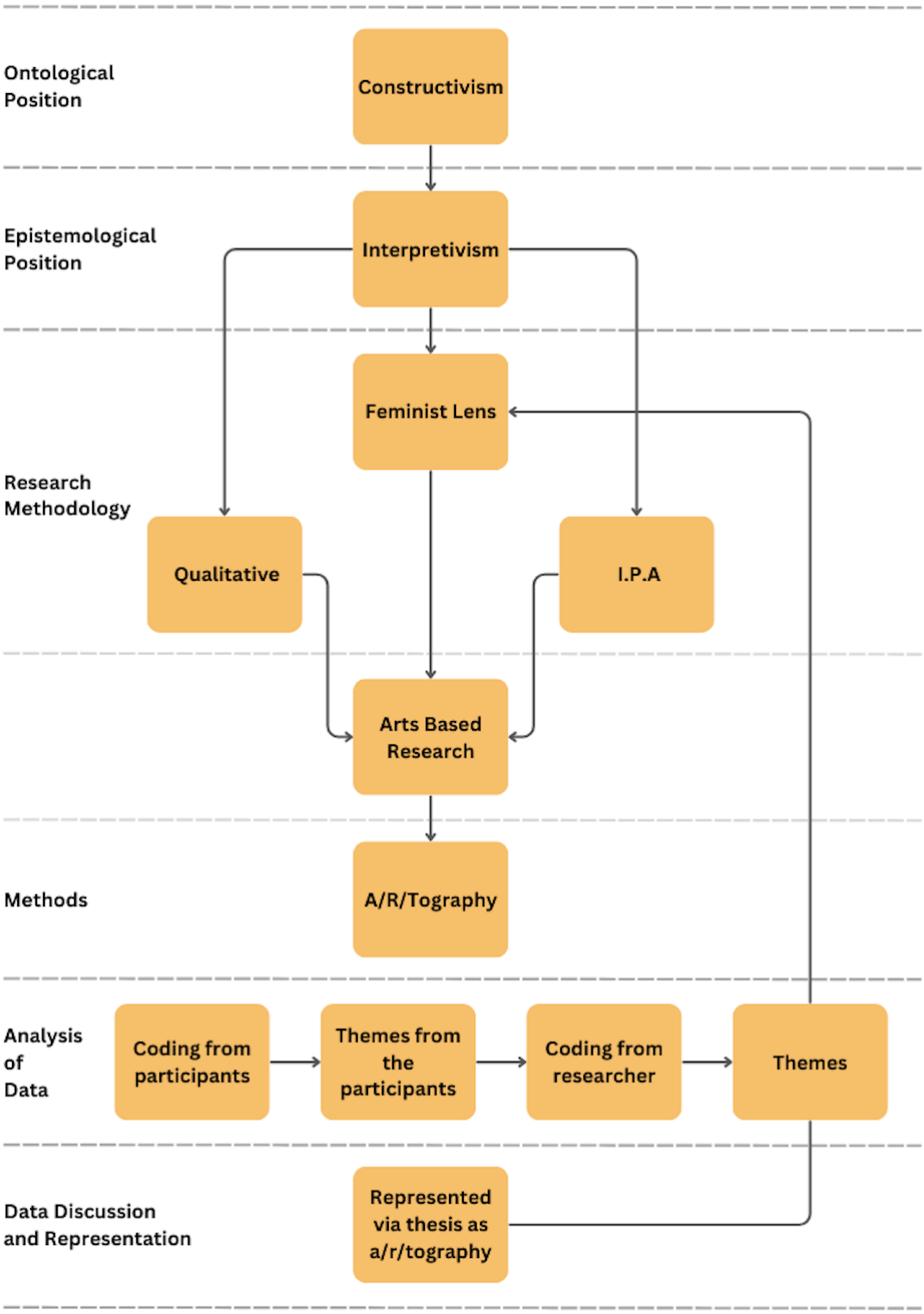
Pertinently for this research Irwin et al. (2006) consider pieces of a/r/tography as art which does not have linear threads of comprehension, but which can be assessed and experienced in different ways to further emphasise the rhizomatic nature of experience and expression. They state an a/r/tographic work is one where the audience is able to "engage with the rhizome by moving in and out and around the work, making connections in a personal way" (Irwin et al, 2006, p.72). This thesis was created in a similar fashion, as a piece of a/r/tographic work which can be experienced through multiple different mediums, however one which can be read in a linear fashion to meet the requirements of the university's guidelines for a doctoral thesis. The photobook (see 5.3), created alongside the thesis, is also a piece of a/r/tography which invites the reader to engage with the visual and textual narrative contained within it. MacDonald & Moss (2015) state that researchers can explore their work further by working at the nexus of art and research, which can lead to a co-construction of meaning and understanding of phenomena, and it is this exploration which allows an understanding of borders, and the transgressions between borders to take place (p.448). LeBlanc et al. (2015) concur with MacDonald & Moss (2015), arguing that a/r/tographers can engage in their own understanding alongside participants, and this invitation to explore phenomena and our own researcher experiences allows for unexpected understandings and interpretations (p.357). What I have attempted to do with this doctoral thesis is to create a piece of a/r/tography, combining writing and art, to express the complexity of the research in as many different ways as I can, embodying the rhizomatic complexity of the lived experience.

4.5.5 Section Summary

Fundamentally a/r/tography is used in multiple methodological ways in this research. It is used to gain a deeper understanding of the phenomena at exploration by myself and by participants, and as a way to interpret and express understanding of the phenomena throughout the thesis. Irwin et al. (2017) advocate for a/r/tography to be considered as a living research methodology which is creative in methods of data generation, and which leads to a deeper understanding of complex phenomena. Figure 6 visualises how the methodological framework functions.

Figure 6

Visualisation of the Methodological Framework



4.6 Data Generation & Analysis - Process & Methods

4.6.1 Introduction

The research took place over a period of a school year (2022-2023), with participants being separated into three groups. Groups 1 and 2 had 8 participants respectively and Group 3 had 10 participants. The research was conducted during weekly elective blocks at the school, where students had the opportunity to choose from a range of activities. I presented the elective to the students during a presentation session where all elective options were shared with students. I described the focus on exploring the built school environment through arts-based research methods, and explained it was research for a doctoral project. Students who were interested voluntarily selected this elective, which aligned with the school's openness to offering real-life research experiences. The school supported this initiative, recognising the value it offered students, not only in engaging with authentic research but also in participating in creative and reflective arts-based activities.

Each group had a weekly two-hour session for the research over 16 weeks. This length of time was chosen to fully explore the artistic creation phase, and to give participants time to reflect on discussions and thoughts which occurred during each session. On a practical level I also spread the research over a 4-month block to allow flexibility into the schedule of sessions for when participants were absent as a whole group for other school related activities. The data generation was split into several stages, each with its own purpose and method and this can be seen in Figure 6. The use of multiple methods was used to create what Frechette et al. (2020) refer to as an interpretative hermeneutic circle whereby each method informs the other through a back and forth movement (p.6).

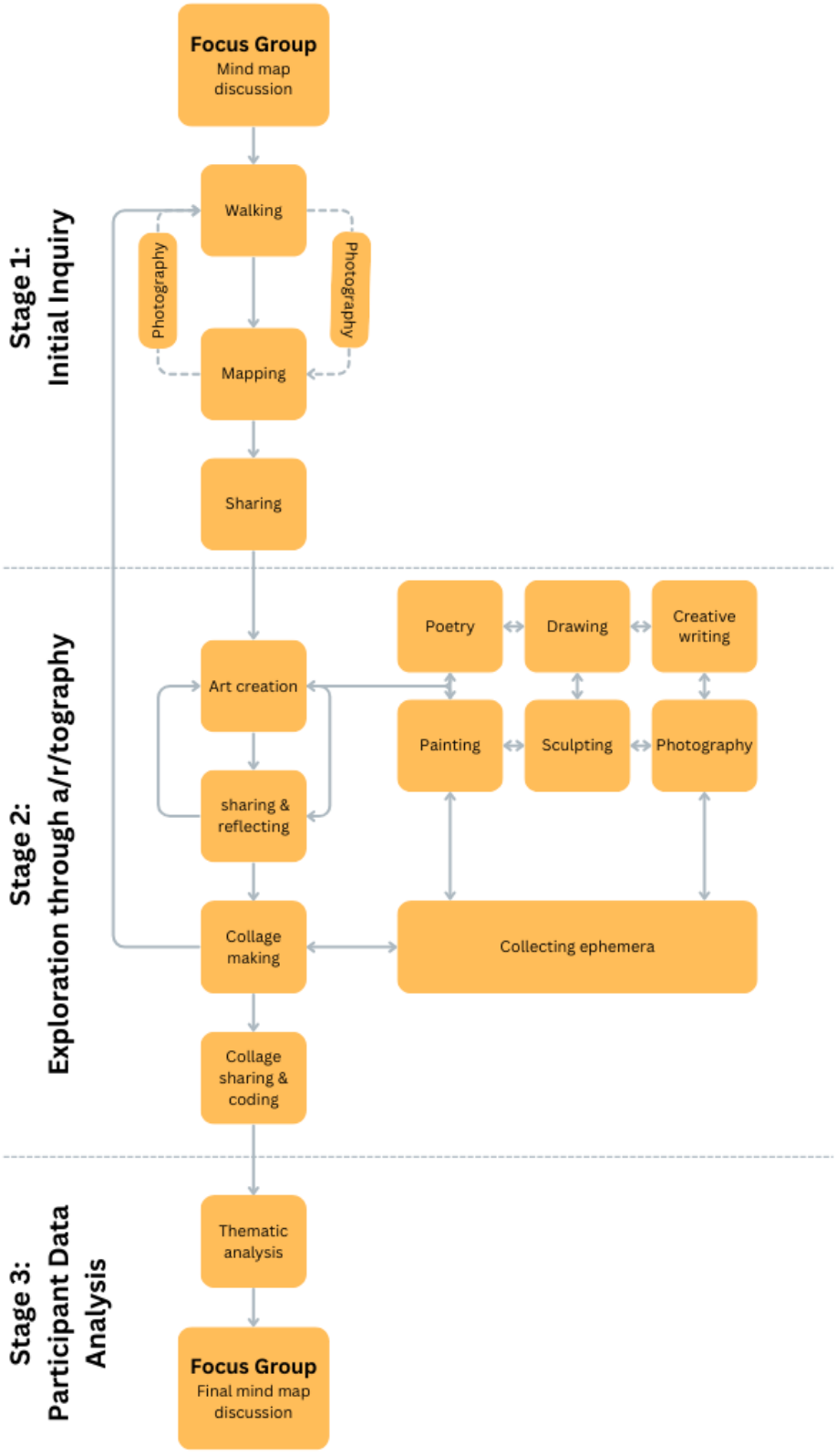
Furthermore, the bilingual nature of the school where both English and Spanish are used as languages of instruction played an important role in the research process. All participants were fluent in both languages and were encouraged to express themselves in whichever language felt most authentic during discussions and creative processes to support the anti-epistemic nature of the research (Santos, 2016). During artmaking participants often incorporated Spanish words and expressions into their visual pieces, reflecting the natural linguistic hybridity of their lived

experiences. The limitations of this multilingual nature of the research are discussed in the conclusion chapter (Chapter 7).

In this section of the methodology chapter, I will chronologically describe the research journey the participants took, through which method data was collected and analysed by participants, and why. This can be seen visually in Figure 7.

Figure 7

Sequence of Activities: Participant Exploration of Phenomena and Self-Analysis



4.6.2 Stage 1.1: Sharing, Feminist Focus Groups and Mind Mapping

During session 1 of the data generation, and after parents had signed consent forms, participants filled out their own informed consent sheets and read over participant information sheets. After this, participants were given an opportunity to ask me questions about the research and this opportunity was created not just to break the proverbial ice, or as a compulsory ethical activity, but to set a tone of sharing amongst the group. This began the general structure of the participants in the space as a type of feminist focus group where sharing and discussing as a group was the norm. Wilkinson (1998) advocated for feminist focus groups to be used as a research methodology so women could share and hear the commonalities between each other and develop a sense of the political context to their personal experiences, which would hopefully lead to a desire to act on praxis (p.115). Harrison & Ogden (2020) also identify focus groups as particularly appropriate when researching with women (p.637), as does Walters (2019) who comments on the greater control participants can have when the moderator's voice in discussion is minimised. I answered the questions participants had with honesty, talking about the origins of the idea of the research, my own childhood memories of school and my love of art with them. This sense of sharing and of testimonial is rooted in the research's feminist framework, with Schalk et al. (2017) commenting that a contemporary feminist demand is for more time to share conversations, and that "talking together is at the core of the conversation of resistance" (p.164). Hall (2018) also supports sharing as a practice of quiet activism where personal stories are shared to connect to the bigger political picture (p.243), harkening back to Hanisch (1970) and the feminist slogan 'the personal is always political'.

This sense of sharing and testimonial appears multiple times during the data generation process as I wanted to enable as many opportunities as possible for participants to share their experiences with each other as a form of self-interpretation and reflection. De Certeau (1984) stated that "every story is a travel story - a spatial practice" (p.115) and it is the spatial story of the participants that is the central aspect of this research. The idea of testimonial is regarded by Saavedra & Pérez (2017) as an anti-colonial tool as testimonial sharing allows for connections to be made between people who experience similar things across national and global boundaries (p.452). The multitude of opportunities to share participant experiences is to also counteract colonial 'rescue narratives' where stories from the Global South are used to either evoke pity, or

justify colonial rule (Schrock, 2013, p.49). Azaldúa & Keating (2015) emphasise the importance of sharing experiences as it is a form of connection creation which transcends boundaries, races and colour, and is also a form to "develop a spiritual-imaginal-political vision together" (p.153). The testimonials that the participants chose to share in the thesis is to respect participant rights to self-interpretation and representation, and to counteract what Spivak (1988/2010) refers to as a silencing of the subaltern. The research aimed to embody what Frenette (2023) clearly elucidates, stating that "the story teller decides where to start, what to share and where to end, in this context the story teller holds the power" (p.386).

Participants were then given the phrase "the built school environment" and tasked as a group to discuss what they thought it meant or referred to and to note this down on a large piece of paper. This was done so that the participants could come together as a group, share ideas which were not personal and thus 'safe', and to have them begin to think about the phenomena without the pressure of connecting to their lived experiences. I gave the participants around 30 minutes to discuss and share ideas, with some groups requesting more time and others finishing earlier. After the group had completed their mind-map I asked if they would share their thinking behind the words and phrases. This was done in an effort to shift their view of me as their teacher and holder of knowledge to a researcher who was interested in their ideas. In two of the three groups each participant highlighted what they had written and talked through why they had written that, and in one group a 'group lead' shared the main ideas of their mind map, with occasional input from their group members.

4.6.3 Stage 1.2: Emotional Cartography and Sensemaking

> Maps are the most documents in human history. They give us tools to store and exchange knowledge about space and place. We are meaning makers, and a sense of place is central to meaning-making. (Brown, 2021, p.xxix)

After the groups shared their mind maps with me, and each other, I introduced them to the next stage of the research which would be a walking and mapping activity. This was for them to

renew and focus their minds on their school in an embodied way but also be engaged in the research (Jackson Foster et al., 2016). This section of the data generation began in session one and would take a range of three to four sessions for each group to complete and consisted of a triangulation between walking as method, mapping and photography. I shared with the participants what emotional cartography was, showing them various examples, including the work of Nold (2009) and their work on bio-mapping, and tasked them to create their own 'emotion map'. The participants were asked to create a large, birds-eye view, map of their BSE to continue to self-define what their BSE was. This would include buildings, pathways and outdoor spaces, although I did specify that they could choose how much detail they wanted to include in this. Participants were told that these maps would include colour coded areas to delineate and mark out the emotions they felt in the spaces they had drawn.

The use of emotional cartography in the research stemmed from the desire for the research to be empowering, specifically here from a geographical perspective. Maps as production of geography, and knowledge have traditionally been what Rose (1993) refers to as "masculinist terrain" (p.4) but also what Singh (2021) refers to as a symbol of patriarchal and colonial power considering their role in colonisation (p.7). Schalk et al. (2017) describe maps as tools which can help visualise different realities (p.37), whilst Crampton (2001) describes map making through different perspectives as an exercise in reinterpreting mapping and one where power dynamic can be deconstructed (p.242). The creation of maps by participants was intended to be a preliminary process of observation as an indispensable starting point (Milgram, 1970), but also as a tool to explicitly address emotions and the emotional embodied exploration of the BSE for the participants early on in the research. I also took inspiration from Gehl & Birgitte's seminal text on the study of public life *How to study public life* (2013) which used maps to show how people used space around them. They note the power of observation, stating that "once we begin observing city life and its interactions with physical surroundings, even the most ordinary street corner can provide interesting knowledge about the interplay of life and form" (p.11). Additionally, the understanding of maps and how to read them is noted by METRAC (2023), a global organisation which aims to help stop violence against women, who stress the importance of consulting with women on their urban environment by using maps to highlight spaces where women are vulnerable to assault.

What I aimed for the participants to do with their map was to observe their BSE, but also observe their emotional embodied experience of their BSE. Emotion mapping, or emotional cartography, has been used within family therapy when analysing home spaces (Goldman et al., 2022, p.17) and it is used in this research so that participants can become aware of how they feel in certain spaces in an effort to reveal the complex relationships they have with their BSE. Goldhagen (2019) describes the importance of understanding your own built environment, asserting that "buildings never leave us cold: if they're not affecting us positively, there's a good chance that they are affecting us negatively" (p.115). In the data generation emotions are brought to the centre to "elevate emotions from the periphery to the centre of dialogue about children's well-being" (Steger et al., 2021, p.3). By having the participants create their own maps, they were given an opportunity to explore and deconstruct how their BSE holds power dynamics in space and place, and also as cartographers, giving them power of how to shape, describe and explain their world, enabling a "reworking of their spatiality" (McKinnon & Breen, 2020). Harris (2004) also considers mapping with young people as a practice that is reflexive, commenting that "knowing and marking the physical environment can enhance young people's connection to place" (p.148).

I was also aware that the participants could have been intimidated by this exercise so early on during the sessions as it required them to explore their emotions via maps, and thus I added in layers of structure they could follow. This was done through discussing with the groups what the school boundaries would be and letting them come to a communal agreement on that, and also having each group come up with ten emotions they wanted to explore and include in their map key. I gave them an example which they could use to encourage them in sharing their own ideas, listing spaces where they feel 'happy' and spaces where they feel 'sad' and advised that they think of no more than fifteen so as to not feel overwhelmed. After this example each group came up with their ten emotions, and also the opposites of these emotions to explore. One group wanted to explore eleven emotions which they felt strongly about and did not want to reduce to ten. Once the groups had decided on their emotions, they began their journey around their BSE as flâneuse, which I explicate next.

4.6.4 Stage 1.3: Becoming Flâneuse

As an undergraduate student on an English Literature course, I distinctly remember having to read Thomas De Quincey's memoir *Confessions of an English Opium-Eater* (De Quincey, 1821/2013) and feeling a sense of envy at a young De Quincey describing his flâneur activities in the middle of the night, wandering the streets of London. This sense of envy stemmed from the fact that I could never imagine walking the streets of a town or city with the reckless abandon De Quincey displayed, but I also realised I had never read or seen any encounter of female flâneur. The only schema I had on a woman walking the streets of a place at night were those of horror stories told of sex-workers going missing or being abused. Massey notes that the flâneur is irretrievably male and the modern gaze belongs to men (1994, p.243), which I considered to be true, until coming across Elkin's *Flâneuse: women walk the city in Paris, New York, Tokyo, Venice and London* (2017). Without delving into the complex patriarchal world of psychogeography as Elkin does, the point which is pertinent to this research is that women have had subversive walking power throughout history. Elkin (2017) argues that walking "intervenes in the organisation of space itself" (p.282) and allows one to organise space on one's own terms. Heddon & Turner (2012) refer to women walking as "heroic walking" (p.229), with Chandler et al. (2019) describing walking as a form of micro-activism for women. Springgay & Truman (2019) also consider walking as a method to be a disruption of the overused male, European flâneur. Bean & Lounder (2019) describe walking as an act which "simultaneously disturbs histories, ideologies and habits while creating new networks" (p.68). Walking is one method used in this research to empower participants, and although it may seem trivial, women walking is an act of subversion.

In this research participants were given time during our sessions to walk in their BSE. The first encounter was during the initial emotion mapping they were creating, with participants either choosing to walk alone, or in small groups, around the school environment to fully immerse themselves in the activity, but also the environment. Participants were not given a route to follow but were allowed to walk where they wanted, with the exception of avoiding classrooms which were occupied so as to not disturb learning. The classroom buildings in the school were multi-storied and took up a small fraction of the school grounds. Large areas of the school were grounds which students could use in recreational time or in classes and this gave the participants

ample areas to explore. Participants were also not given a time limit and encouraged to take their time in their walk, lingering in places if they wished to fully understand the emotions they were experiencing. This sense of lingering and walking without a path had a trifecta of purpose: to build a sense of control and empowerment over the research for the participants, to find ways to walk which were differing from their normal routines, and to analyse the experience from a fresh perspective (Bridger, 2015). Capstick (2015) explores this sense of wandering as liberating when researching with dementia patients, tracking their movements during their 'wanderings', but not from the perspective of a carer looking for someone with dementia who had lost their way, but seeing walking as something which gives the walker power (p.212). Additionally, Springgay & Truman (2017) highlight that walking itself should not be seen as a leisurely activity but one which particular bodies struggle with, or experience as danger (p.88).

Irwin (2006) understands walking as a process of evocation which allows for sensory and spiritual awareness to the everyday space and lived experience (p.77). Kowalewski & Bartłomiejski (2020) define walking as method as a type of sociological intervention as research which uses walking as method usually has participants walking in spaces which are every day and well known, but the process of walking with intention allows for new understandings to be made (p.62). Furthermore, Cosson (2007) highlights how walking as a method, when used in conjunction with other methods, allows for connections to be made and expressed in artistic forms (p.278) and Springgay & Truman (2018) use walking as a method with children and adolescents, noting that walking and education are interconnected (p.114). They had children create maps of their school space and commented on how children took to the activity through humour, renaming places and spaces to the activities which occur there (p.125).

Upon completing their walks of their BSE participants gathered around tables in small groups and mapped out their built environment and the emotions they experienced in each space. This took some groups two sessions, and one group took three sessions to complete their emotion maps. Some participants re-walked areas, and some participants wanted to continue walking as it brought them a sense of relaxation and mindfulness. Tamboukou (2004) also conducted research with young people and observed a similar situation with participants in their study using the walks as "occasions for self-reflection, ways of knowing each other better, moments of

recreation and joy" (Tamboukou, 2004, p.406). Knight (2019) considers the relationship between walking and mapping as rhizomatic, stating that "mapping is highly functional because it connects and reconnects to the walk" (Knight, 2019, p.218), and Swyngedouw (1992) and Lynch (2004) consider walking, or way-finding (Farr et al., 2012), as central to interpreting the world.

Once the maps were completed participants gathered and each took turns sharing their maps, highlighting specific emotions and where they thought those emotions were coming from. The sharing of maps took multiple sessions as some participants went into great detail, and the groups discussed various points shared. These maps are not the primary source of data for this study so they are not discussed in the findings, but in Figure 8, Figure 9, and Figure 10 are examples of the emotion maps. This completed stage 1 of the exploration of the built environment which was aimed at participants exploring, through embodied experiences, their BSE, and identifying their emotions in the BSE.

Figure 8

Participant Emotion Map 1

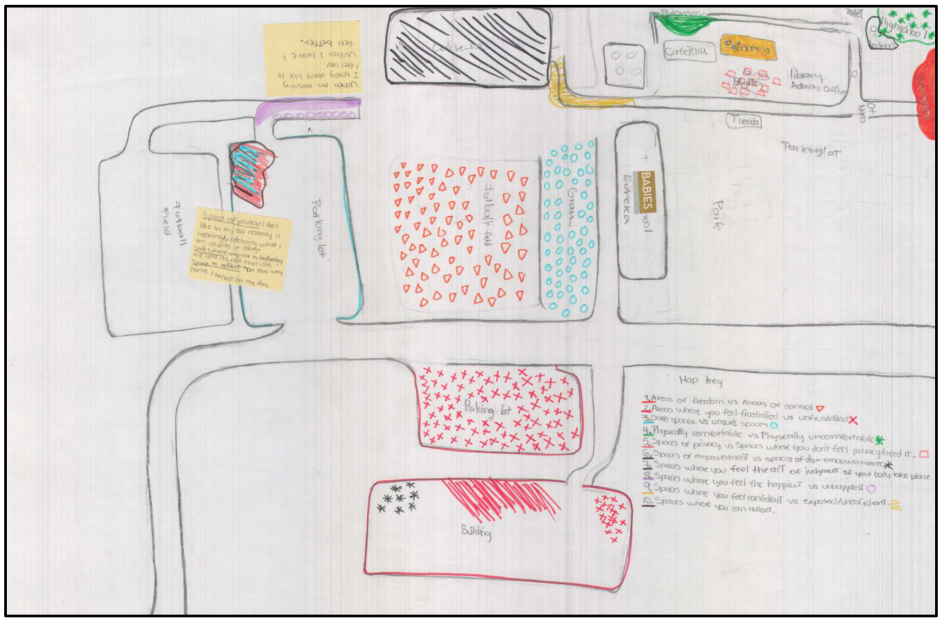

Cafeteria
Library
Admin
Parking lot
Parking lot
Parking lot

Figure 9

Participant Emotions Map 2

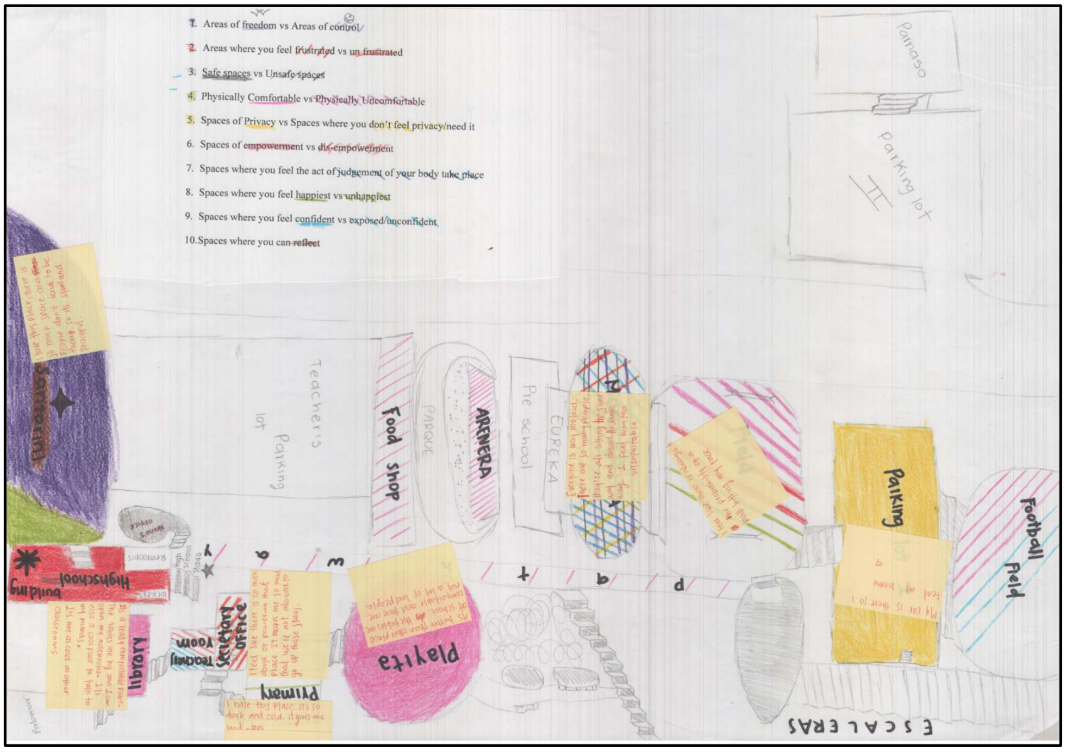
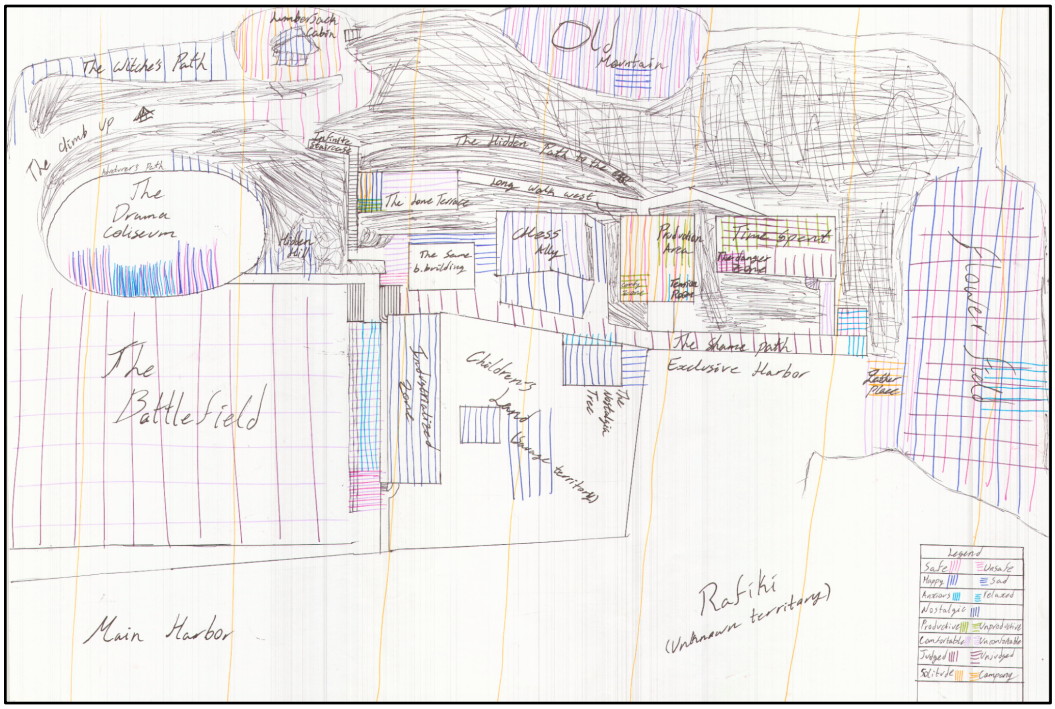


Figure 10

Participant Emotions Map 3



4.6.5 Stage 2.1: Exploring Through A/r/tography

This stage of the data generation contains the primary data, in the form of collages and participant self- analysis, which is used for the data interpretation of this thesis. Participants were given the majority of the 4 month period of research to go on an independent artistic journey, investigating their emotion maps and their lived experience of their BSE through different types of art. During this stage I provided art materials to the participants: paints, pencils, charcoal, different types of canvas, water paints, crayons, colour pencils, oil pastels, modelling clay, chalk, instant cameras, and more. Participants were encouraged to explore their emotions and experiences through photography, art and words, creating different art pieces. This stage of the research was both most liberating and difficult for me as the researcher as I let go of control over what participants were producing, and nor did they have to explain their artwork as it was a personal exploration. It was also a joyful experience with participants discussing their art with me outside of the research sessions. Participants also engaged in discussions as a whole group, small groups, and in pairs about their environment and the new connections they were making. I made note of this in my research journal to document the conversations to keep track of the rich narratives they were building.

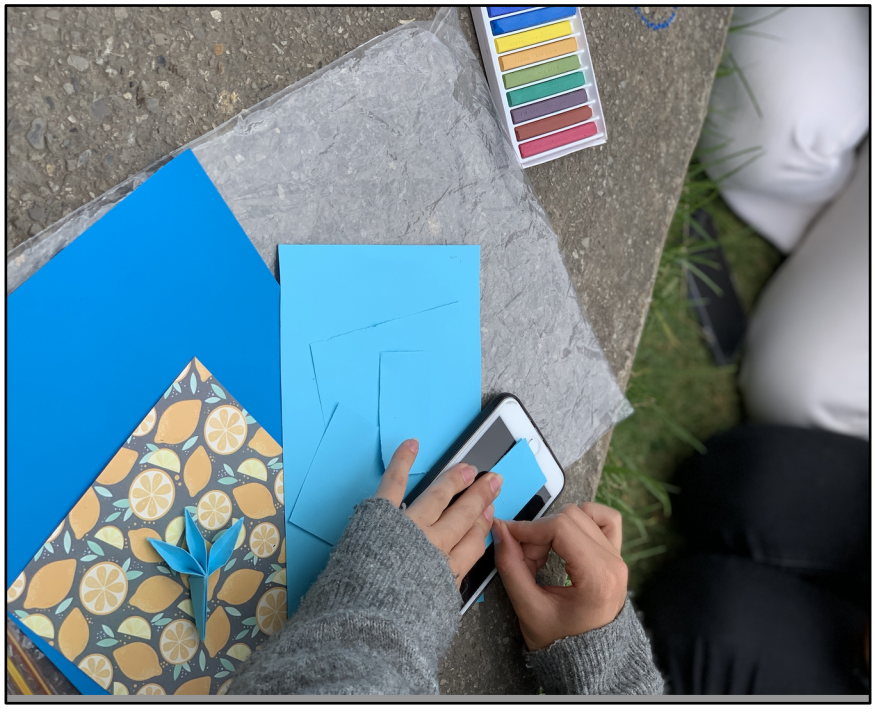
What participants created during this period was not data for data analysis but “living expressions” (McNiff, 2017, p.29) which possess expressions which are larger and more complex than what can be expressed in codes. Some participants wrote poetry to try and understand and express what they were feeling. I had not personally prompted this, but the students had me as their English teacher and perhaps because they had written poetry with me in English classes, they chose to do so again in the research group. Faulkner (2017) describes poetry as a form of deep reflection for the researcher and participant, labelling it a form of reflecting practice. During this stage multiple participants would continue to take walks in their BSE and take photographs of things which interested them. Rose (1997a) labels photographs as cultural text with the photographer sharing sites of interpretation (p.227) and Heng (2020) also notes the emotions which are behind photographs. See Figure 11 and Figure 12 for examples of participant art creation in action.

Figure 11

Photo - Experimenting with Colour and Pattern

Figure 12

Photo - Creating Origami Sculptures



4.6.6 Stage 2.2: Collage Creation

The final culminating art piece which participants created was a collage that encompassed what they wanted to share about their experience of their BSE. Leavy (2022) recommends some guidelines are in place for participants to create in comfort and clarity, and thus participants were given the aforementioned topic, a range of art supplies (see Figure 13), a large B2 sized durex paper, and a timeline of expected completion. McKay et al. (2006) contend that collage is not easy for participants to engage with, with participants needing engagement and purpose for authentic exploration of a concept. Participants could use any previously made artwork in the sessions to include in their collages, or create new pieces. Most participants created entirely new art pieces and designs, taking into consideration newer insights and connections made during their earlier creation and reflection process.

Figure 13

Photo - Art Supplies and Ephemera Being Explored by Participants

Collage was chosen as the final artistic expression as when combined with the written word and photographs, it can reveal symbols, metaphors and opinions, which Laughlin & Johnson (2011) posit cannot be elucidated in other forms of communication. Vaughan (2005) describes collage as a type of "postmodern epistemology" (p.28) and Richter (2016) argues that collage is a type of

curation which helps to form new knowledge. Bradley & Atkinson (2020) outline why collage can be a powerful method in the ABR arsenal: collage can be a tool which participants use to engage in an inquiry, it acts a processing tool to help understand a phenomenon, and collage does not require artistic abilities to be engaged with (p.144). Butler-Kisber & Poldma (2010) expand on this last point, noting that cutting and sticking is something learned as a young child and thus the basic skills needed for collage tend to be in a participant's repertoire already, but they also note that collage has a long history, explaining that it was used in conjunction with Japanese poetry over 1000 years ago (p.2). Davis (2008) comments that the power of collage lays in its ability to defy master narratives of authority, and that it enables the creator "to explore memory, imagination and experiential reflection" (p.245). Collage, although "seemingly a casual art process, hides the labour of art making" (Elkin, 2023, p.102) and the fragmentation of ephemera and repurposing of image can help to contextualise complex realities (Gerstenblatt, 2013, p.295). Culshaw (2019) argues that collage is a mindful art creation process which forces the artist to slow down and notice things they may not at other times. In this research collage was used to form an experience for the participants where they could gather their thinking and express their spatial story of their BSE using a powerful visual method. See the following figures for examples of participants creating collages.

Figure 14

Photo - Collage Creation 1

Figure 15

Photo - Collage Creation 2

Figure 16

Photo - Collage Creation 3

Figure 17

Photo - Collage Creation 4

Figure 18

Photo - Collage Creation 5

Figure 19

Photo - Collage Creation 6

4.6.8 Stage 3.1: Collaborative Data Analysis - Sharing and Coding

Once participants had completed their collages the next stage of the research process took place: participants shared their collages with their group and then coded each collage as a group. Before participants shared their collages, I gave a workshop on coding and thematic analysis as a key focus of the research was to have participants reflect, analyse and interpret their own lived experiences in as many different ways as possible. This resulted in a research design which incorporated participants learning about and implementing thematic analysis of their own collages. The set of themes that each group then created were used as the key data to analyse and interpret for myself as the researcher. This is discussed in detail in Chapter 6, in the findings and discussion.

The intention behind the self-analysis of the collages was to follow the principles of Interpretative Phenomenological Analysis (IPA) but to also include participants in the process of analysis to further their own sensemaking of the phenomena at study. Ismail & Kinchin (2023) describe IPA as going through a process of: initial noting, doing, and theme selection. During the sharing of collages participants placed their collages on a large blank whiteboard wall for presentation and went through this process of IPA over two sessions. In the first of the IPA sessions presentations of the collages took place and space was left around each collage for coding words. Participants each stood and took turns explaining their collages, telling the stories of the smaller parts of the collages which added up to share their lived experience of their BSE. These collage explanations, and the subsequent discussions after each presentation, were recorded and transcribed by myself. After each participant shared the story of their collage the group, including the participant who had presented, selected words which came out from the collage and wrote these around the collage. See Figure 20 and Figure 21 for photos of the participant coding process.

Figure 20

Photo - Participants Coding During Collage Presentations 1

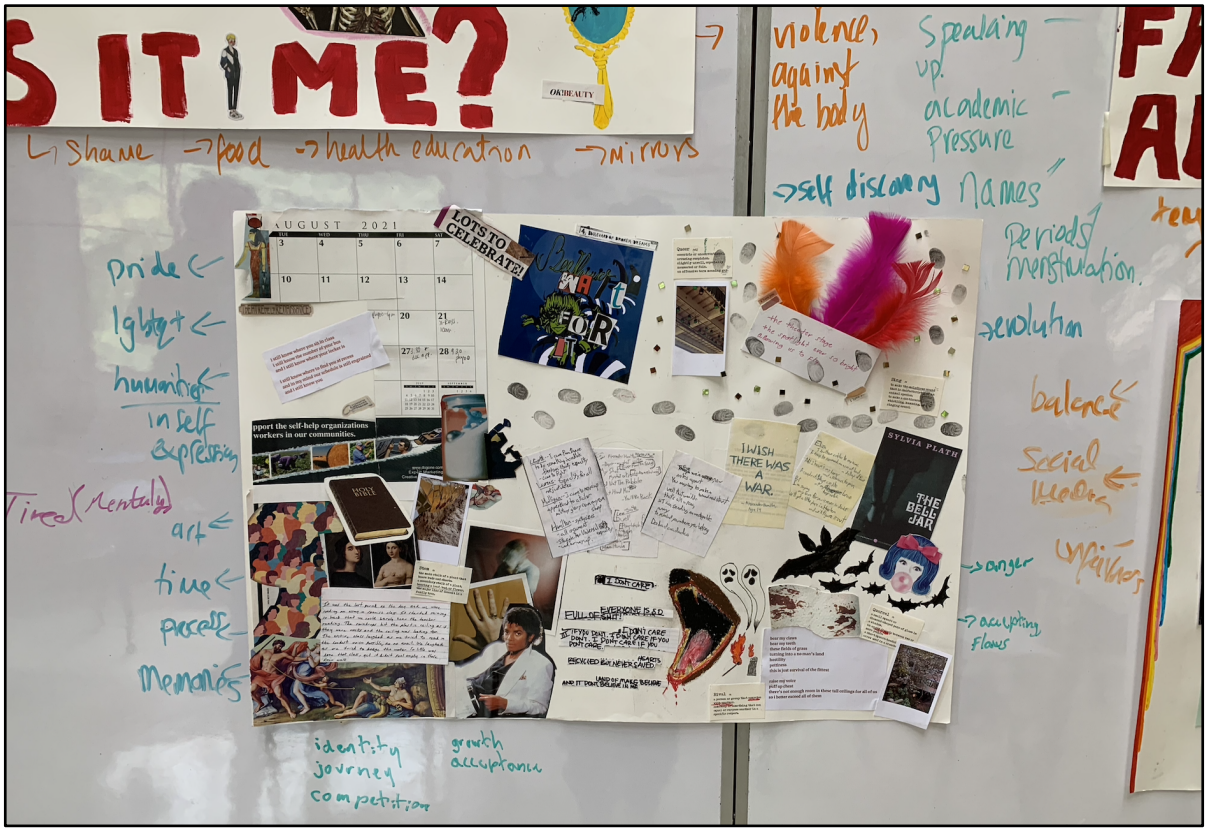
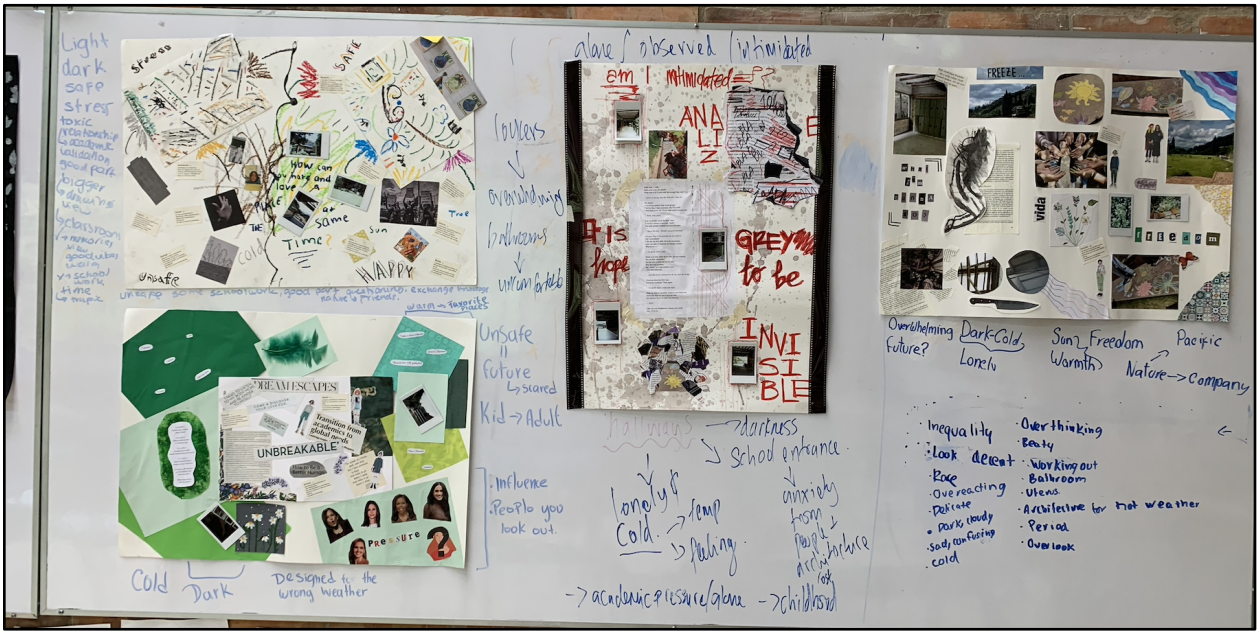


Figure 21

Photo - Participants Coding During Collage Presentations 2



At the end of the presentation session, I listed down all the words from the board and which the participants of that group said were important. These could be places, feelings or names of experiences. This session of presenting and selecting key words came to be the coding aspect of the thematic analysis for each group.

This process of sharing and group coding was chosen as I did not want the participants to create imaginative work depicting their complex lived experiences only to then interpret this experience with my research subjectivity overlayed on their intention. Additionally, to fully engage with the emancipatory aim of this research, the participants needed time and space to understand their lived experiences and retain control over how their work was presented, as well as what stories they wanted to share. Leavy (2022) also argues that this retention of power through following up artwork created leads participants to feel that their experiences and feelings are taken seriously (p.252). Eisner (2003) describes how creating imagery to express experience is only at half value as creative art, in whichever form it may be, does not secure importance until the process of transforming the art into a public forum is presented (p.342). Furthermore, Ruopp & Unrath (2019) view and review work created when subtleties in meaning, experience and interconnection are discovered (p.35). This process is what Morris & Paris (2021) refer to as "translation" (p.102) and they argue it is through presenting and translating artwork that the audience can feel an embodied reaction to art.

4.6.9 Stage 3.2: Thematic Interpretation and Reflections

In the final sessions of the research participants went through the experience of thematic analysis. The coded words which participants had created and which I had noted down were typed up by myself, printed off and cut into small strips. These strips of words were taken to the session on thematic analysis, alongside large pieces of black card. I presented the coded words to the participants around a table, and reviewed how thematic analysis could work for them, explaining that the words were from the codes they had created, had been printed and cut up, and would now be sorted into different themes by them as a group. Participants began to sort through the words and started creating their own themes. See Figures 22 and 23 for photos of the sorting and theme creation stage. There was some negotiating, thinking and group discussion and participants took to the activity quite easily and with little assistance from me. This may be

because sorting and labelling is a common classroom activity and thus something the participants were used to doing as school students and a reason why I integrated this into the research process. Participants then pasted the codes down into their respective themes and wrote down the definitions of those themes on the back of the card, in their own words. This meant there was a reduction in the need for "member checking" (Morris & Paris, 2021, p.100) as they discovered and reported their own initial findings through their own codes and themes. I then used the participant identified themes to analyse the data. Once analysed I created a researcher identified set of themes which are discussed in Chapter 6.

Figure 22

Photo - Participants Sorting Codes into Themes 1

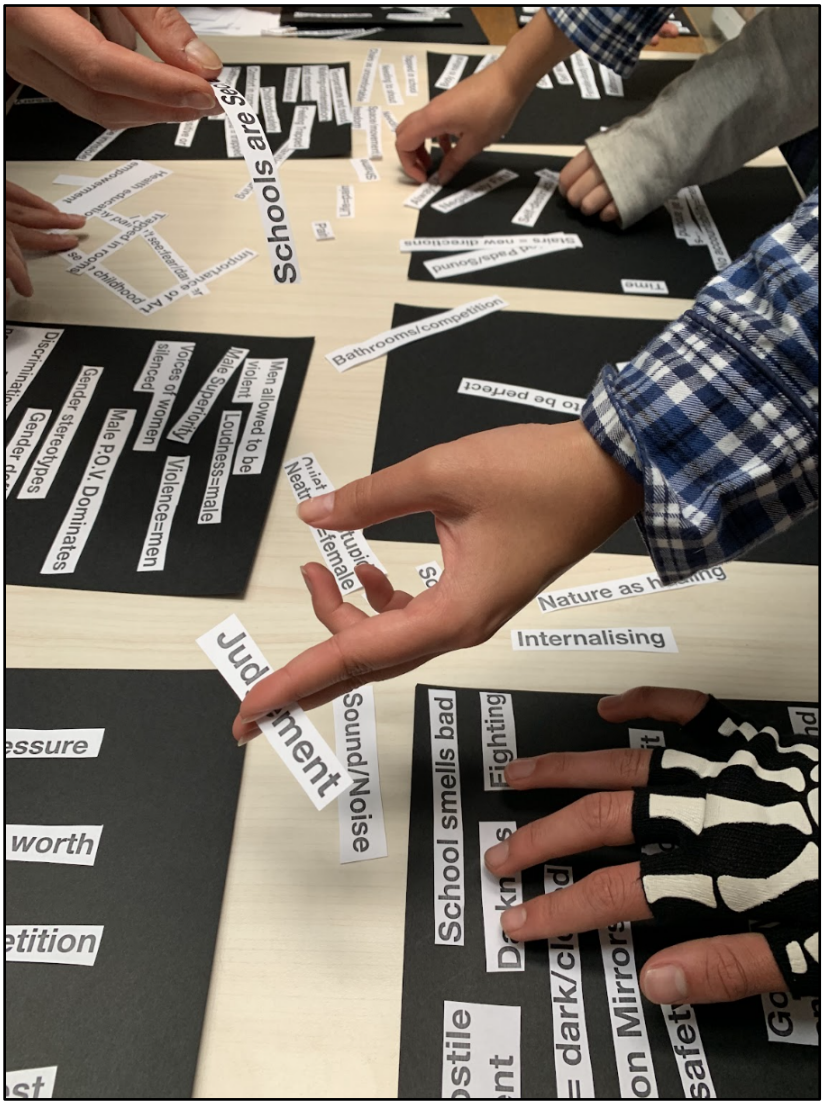


Figure 23

Photo - Participants Sorting Codes into Themes 2

Once all the themes were pasted, they were placed side by side so participants could see and observe them. With these being observed the participants created their final mind map. The mind

map was the same exercise that had begun the research, a group discussion on what they understood as their "built school environment". This final mind map creation and focus group discussion was recorded and transcribed (see Appendix L). This focus group discussion was designed to bring a natural reflective close for the participants of the study as sharing knowledge as equals includes creating opportunities for participants to play a significant role in data analysis and synthesis (Yuen, 2018, p.340). To further create a sense of closure participants were given a participation debrief sheet (see Appendix F) which went through the research aims again, and explained how their artwork, transcripts and ideas would be shared. I also took time to explain that their collages, and art produced would appear in the research and possibly in other research, and that they could opt out of this. We reviewed the participant consent forms again and discussed whether any participants did not want to have their words or art appear in the research. No participants opted out of the research. I also asked participants again whether they would still like to be named in the beginning of the research and photobook and participants were eager for this to take place. Participants took their collages home at the end of their final session so that they could take ownership of their artwork. Following this I used their collages, themes, and the transcribed analysis of their collages, as the primary data set for the research. Table 1 provides a summary of the different types of data generated in the research. This is further explored in detail in the findings and discussion chapter (Chapter 6).

Table 1

Different Types of Data Generated in the Research

Data Type	Description	Amount/Format
Focus Group Discussion	Focus group discussions at various stages.	Sharing, reflections and dialogue. Key insights recorded in research field diary.
Mind Maps	Initial and final group thoughts on the BSE.	3 groups x 2 Mind Maps. Total: 6 Mind Maps.
Emotion Maps	Individual emotional cartography maps of the BSE.	26 Emotion Maps.
Artwork	Art pieces created during independent exploration	Variable amounts not recorded as data for the research, but part

	stage.	of the I.P.A. process for participants.
Collages	Individual collages.	26 collages, as seen in the photobook.
Themes Identified and Definition Cards	The theme cards which contain codes from each group, and which have the definitions of each theme on the back.	20 themes identified by participants.
Transcripts	NVivo transcribed discussions of collage presentations and the final group discussions around the BSE.	26 transcripts from collage presentations totalling 196 minutes and 36 seconds. Broken down: Group 1 – 68.17 Group 2 – 66.05 Group 3 – 62.07 3 transcripts from the final group mind map discussion totalling 45 minutes and 20 seconds. Broken down: Group 1 – 10.07 Group 2 – 16.50 Group 3 – 18.23
Photographs	Photographs taken by the researcher during the research.	Various, embedded Photobook and thesis.
Researcher Field Diary	Field diary which contains reflections and observations from the researcher during the research process involving participants.	Written reflections (see Appendix A).
Researcher Journal	Journal which contains notes, ideas, reflections and artwork collected throughout the doctoral research process.	Various written and artistic reflections (see Appendix B).
Researcher's Artwork	Various pieces of artwork created by researcher.	Various (see Appendix M).

4.6.10 Section Summary

The research was designed to allow the participants to engage with the research in different ways, encouraging them to meaningfully explore their experiences in their BSE. The intersection of methodologies, combined with a/r/tography and participant collaboration as a binding principle of the research, was used to empower participants. The methodology and methods were used to bring the voices of the participants to forefront of the research and the findings from the study, based on the participants interpretative self-analysis are presented in detail in the following chapter.

4.7 Positionality and Ethical Considerations

4.7.1 Introduction

Working with young people, through arts-based research, and with feminist theoretical underpinnings, has presented a complex set of ethical considerations in this research. Aside from the ethical requirements the university sets out, and general codes of conduct which are expected within the field of academic research, this particular research has presented emotional and ethical dilemmas from the point of view of a researcher. In this section of the methodology, I lay out explicitly what those ethical complexities were, and in what shape or form they have been considered.

4.7.2 Positionality, Reflexivity and Researcher Emotions

In this research I have attempted to embrace a sense of academic courage to journey down a path which led me to use ABR. MacDonald & Moss (2015) also explore in their research the tensions which can occur when researching through creative or artistic research methods. Frechette et al. (2020) explore this insecurity and comment that the researcher must come to terms with who their research speaks to, who it speaks of, and a justification for the use of methods which is coherent with who the type of researcher one wishes to become (p.5). Faulkner et al. (2016) concur that it is impossible for the researcher to remain outside of the subject matter of the research and that reflexivity is required in all research so that the researcher can fully understand that they are an instrument in the research process, coming to the research with preconceived notions in behaviours, attitudes and beliefs (p.198). They also advocate for reflexivity to be a process of continual reflection, rather than of a process which has a beginning and end, arguing

that positionality is an ever-changing notion, depending on the continual lived experiences of the researcher and thus reinterpretation and new insight can be achieved through this cycle of reflection.

To embrace reflexivity, I created a field diary where I collected observations with each session of the research to contain my field notes but alongside had a separate column documenting how I was feeling and my personal reflections during and after each session (see Appendix A). I then read over these when conducting data analysis, and continue to, each time finding a new avenue of thought and feeling. I also conducted a year-long journal during the writing phase of the thesis to document the emotional, psychological, and academic journey I was experiencing during the writing process (see Appendix B). This sense of deeper reflexivity also reflects feminist research philosophy, where acknowledging researcher positionality and emotions is considered as valuing the research process as much as the research results (Rose, 1997b; Nadar, 2014). Berger (2015) argues that there is a balance to achieve between reflexive research and research aims, citing the value in understanding positionality when conducting data analysis and considerations of positionality can affect data analysis (p.223). Berger (2015) also comments on the need for the researcher to be mindful of not losing focus on research participants due to excessive self-analysis (p.532). Fox & Allan (2013) comment on the continued naivety they have experienced in their own research, documenting their journey to acknowledging their positionality in their research, and advocating for researchers to actively write in their positionality into their work (p.105). Finlay (2002) considers this writing in self-aware meta-analysis as not a problem but a presentation of opportunities for the researchers (p.531), but similar to Berger (2015) advocates for the researcher to interrogate their own reflexivity, whilst keeping focus on the phenomena being studied. Regardless of the long-term impact research can have, Wilcock (2024) does state that if one participant is enabled to feel empowered then the negative effects on the researcher may be worth it (p.5). This is further explored in the next section.

4.7.3 The Emotional Labour of Arts-Based Research

Arts-based research also poses its own set of ethical concerns. Sinding et al. (2007) particularly note that ABR has potential to do harm to researchers and participants as art has the possibility to rearrange understanding of the self and the world, and can be difficult to predict (p.462). To

counteract this Blakely (2007) advocates for research to embrace an ethic of care where researchers are emotionally engaged in their research to consider the nuances of interactions of their participants, and to also extend this ethic of care towards researchers, through journaling and peer support (p.65). During my research I had a very strong support circle: supervisors, peers, my partner, friends, and family. However, this did not 'protect' me from the emotionally charged work of using ABR as methodology. I have stated earlier that during my research I engaged with a/r/tography in different ways: written observations during data generation, an art journal documenting my writing process, and a collection of collages created before, during and after the research to process everything I was learning about the phenomena. These artistic endeavours created powerful and stirring moments with memories long forgotten about my own lived experiences, my life as a student, and thoughts of the research which could be considered as dark: would I ever finish, would my work make an impact, what was it all for, and so on. Whilst I was aware that ABR had the power to create such feelings, I was not actually aware of it until I experienced it. This led me to be extremely cautious of tracking my participants' emotions during their artwork as I myself had felt the power of ABR to create wildly complex emotions in the body and mind.

For my participants I took extra care to pick up threads in any conversations which displayed possibly harmful connotations to report to the school psychologist, which participants were aware of. Frechette et al. (2020) consider this alertness from the researcher as embodied epistemology whereby the researcher uses all six senses: sight, hearing, taste, touch, smell and gut feeling, to be in a constant state of reflection (p.5). However, concerns did not occur, and the few times topics came up which could have been potentially negative emotionally for the participants the participants supported each other through conversation. In this aspect of the research I felt my training as a teacher, and the continuous professional development around safeguarding, let me be confident in understanding when to step back in the research and let participants support each other and where I was well trained to "pay attention to the hidden messages that children's voices communicate" (Parnell & Patsarika, 2014, p.101). When considering the ethical considerations of working with children and young people there are a complex range of elements to consider. Laughlin & Johnson (2011) comment that guidelines which are used in ethical considerations for adult participants do not apply to children well,

stating that the physical space of the research should be considered more holistically, and engagement methods should be revisited (p.443). This is also where knowing the participants over several years also played to a strength in the study as I knew the participants' backgrounds and could read their reactions quickly to ascertain if there were any moments which I needed to exercise a greater sense of care and consideration. I also felt that the initial awkwardness that can occur in research when meeting participants was something that I did not have to face as participants knew me so well.

4.7.4 Recruitment of Participants, Pseudonyms, Informed Consent and Anonymity

The research was conducted at a private school on the outskirts of Bogotá, Colombia. I had worked at the school for two years as a teacher before the research started. I noticed the school was very open to expanding pedagogical thinking, so I proposed conducting the investigation during my time as an employee. For this thesis participants volunteered to be a part of the research after a presentation was given to them about what it would entail. There were 26 participants, ranging in age between 16 to 18 and all are Colombian. The participants come from what can be considered an affluent (upper class) background in Colombia and are bilingual speakers of English and Spanish.

To align with the emancipatory aims of this thesis, participants were included in the discussion of how they should be referred to in the written research and participants stated clearly, they did not want to be referred to by pseudonyms, numbers or letters. I also suggested that they could select their own pseudonyms, but this idea was also rejected by the participants. Furthermore, research conducted has argued that the labelling of participants via letters and numbers without discussing this with participants presents a micro-ethical problem which many researchers do not identify in the research process (Wang et al., 2024; Lahman et al., 2015; Itzik & Walsh, 2023). Thus, participants are referred to solely as "participant" in this research, with effort made by myself to make clear when different participants are sharing their experiences.

In the first session participants were made aware of the journey of the research, not just in terms of their role, but also how the research came about, how they would contribute to it, and what would happen afterwards. Participants were given an information sheet which outlined the

research aims, their role in the research, who they could contact if they had any questions or concerns, and information on where to find support if any sessions were emotionally upsetting for them. Participants were then given the opportunity to ask any questions about the research before they were given informed consent sheets to fill out. Informed consent from parents was sent to parents in a separate consent sheet (see Appendix D, E, F, G and H for consent sheets and information sheets). Permission from the school had already been sought and gained.

Initially participants were told that they would remain anonymous in the thesis, however the participants, bar one, asked to be named in the research. I discussed with them why they wanted to be named, and the possible consequences of this. They asked to be named so that they could share the work they had co-constructed on a wider scale and to use it as an example of extra-curricular activities they had participated in. I reviewed the ethics form submitted for the research and discussed at length with my supervisors on how to achieve the balance between protecting participants, but also giving them agency to decide on sharing their co-constructed research. Thus, participants are named in the thesis and photobook as collaborators of the research, but their actual work, words and ideas remain anonymous. Consequently, a participant table has been chosen to not be included to protect participant anonymity as participants first names are included in the photobook and written thesis in introductions. At the end of the research participants were given a participant debriefing sheet outlining the research aims, what we had done together, how to contact myself, or my supervisor if they had any questions, and the projected future of the research project. Since I completed the research, I have met several of the participants who have asked me about updates on the research and the writing of the thesis and talked about their time in the research group with fondness.

4.7.5 Working with Children

The ethical challenges of working with those classified as children presents further complexity when working with children who know you prior to the research in a position of authority. To bridge the gap between the power dynamics of participants and researcher I avoided traditional qualitative research methods such as interviews as Sommer et al. (2020) consider these methods which propagate inequality in power. Sommer et al. (2020) note that to reduce the distance between participants of a young age, and older researchers, children must be seen as active

investigators of their environment. Dockett at al. (2009) consider the strategies used in research to engage and empower children as a vital component of research with children, emphasising the need to have children be involved in different stages of research, giving children choice as to how much they want to engage in the research and ensure that their opinions and values are respected. Broström (2006) contends that valuing and respecting children is not enough and that care should be taken when protecting children's privacy. Taking this into consideration there were many conversations which I was a part of with the participants which are not shared in this research as it felt like it would be a breach of confidentiality of the participants and their rights to privacy. Deciding to include and exclude data is a sensitive area as it gave me the final say on what the participants could share, but was done to protect participants.

Additionally, Skelton (2008) documents their research in the field of children's research and argues that childhoods must be recognised for their diversity, giving the example of the difference required when researching with a ten year old versus researching with those who are fall into the 16-18 age range where they may be considered adults in their own right, in their global and cultural context. Hammett et al. (2022) also note the messiness which comes with research, and emphasise that moving beyond tick box ethical procedures means trusting researchers to act with ethical credibility. Modi (2020) discusses the need to see children as vulnerable to being involved in research, and argues for a shift in research where children are seen as active agents in their lives, acknowledging their rights to be identified as people with their own thoughts and experiences which they are capable of sharing. Thomas et al. (2023) posit that when working with children, children should be able to choose from a range of activities as to how best to share their views and experiences. Furthermore, Coyne (2024) focuses further on the type of research which should be conducted with children, noting that to reduce power imbalances and create authentic research opportunities for children, participatory research should become the de-facto method of researching with children.

There were also complexities with teacher-student power dynamics as I was the participants' teacher during their regular English classes. Additionally, I had taught for two years already and thus participants initially treated the session as a classroom experience, which Walters (2019) posits as inevitable but which they consider can be overcome through planned activities with

participants which can breakdown some traditional teacher-student relationships (p.366). Additionally, I did not want the participants to feel obligated to join the research or share commentary they thought I would want to hear. I emphasised that the elective was not graded, and that they could leave the research at any point and join another elective instead. Furthermore, I was aware that the research group may have changed my perception of the participants who still had one more year of schooling left after the research group finished. This was a major factor in my choice to leave the school as a teacher at the end of school year, when the research was completed, so I could distance myself from the school and the participants' during the analysis and writing stage of the thesis. Whilst I had attempted to reduce what Thwaites (2017) refers to as exploitative use of participants, through attempts at minimising hierarchy and encouraging participants to express themselves freely in the form they wanted to, I would also agree with Thwaites' (2017) observation that the best a researcher can do is actively be aware of power dynamics and attempt to minimise them (p.8). Woolner et al. (2012) consider that researchers who are outsiders in school communities can be problematic when researchers attempt to form relationships with participants (p.15) and as I already had developed those relationships, participants felt safe to express sensitive topics. These sensitive topics, or as Guillemin & Gillam (2004) refer to as 'ethically important moments', are contextualised and discussed in detail in the data findings and discussion chapter. Berger (2015) explores how much the researcher should share about their own lives with participants, and highlights the difficulties between minimising sharing personal experiences to not bring the researcher's agenda and reflexive standpoint into the participants voice, but also being sensitive towards participants when they look for shared experiences (p.225):

> On one hand, such familiarity may enable better in-depth understanding of participants' perception and interpretation of their lived experience in a way that is impossible in the absence of having been through it. However, at the same time, the researcher must remain constantly alert to avoid projecting own experience and using it as the lens to view and understand participants' experience. (Berger, 2015, p.230)

Whilst Kraftl (2015) considers children's geography as a critical field of study to analyse how children and young people are controlled, they argue that research with young people is based in top down approaches; policy document analysis, curriculum analysis, distant observation, and should move to involving young people as much as possible (p.222). Working with the participants through feminist and ABR methodologies requires the researcher to step back which Tarr et al. (2017) state can be unusual or uncomfortable (p.41). Tarr et al. (2017) also advise to reduce power distance between participants and researchers by becoming participants in the research process and to continue relationship building between sessions, in breaks and having this as an added layer of data (p.44). Schurr & Abdo (2015) give the advice to think about where and how researchers place themselves in spaces of research to reduce influence and power over participants. Considering this, when participants were involved in creating art individually and when they were explaining some of their artwork to the other participants, I placed myself at the back of the room, and created art work alongside them. I also engaged with the same activities as the participants so that they did not feel 'watched', and discreetly took observation notes. When participants wanted my commentary on topics they were discussing I engaged with them on topics which evoked empathy as I had felt their feelings of injustice. Suzanne & Reiss explore this sense of sharing as important, commenting that they had "felt vulnerable as a woman in the academic world and refused the idea of pretending not to be vulnerable and keeping the unjust system running" (Suzanne & Reiss, 2023, p.14). This sense of sharing was troublesome for myself as a researcher as I wanted to engage with the participants, but I also had to keep out of conversations which would be critical of the school as that clashed with my responsibility as a teacher. This included incidents of participants complaining about other teachers, my colleagues, and which did not bring about safeguarding issues, but conversations in which I felt it pertinent to excuse myself from. The teacher-academic identity is a complex one and one which can raise unique ethical dilemmas.

4.7.6 Sharing Personal Experiences

As identified earlier, a danger which the participants faced, and which participants face in qualitative research in general, is the risk of being identified. However, in research which addresses sensitive topics that have been raised in the research, they also risk being misrepresented and having their struggles be objectified (Sinding et al., 2007, p.464). To combat

the spread of sensitive topics outside of the research space in the first session I discussed with participants the importance of the space as being safe, and where possible to keep topics discussed within the group private. I could not control whether participants discussed topics from the sessions outside of the space, but there was an informal agreement by participants to keep sensitive information private. I also clarified that if topics were raised which I found concerning for their safety, then in my role as a teacher and not just a researcher, would mean I would have to safeguard the issue. As a teacher I would have had to escalate any such issues to the school Safeguarding officer. I would then have had to reflect on the safety of said participant and assess, in conversation with my supervisors, if it was in the best interest of the participant to continue to be in the research group. Ahmed explored the complexity of sharing experiences and emotions, stating that "sharing is not always warm or fuzzy, or happy; it can be hard and painful and bumpy" (Ahmed, 2023). I attempted to mitigate this through setting up group conversations with the participants early on which would hopefully allow for participants to develop trust in one another in a supportive and non-threatening environment.

When considering the issue of objectifying or mis-representing participants I aimed to overcome this by including participants in the shaping of the research methods to use, giving them freedom to select artistic methods of their choice. I also transcribed their oral analysis verbatim and referred back to the recordings and transcripts several times over the writing process to check for accuracy. The findings shared in the next chapters were also heavily created by the participants as they themselves analysed and coded their own final collages as a group and then used the codes to create themes which I would use in the final analysis of the research. This is discussed in detail in Chapter 6. I chose to do this to encourage a sense of ownership of the research for the participants, to reduce power-dynamics between myself as the interpreter of their work and words, and so they could see their own codes and themes in the final thesis. I attempted to encourage a relationship where participants did not see me as the researcher but as a collaborator to break down traditional researcher-researched hierarchy (Leavy, 2015).

4.7.7 Ownership and Presenting Data

To continue to give ownership of the research to the participants, the participants' artwork and collages created during the course of their sessions were given back to them at the end of the

research. Digital copies were made and are stored on the University of Sheffield's secure Google drive. The participants' collages appear, unedited, in several places in the thesis. All the collages created by the participants appear in the accompanying research photobook (see Chapter 5). This was done to share as much of their work as possible, and it embodies their interpretation of the phenomena at study, and to continue to build the thesis as a piece of a/r/tography. I wish to respect the art created by the participants in as many ways as possible, and I consider it important to be seen and interpreted by readers of the thesis. An additional photobook has been created to go alongside the written thesis which contains all of the collages created by myself, collages created by all the participants, and photographs taken during the course of the research. Again, this is to respect fully a/r/tographic methodology and ABR philosophy which runs throughout the research and place the art created during the research in a position where it can be appreciated. The photobook book also contains the names of the participants as contributing artists so they can be identified as owners of their own art collectively if not individually. The photobook book can also be seen as a piece of a/r/tography where the story of this research can be understood in a different way to the written thesis. Participants of the study also have a digital copy of this photobook.

4.8 Chapter Conclusion

The research is rooted in constructivist ontological philosophy and interpretive epistemology, placing emphasis on reality as a construction of subjective, lived experiences. Through embracing qualitative research to integrate feminist theory, and the emotional dimension, safe spaces were created to have participants as genuine collaborators in the research so that they could share their own contextualised interpretations of the phenomena at study. To enable this interpretation, Interpretative Phenomenological Analysis (IPA), aligning with Participatory Action Research (PAR) principles, was used to form the methodological framework. To embrace the empowerment of participants Arts-Based Research (ABR), specifically a/r/tography, was used to facilitate exploration and expression of the lived experience from the perspective of the participants. A/r/tography was specifically chosen not just because of its close alignment with my identity as a researcher, but also because it embraces entanglements and can be used to recognise the rhizomatic complexity of the phenomena at study.

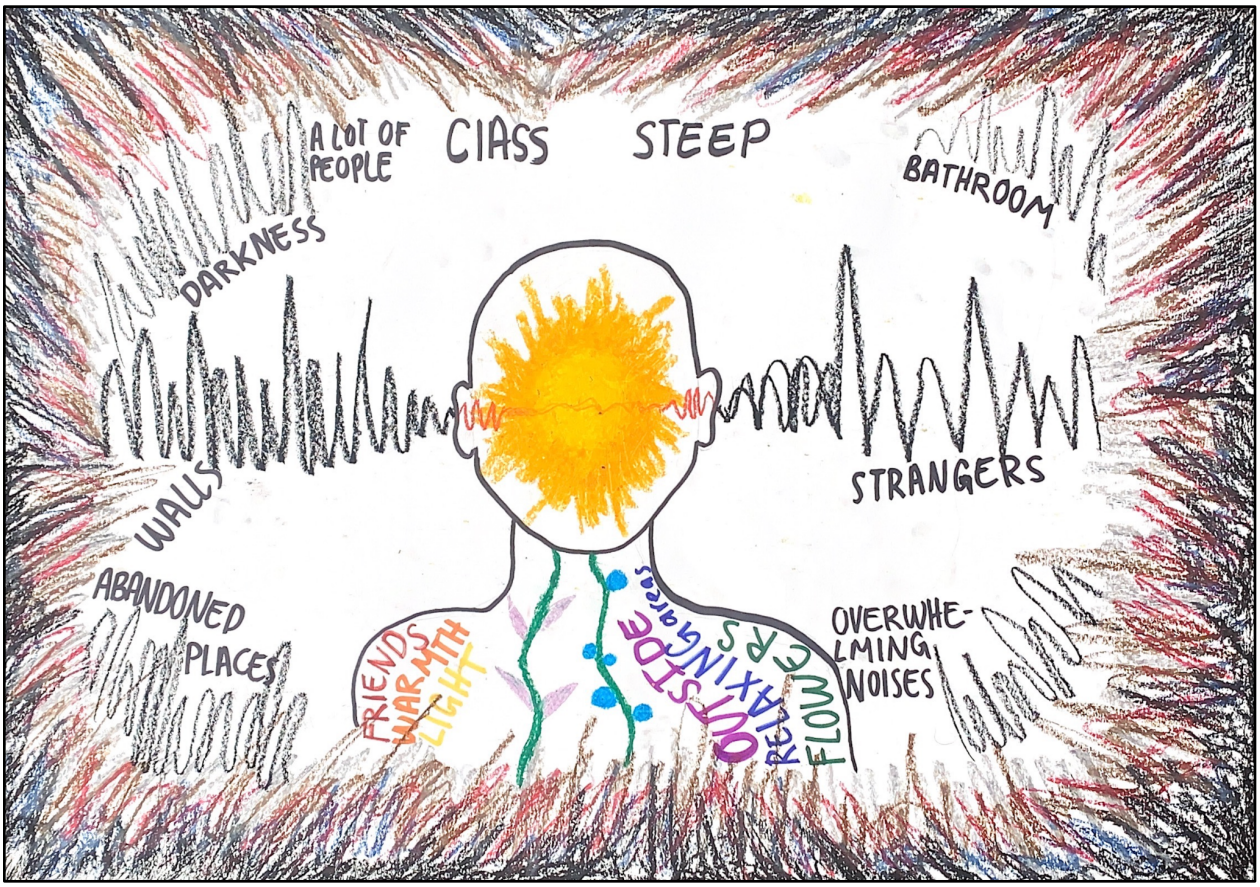
The combination of interpretative, feminist, IPA, and ABR methodologies has been chosen to engage with diversity in methodology and to encourage a sense of empowerment for the participants as they tackle the rhizomes of their experiences within their BSE. The methodological design has been crafted to lead to a profound exploration of the BSE for the participants and an elucidation of the complexity of being a Latina girl in this specific BSE. The following chapters present the data from the research and the discussion from the themes which were uncovered by the participants through their analysis and my own.

Chapter 5 - Presentation of Collages & Photobook

Figure 24

Research Participant. (2023). My Own Serenity [Collage].

"Even though outside is very overwhelming, if inside I have my own flowers and my own serenity and light, at the end I can manage to feel at peace with myself."



5.1 Introduction

As a/r/tography and the journey of art creation plays a central role in the research this chapter has been created to share participant collages and their own interpretations of their BSE (such as Figure 24) with the reader of this thesis to reinforce the artistic journey and product as a focal point of attention. This chapter is presented before the findings and discussion chapter so that readers can create their own reflections and engagements with the art that participants created without my analysis influencing this experience. This is further discussed in section 5.2.

Additionally, in section 5.4 the reader is presented with a QR code and link which leads to the complete digital Photobook containing artistic work from the participants and myself.

5.2 Tensions in Data Presentation

Presenting findings for ABR provokes a degree of tension between the feminist participatory action research aim of this research with the more conventional academic requirements for the submission of a doctoral thesis. Jagodzinski & Wallin (2013) dictate that ABR presented in academic research must be able to share and translate the embodied knowledge and visual literacy which is contained within art created for research purposes. However, to qualify for the degree of a Doctor of Education, original written interpretation of data must be accumulated, interpreted and shared in the thesis, according to university regulations and expectations. This creates a tension between sharing the ideas, words and experiences of participants with my interpretation of their experiences. Leavy (2015) advises researchers who must translate ABR into academic products to draw on artefacts created from participants, as well researcher insights taken directly from the participant such as focus group and interview transcripts or field notes. To complicate matters further Finley (2008) advocates for the need of ABR researchers to process and interpret participant art, but to also ensure that the art and its interpretation are shared democratically to a wider audience beyond academia. Morris & Paris (2021) argue that the power of conducting ABR lies in its ability to create an embodied, sensory effect in the audience, and this occurs when a visual installation is shared so that the audience can engage with the art, its creator, and the researcher. The thesis aims to share the participants' artwork as widely as possible in the context of a written thesis, whilst allowing an interpretation of their artwork and their self-analysis to be considered by myself as a researcher. The next subsection of this chapter includes a cross section of the collages created, with verbatim quotes from the participants taken from the transcripts of their collage sharing and analysis. I do not include researcher analysis in this cross section of collages for the following reasons:

1. To centre each piece around the words and analysis of their creator, and thus reconnecting with the PAR and emancipatory methodology of the research where the participant's voice can come through clearly, without my interpretation of their subjective experiences.

2. Refraining from analysis at this point of the data presentation allows for the artwork created by the participants to be viewed without my own researcher subjectivity influencing the phenomena being explored.
3. The combination of the visual collage, and a verbatim interpretation of it by its creator, respects the process of democratising knowledge and contributing to the reversal of knowledge epistemicide by letting the art speak for itself.

The representative collage cross section intends to fully engage with the democratisation of knowledge by respecting the artist of the art in their own right.

5.3 Representative Cross Section of Participant Created Collages

Figure 25

Research Participant. (2022). Reborn with a Flower Head [Collage].

"I feel like since I entered the school my brain has become more foggy. I don't think straight most of the time. I think I'm just anxious all the time and stressed. And so I feel my head, it's not on my body, it's just my body and then something else on my head."

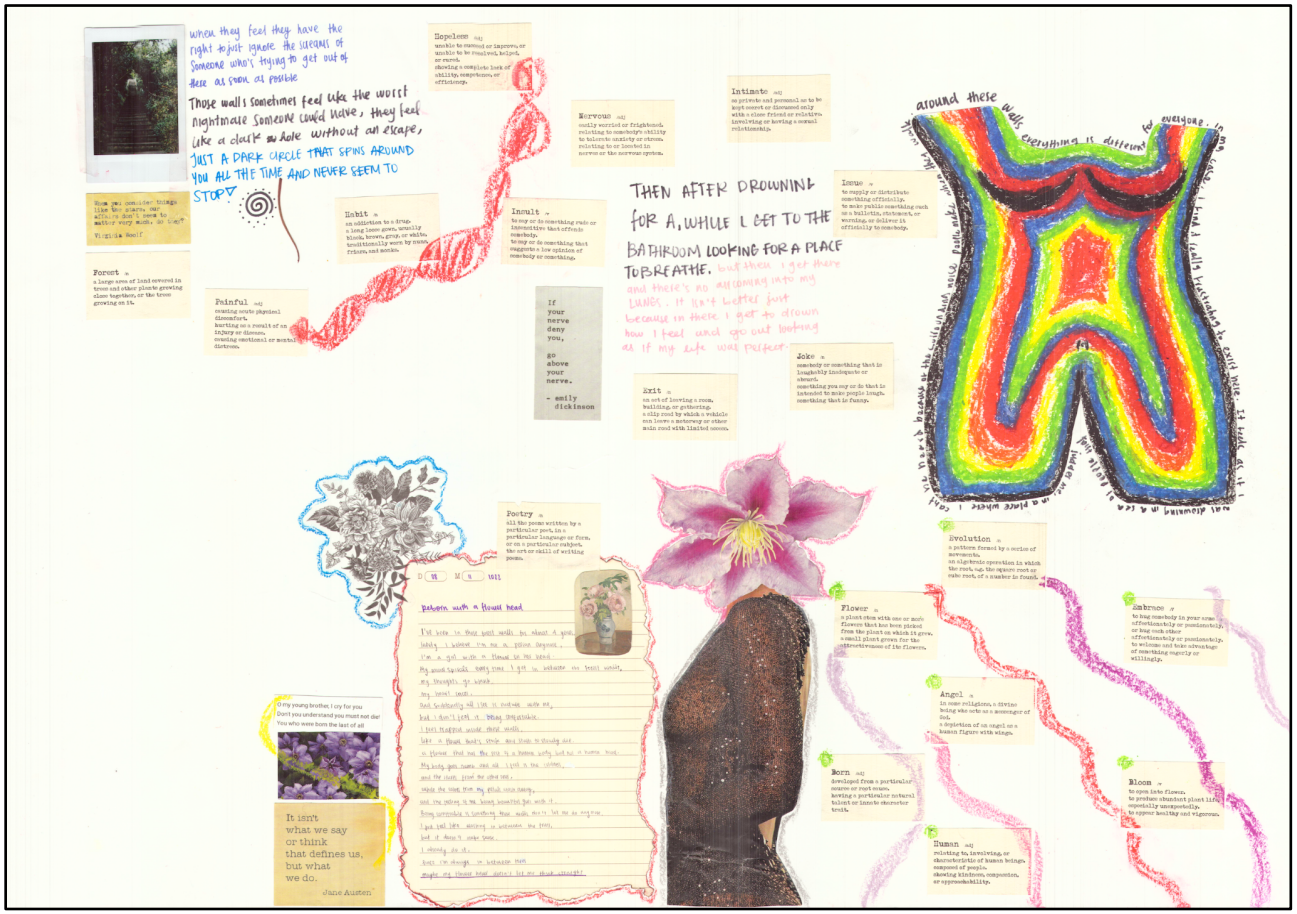


Figure 26

Research Participant. (2023). Keep Inside [Collage].

"Sometimes at school, I feel like I have a lot of feelings and emotions, and thoughts running through my head, but I just can't say any of it."

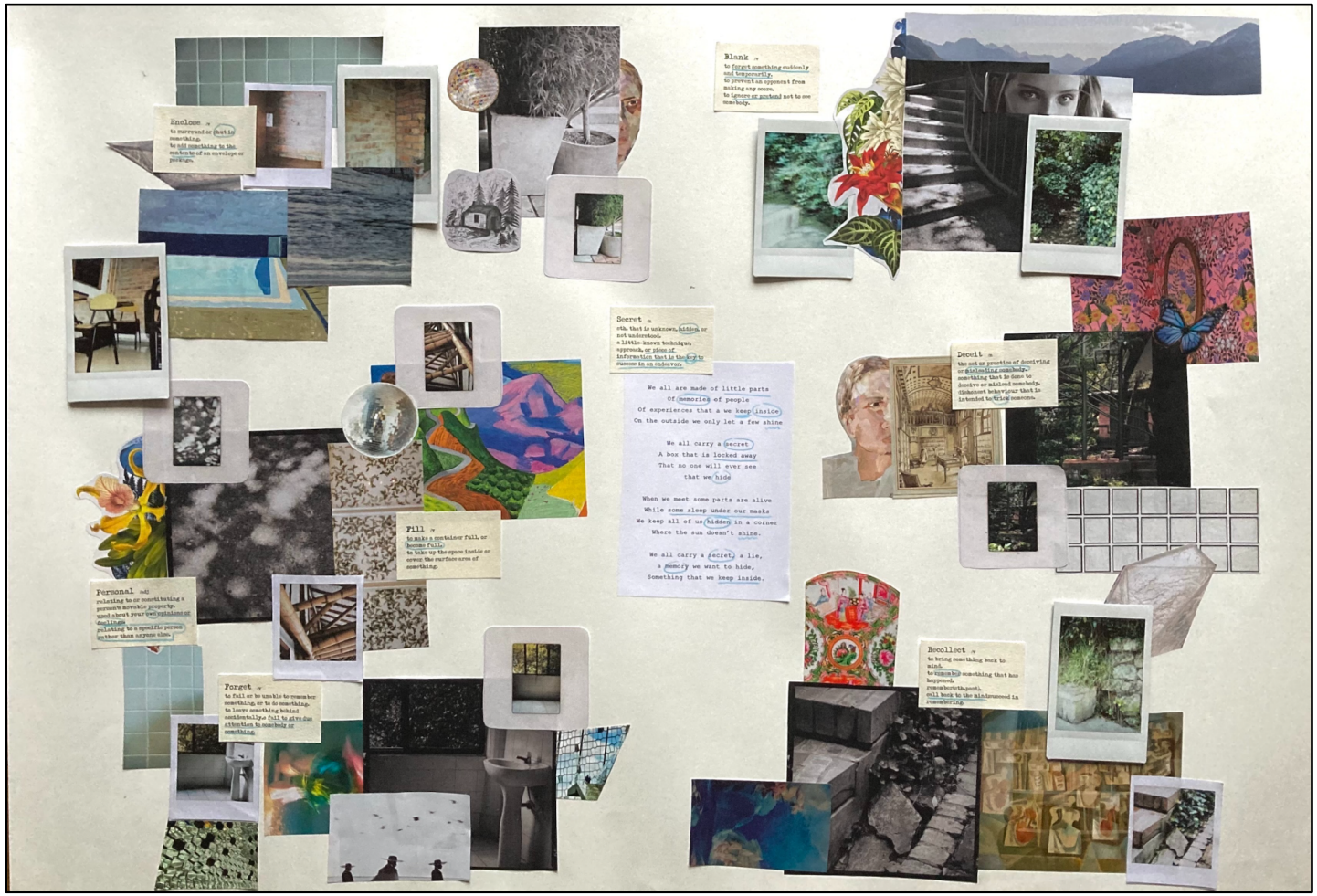


Figure 27

Research Participant. (2022). Hurting [Collage].

"It's really cold. It hurts physically because my, for example, my extremities, my extremities, they start hurting. Your fingers, your nose, your leg. It's really cold. "

Figure 28

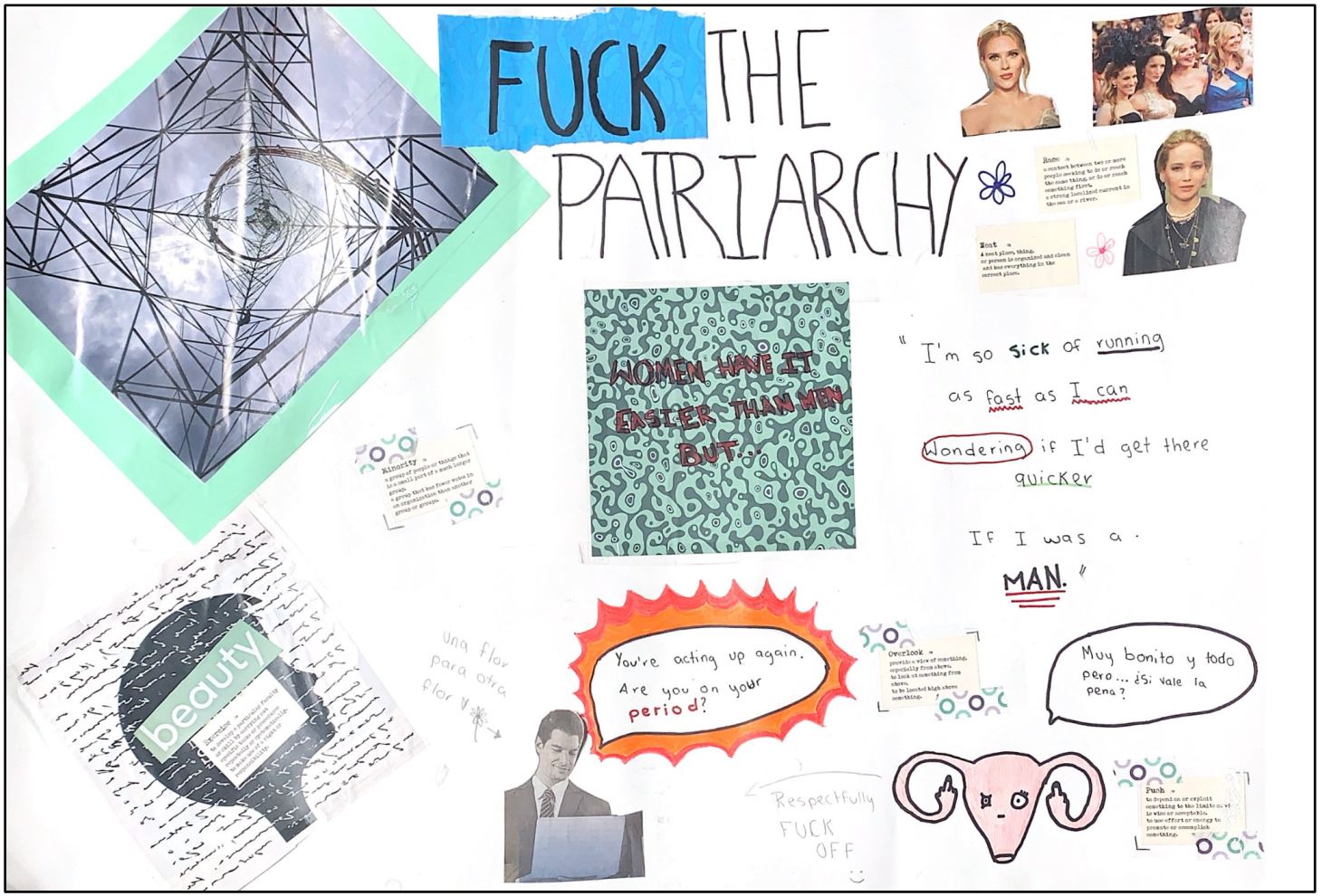
Research Participant. (2023). Quiet Corners [Collage].

"When you're younger you have those safe spaces, the quiet corners, the big books, and it's a very comforting space and somehow that gets lost as you get older."

Figure 29

Research Participant. (2023). If I was a Man [Collage].

"I do not think that women have it easier than men. And I place it in the middle because what's around this sentence are some of the reasons why I think that women actually do not have it easier than men."



5.4 Photobook

The digital photobook contains all of the collages created by participants as well as collages created by myself for this thesis and provides a high quality image quality so that the collages can be zoomed in and observed better. The photobook has been created through a/r/tographic principles: blending collages, photos and text, and accompanies the thesis as a standalone experience which readers are invited to view and engage with.

Scan or click here to access

Chapter 6 - Findings and Interpretation

Figure 30

R.K. Saghera (2024). Themes and Insights: Reality Bites [Collage].

6.1 Introduction

In this chapter I report how my interpretation of the findings took place and the insights they offer through Interpretative Phenomenological Analysis (IPA). In section 6.2 I begin with presenting the breakdown of codes, themes and definitions of the participants, generated from their own interpretation and thematic analysis of their collages. This includes images of their original sorting of codes described in section 4.7.7, and reference to a table which includes the themes, definitions and codes from the participants' analysis (Appendix I, Table 1). This is followed by outlining my use of NVivo to assign the transcripts from the collage presentations to the participant-generated themes, which I then present in a frequency table (Table 2).

Section 6.3 presents the researcher interpretation and discussion to answer the research question of the study (see section 1.9). The findings and discussion is divided into several parts to bring the reader clarity over the layers of analysis and interpretation which I employed to make meaning from the participant-generated themes, transcripts and frequency table (Table 2). The section begins with an explanation of the hermeneutic circle, or the process of 'sitting' with the data, which led to my set of researcher-generated themes. The discussion is then presented through each identified theme using participant collages, verbatim quotes from participants, pertinent literature which enhances understanding, and my analysis.

6.2 Findings of the Research

6.2.1 Participant-Generated Codes and Themes in Appendix I, Table 1

A cross section of the original format of the participant-generated themes, with participant definitions of those themes, is shown in Figures 31-36 The full set of participant-generated themes and definitions can be found in Appendix I, Table 1 in text form. The table illustrates the insights identified from the coding and theme creation from participants. The initial participant-generated themes appear exactly as participants labelled them, though there are a few exceptions where the participants specified further what their theme was referring to. This can be seen in Appendix I, Table 1, under the theme of "architecture" whereby Group 1 separated out architecture into two sub-themes: "architecture-Spaces, architecture and emotions" and "architecture-Sensations and architecture". The definitions participants gave to each theme are included in Appendix I, Table 1, as are all of the raw coding words which each group sorted during the theme creation stage (as seen in the photos in 4.7.7).

Figure 31

Temperature - Participant Created Theme with Codes

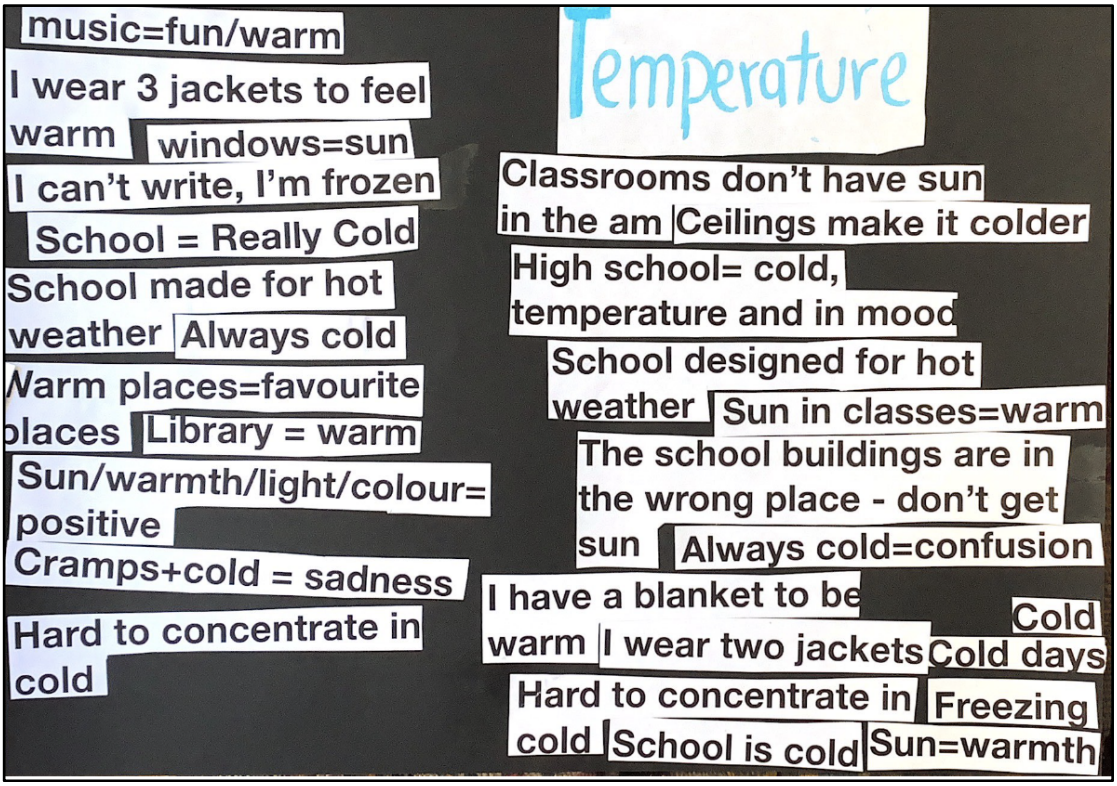


Figure 32

Participants' Definition of the Theme of Temperature

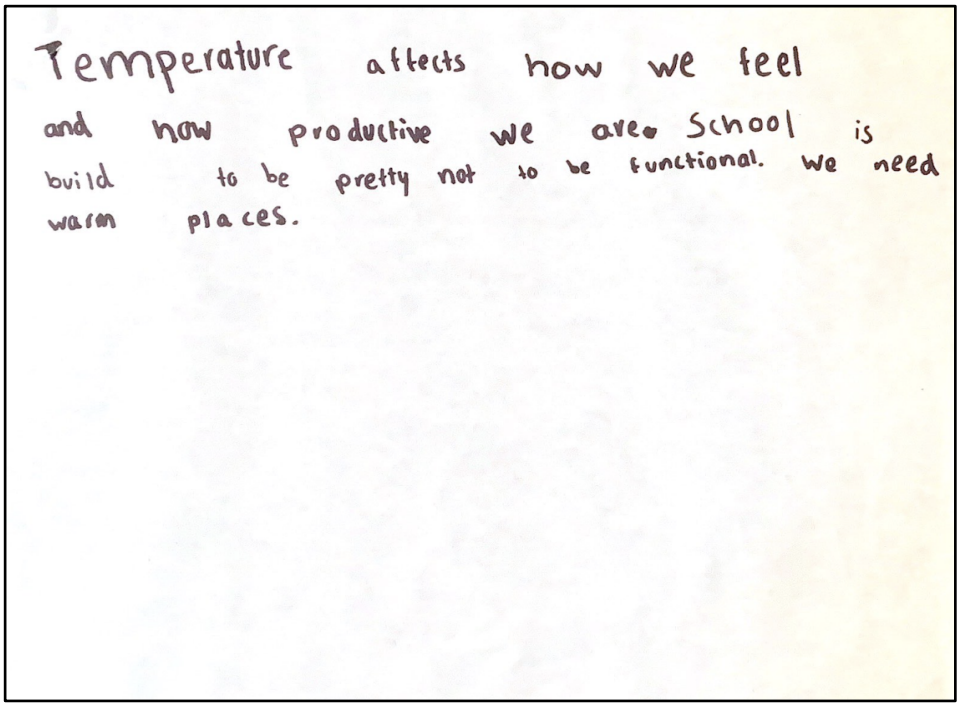


Figure 33

Safe Spaces - Participant Created Theme with Codes

Figure 34

Participants' Definition of the Theme of Safe Spaces

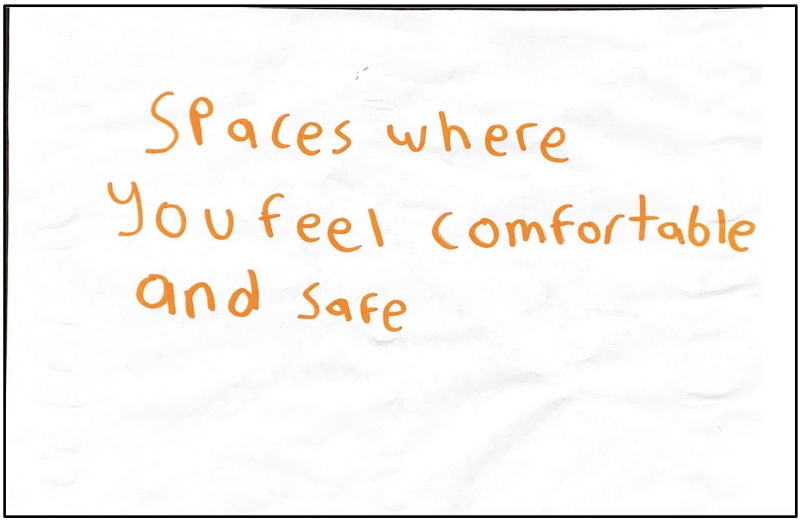


Figure 35

Being a Woman - Participant Created Theme with Codes

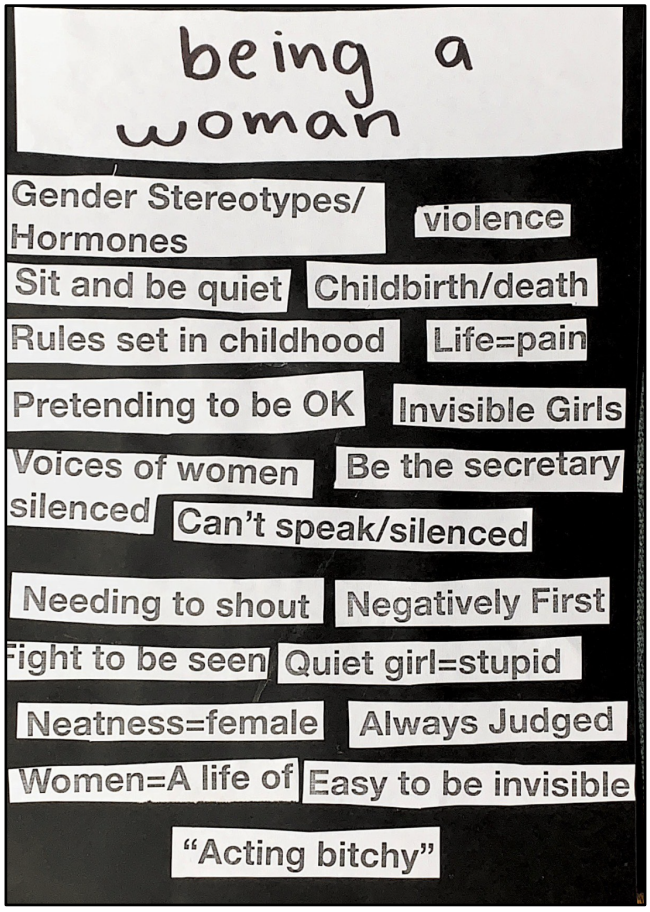
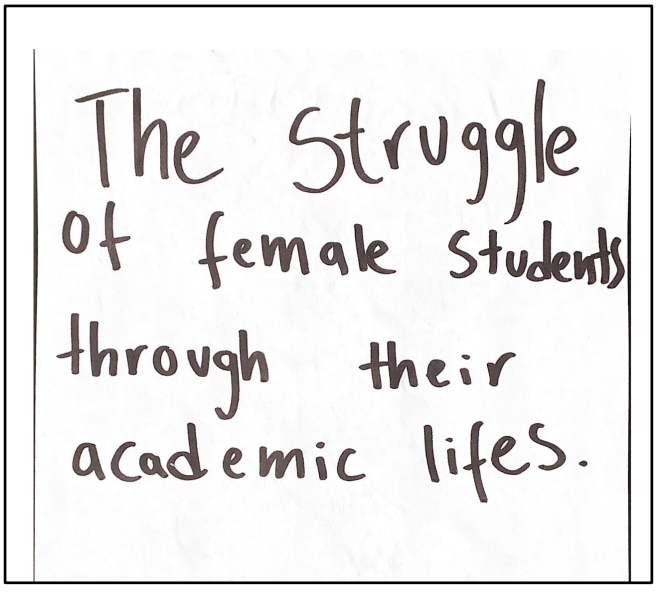


Figure 36

Participants' Definition of the Theme Being a Woman



6.2.2 Breakdown of Participant-Generated Themes

After the codes and themes were compiled into Table I (Appendix I) the participant-generated themes were used in the transcription process. The transcripts I created of the participants analysing their individual collages were uploaded to NVivo, a qualitative analysis software program. I then coded each transcript using the participant-generated themes in NVivo (see Appendix J for examples of the transcriptions coded in NVivo). Many of the excerpts I coded had porous boundaries to multiple participant-generated themes, with multiple themes interplaying and impacting another. To stay true to the participant-generated themes I coded excerpts to all the participant-generated themes they belonged to, even if that meant an excerpt belonged to multiple participant-generated themes.

6.2.3 Transcript Excerpts Assigned to Participant-Generated Themes

Table 2 displays the number of mentions of the themes in the transcripts of the collage presentations after I completed the coding process in NVivo. This enables an understanding of the themes which were most significant to the participants in a quantifiable manner. The number of participants referring to each theme in their collage presentations and analysis is shown in the "number of participants who refer to the theme" column, and the quantity of excerpts assigned to that theme across all the participants is highlighted in the column "number of transcript excerpts assigned". Table 2 plays a pivotal role in my analysis of the findings because the table is a quantitative representation of the importance placed on each topic by the participants. The frequency of the number of participants who refer to the theme reveals how prominent each theme raised by the participants is to them. The table also reveals the themes which should be addressed by the school where the research took place in possible order of importance as quantifying from arts-based research reveals the research groups identification of what they consider to be most in need of change, or what troubles them the most in their BSE. However, Table 2 cannot reveal the complex interplay that the participant-generated themes have, and which are explored in the participant collages and in their explanations and own analysis of their collages. Thus, the discussion chapter is presented via themes identified by myself through IPA. This is explored in the next section.

Table 2
Frequency Table: Transcripts Assigned to Participant-Generated Themes and Number of Participants Contributing

Participant-Generated Theme	Number of Participants Who Refer to the Theme (N=26)	Number of Transcript Excerpts Assigned to the Theme
Architecture	21	48
Temperature	16	26
Being a Woman	7	23
Judgement	9	23
The Female Body	8	23
Patriarchy	6	20
Periods	9	20
Mental Health	12	18
Academic Damage	12	17
Safe Spaces	12	17
Light	11	14
Nature	10	14
Memories	11	12
Unsafe Spaces	9	12
Reflection Spaces	7	11
School Values	6	10
Life in School	7	9
Expectation	7	8
Sound	4	5
Time	4	4

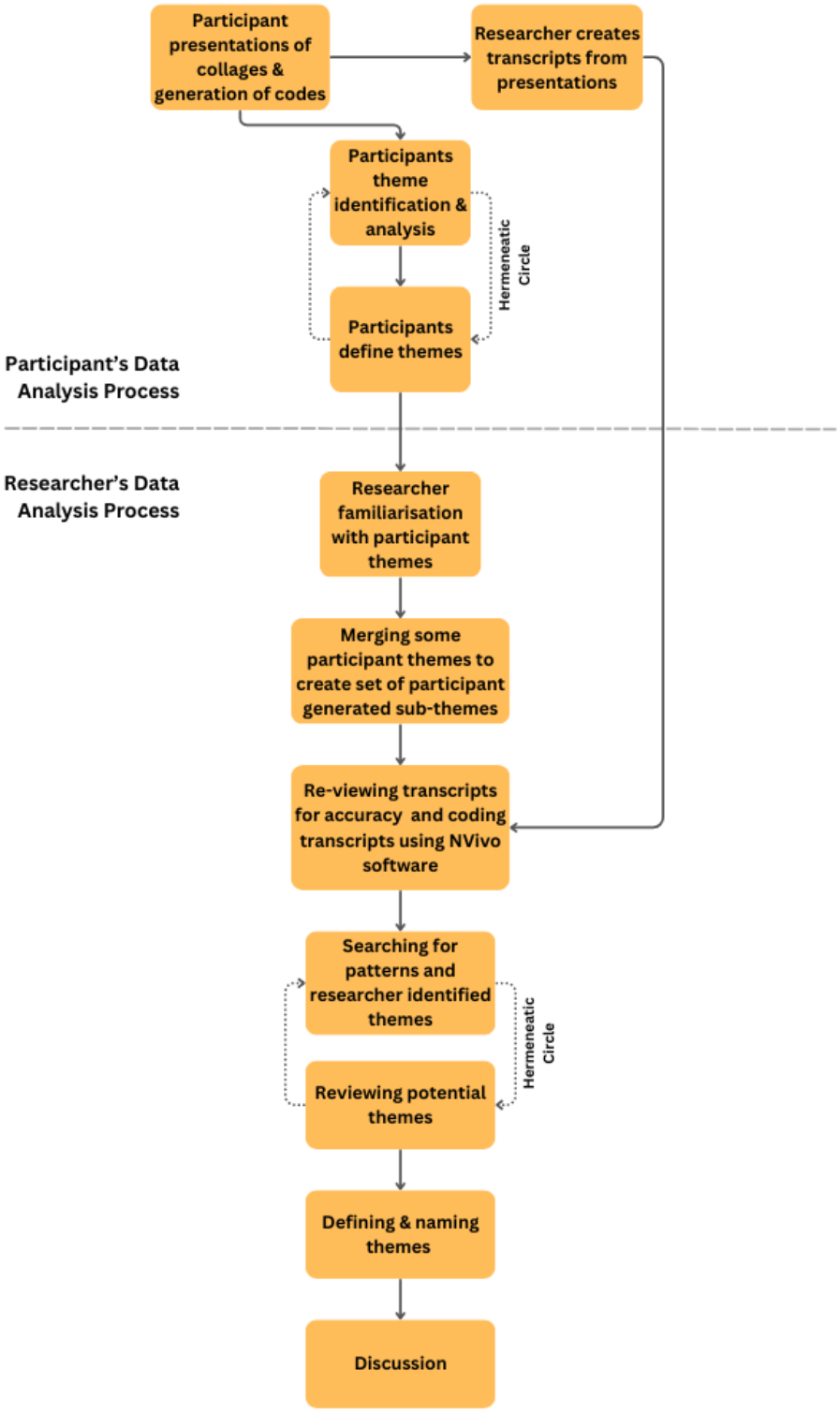
6.3 Analysis of Findings and Interpretation

6.3.1 Revisiting IPA and Feminist Principles

To analyse and interpret the findings I reviewed IPA and feminist principles of data analysis and interpretation. This consisted of 'sitting' with the data through conducting hermeneutic circles, as outlined in Figure 36. To allow for the participants' experiences which they shared to be the central focus the artwork and discussions generated were conducted before I started the literature review and theoretical framework. Although a preliminary methodological framework and literature review were conducted for the thesis proposal, I did not continue the readings until after the research period was complete to allow myself distance from theory so that the research could be inductively generated and analysed. Following the principles of hermeneutic analysis allowed what Willig & Stainton Rogers (2017) refer to as empathic interpretation which allows the researcher to stay close to the data. They argue that the researcher needs to "bring some pre-understanding with which to approach whilst at the same time being open to being changed by the encounter" (Willing & Stainton Rogers, 2017, p.284). To clarify this complex process of coding, theme finding and analysis Figure 37 visualises the process in a flow chart, combining the participant and researcher analysis process.

Figure 37

Combined Participant and Researcher Analysis & Interpretation Process



6.3.2 Identifying Themes - Researcher Interpretative Analysis

The process of identifying themes from the insights, art and responses gathered for this research required interpretation which was systematic and which can be followed by other researchers (Leung, 2015), but also required what Engward & Goldspink (2020) refer to as imaginative interpretation and interaction with data. Engward & Goldspink (2020) highlight that IPA does not state one singular method of data analysis is better than another, and nor does analysis occur in one moment of analysis. Saldaña (2018) also considers that in thematic data analysis and interpretation it is wise for the researcher to check for redundancy in themes, codes and reorganise codes and themes before final themes are defined. To further complicate the data interpretation many of the participant-generated themes had porous boundaries, and the codes which appeared in one group-generated theme also appeared in other group themes. An example of this was discussions of menstrual experience which appeared as codes under the themes of "patriarchy", "architecture", "expectation", "safe spaces", and "being a woman". This occurred with multiple participant-generated themes, and some groups which had not created themes such as "periods" or "being a woman" or "patriarchy" discussed and coded experiences which could fit into many of the other groups themes. What became apparent during my initial 'sitting' with the data was that all three groups discussed similar, if not the same, themes. I had initially thought of presenting findings per group, but as the patterns of similarity kept repeating and appearing I decided to present the findings as one set of themes and one discussion.

I also attempted to explore the emerging data in different ways, creating artwork (see Appendix M) to engage with the emerging themes in exploratory ways, as advised by Leavy (2015) who states that art "can also be used as an act of analysis and interpretation" (p.258). I identified themes and then reviewed them for patterns. I then spent time removing myself from the data, which sometimes could be days or weeks, and then returned to the themes I had identified and the data to seek new understanding and reflections. The process of pattern identification from data, reviewing transcripts, and engaging in a hermeneutic circle spanned more than a year before my final set of researcher-interpreted themes were identified. The final set of researcher themes and definitions originated from embodying the tenets of the methodological framework (Chapter 4) with effort made to stay close to the participants' own generated themes. I attempted to do what Smith & Osborn (2015) argue involves the researcher trying to make sense of the

participant, trying to make sense of what is happening to them, by repeating the stages of the research and analysis the participants went through themselves to achieve their set of participant-generated themes. I continued to review the transcripts of the participant presentations and analysis of their collages to remain close to their intentions. This multi-layered IPA approach to analysis included the following data: the participant-generated themes, Table 2, and the NVivo coded collage presentation transcripts. This resulted in patterns and connections emerging from the findings about the girls' experience of their BSE, and which I took time to make sense of before finalising my researcher-identified themes.

6.3.3 Final Set of Themes and Definitions

The final set of researcher-identified themes and their definitions are found in Table 3. These eight themes are discussed in detail in the next section of the chapter. Once I had decided on the researcher-identified themes I attempted to clarify what those themes were indicating by copying the definition creating process which the participants took part in when creating definitions for their participant-generated themes. The definitions I have given to the researcher-identified themes were sourced from the definitions the participants wrote for their identified themes, and my interpretations, amalgamated to create one unifying definition.

Table 3
Researcher Identified Themes and Definitions

Researcher Identified Theme	Participant-Generated Themes	Researcher Definition of Theme
Body Politics	➔ Being a Woman ➔ Judgement ➔ The Female Body	The embodied social and cultural pressures of being a young woman in the BSE.
Environmental Comfort	➔ Light ➔ Sound ➔ Temperature	The significance of light, sound and temperature on the daily experience in the BSE.
Memories	➔ Memories	The impact of memories on perceptions of the BSE.
Mental Wellbeing	➔ Academic Damage ➔ Expectations ➔ Life in School ➔ Mental Health ➔ School Values ➔ Time	The influence of: academic challenges, expectations, and school routines on mental health.
Nature	➔ Nature ➔ Reflection Spaces	The impact of contact with nature, and how it stimulates mindfulness and introspection.
Patriarchal Experiences	➔ Patriarchy	Insights into understanding how the patriarchy appears in, and shapes participants experiences of the BSE.
Periods	➔ Periods	The experiences of being a menstruator in the BSE.
School Architecture, Safety and Exclusion	➔ Architecture ➔ Safe Spaces ➔ Unsafe Spaces	The impact of the BSE and its design choices on perceptions of safety and schooling.

6.4 Discussion of Findings via Themes

6.4.1 Introduction

The eight themes interpreted from the findings are explored in this section of the chapter and are presented with a participant created collage that particularly focuses on the identified theme, alongside a verbatim excerpt from the creator of the collage. A discussion of the theme follows, with further use of excerpts from other participants which are pertinent. The choices to include as much of the participants words and work into the discussion was to create a sense of thick description (Geertz, 1973), balancing sharing participants' own contextualised analysis, and my own interpretation and analysis. Participants' verbatim excerpts and quotes are italicised to draw emphasis to the participants' own words, supporting the central notion that the participants' experiences are at the heart of this thesis. Additionally, participants are only referred to as "participant" and not given individual pseudonyms or labels (see section 4.8.4 for the detailed explanation of this choice). I have made an effort to make clear when different participants are being referred to through the use of different determiners to clarify who is being referenced.

6.4.2 Memories

Preamble

The research conducted was imbued with a sense of nostalgia and reminiscing throughout the different stages of the research process from participants. This may be because the participants were either in their last few months of their formal secondary education, or about to enter into their final year. Due to the nature of the school where the research was conducted being a Kindergarten through to High school, participants could see and walk around areas where some remembered their very first day of school as four year olds. Many of the participants discussed memories of their childhood in their collages, and this is a theme I had not predicted, and which did not appear in my preliminary readings for the research. Nevertheless, memories weaved their way into the stories, artmaking and collage analysis throughout the year of data generation, and eleven different participants (see Table 2) referred explicitly to memories in their collage analysis. The identified theme explores how the participants highlighted the relationship between memory, the BSE, emotional attachments to place and space and how this is impacted by subjective social contexts.

Figure 38

Research Participant. (2023). How Did I Go From Growing Up To Breaking Down? [Collage].

In my collage I try to portray my journey in this school since I was very little, because I've been here since I was four years old. So, my collage is divided on like two sides. This girl is the centre of everything. And this is the half of when I was little. And this is the half from when I was older. So, the first half from when I was younger, I tried to show like many experiences that I had. The table, I try to show how a table from a little kid's perspective looks like. And I try to use the materials that one uses. That's why the table is done with crayons. It's about how tables get smaller and smaller while you're growing. So when you're little, the table is huge and you have a lot of space to explore, and then in primary they get smaller, but then when you're in high school you have these awful tables…I feel like it shows my growing up, but like,

lately…I feel like I felt more excited about coming to school when I was younger. And now, I'm not that excited about it.

Sensemaking and the Role of Memory in Perceptions of Space, Place and Time

Figure 38 and the subsequent excerpt from the participant who created it reveals the sensemaking which many of the other participants went through during the research process. What is particularly insightful with the excerpt is the connection between material objects: tables, chalk and crayons, which are shown to be containers of memories of childhood. Additionally, the participants often referred to their experience of their BSE when they were younger as being more positive and happier, with the final line of the above excerpt embodying a sentimental longing for the past. This is further analysed in section 6.4.9 in connection to mental health and the BSE.

The sense that space and place, and in the case of this study the built environment, as being deeply rooted in the participants memory is explored by Fisher (2011) who comments that when specific architecture and spaces are envisioned one remembers places and reacts in certain visceral ways (p.106). Fisher (2011) argues that the corporeal and visceral reaction to space connects to the idea that past experiences of space impact the way space is perceived in the present. This sense of personal history with space is also investigated by Hopkins (1996) who argues that architecture signifies a point of reference in time for a person's cognitive schemata. This means that the connections we make with architectural spaces from a young age become a framework which is used in adult human spatial comprehension (Hopkins, 1996).

When exploring the built environment, the topics of the passing of time and memories were recurrent. Exploring architecture as a basis for making sense of time came up, with another participant in a different group noting that, *"I put this calendar here because I wanted to represent how time seems to be running out, but when you think it's running out, it actually expands because you start thinking about everything that came before".* This comment reveals that like the participant who created Figure 38 sensemaking is taking place and that the participant has been able to use the artistic creation and analysis of the collages as a meta-cognitive exercise which helps her reflect on how memory shapes her sense of identity. The

quote from the participant reveals a sense of urgency and stress that she may be feeling and possibly longing for the simplicity of life in primary school. De Paiva & Jedon (2019) comment not only on the mental frameworks made in connection with specific places but comment on the nature of how those spaces and places can shape identities, stating that the longer a body is in a space, the longer it is shaped by said space. Furthermore, they note that the longer a body is in a space which causes stressful experiences, or negative emotions, the longer those negative impacts may last on shaping the way identity is formed long term. This process of sensemaking which is seen in the data reveals the emotional depth and complexity which the girls experience from their memories of their BSE.

Emotional Attachments to Places in Childhood

A clear feeling which participants mentioned was the sense that they recalled emotional memories, positive and negative, from their childhood. Steger et al. (2021) consider the emotional attachments to places made in childhood as connected to places which are symbolically and materially important (p.2). The emotional attachments that participants shared centred heavily on their first few years in formal schooling with one participant commenting during their collage analysis that, *"a thing about childhood that I really have a nostalgic feeling about is colours and crayons because I feel like it's a representation of childhood, but I think overall I've lost it…I really like going to visit kindergarten because its more colourful there".* I believe the data shows that the participants have a yearning for their childhood experiences of their BSE. Whilst this thesis did not have the time to study this in depth, I consider it an insight into areas for further investigation to research into which specific aspects of their younger experiences of their BSE the participants feel are lacking in their adolescent years.

Additionally, the participants often shared collective memories which Moss (2010) notes is a way for young people to "carve out space and time for themselves from this complex social landscape" (p.16), and that social arrangements are constructed by young people through collective memories. Moss (2010) posits that memories contain knowledge for young people which consists of knowledge from the past and present. This can be seen in the following quotation from a participant who explores how past experiences of the BSE find their way into the present, stating, *"I have 'recollect', and it's like, just when you remember things that maybe you forgot or secrets that you kept".* The complexity of memory is revealed through this

participant's quote, with "recollect" and the reference to "secrets" remembered revealing how memories of the BSE were fragmented, and it is the process of active memory recall, through the research process, that those memories have resurfaced and been unpacked for meaning.

Impact of Social Context on Memory

What the participants revealed about their memories of school is that the social context of a situation is a key factor in how they remember. Barzykowski et al. (2019) postulate that the social context of memory making is an important aspect of identity formation in high school students, with high school students tending to remember more recent memories as positive, although I found the reverse to be true with the participants whose more current memories of school veered to the negative. Walls et al. (2001) conducted a seminal study into autobiographical memories of school, with research conducted showing that boys' memories of school centred around sports, disciplining and grades, whilst girls' memories tended to revolve around friends, social events and awards. This can be seen with one participant commenting on the library saying that *"I have really good memories of being there, like, between classes and having a break from school"*. The participant exposes the tensions between spaces in their BSE which are considered spaces of happy memories, and those of the classroom which are negatively associated. Furthermore, another participant from the research validates Walls et al. (2001) by sharing a memory of work rewarded and the public acknowledgement when achieving rewards stating:

> *I decided to put a quiz here, and I decided to put it in this frame, because I have a really clear memory of when we had quizzes and if you got 100 in quizzes you would get a star next to your name and you could see what people have been really good because they have a lot of stars and all that, and I really hated that.*

Walls et al. (2001) also noted that the women who participated in their study remembered far more accounts of school life and placed a greater emphasis on memories than the men interviewed. This could be a reason as to why memories as a theme was raised so often in the research. Shafiq (2017) and Tanggaard & Nielsen (2013), argue for the importance of the study of the connections that young people make between space and memory. Shafiq (2017) argues that architecture and the built environment are key components of what makes up personal

identity, shaping memories. Tanggaard & Nielsen (2013) consider it vital to include the perspective of school and education from the point of view of students and the memories they hold of their educational experience before they leave the formal education system behind. They argue that by doing so schools can be analysed as part of a complex societal structure, rather than standalone figures in the past experiences of adults. The participants' regular reference to memory suggests that memory is an active component to the way the BSE is experienced.

6.4.3 Nature

Preamble

The location of the school where the research was conducted makes for a unique environment to have researched in. Without giving too many details to make the school identifiable the school itself is placed in a nature reserve, and the buildings of the school are located on steep hillsides, often exposed to the environment and nature around them. This means that students who attend the school are exposed to nature throughout their schooling years in very confrontational ways, with views of mountains, forests and the insect and bird life which accompanies this. This made for many mentions of nature (see Table 1). Participants in every group either made nature a central focus of their collages or referred to nature and spaces of reflection in their collages. What became apparent in the analysis of the themes identified revealed the thoughtful ways participants felt about nature, and their insightful contemplations on reflective spaces.

Figure 39

Research Participant. (2022). Unstressed Around Nature [Collage].

I used green here to show the peace that this side of what I will explain represents. And red at this side because of the anxiety that all these things make me feel. So here I basically, I focus on every green space at the school. And I also use pictures of animals because I feel like the fact that we have space for having animals in this school is really, I don't know if I would say important but I do think it has a positive impact on my emotions. And I also think it's really good for little children to grow up and have some type of connection with animals because many people in the city don't have any pets and I think it's important to learn how to relate with animals.

The Cognitive and Emotional Benefits of Nature

The clearest element to come about from the participants in regard to nature was how much it helped them cognitively and emotionally. The participant who created Figure 39 shows awareness of the value of nature in her specific BSE, highlighting the positive emotional impact that nature has on her daily lived experience of the BSE. Furthermore, aside from the connection to nature which benefits her, the participant also considers the greater positive impact that nature and animals have which extends beyond herself. The thoughtful analysis of the importance of nature and animals in connection with the BSE, especially for younger children who may live in urban developments, shows that the participant is aware of the power that the BSE has. For Ulrich (2008) this is concurrent with their research where they argue that human beings are biophilic species, who are naturally drawn towards nature. Whilst researchers such as Vanaken & Danckaerts (2018) argue that there is limited evidence around the beneficial association with nature and mental wellbeing in young people, Tillmann et al. (2018) critique the lack of differentiation between adults, adolescents and children in their connections with nature.

The participants made clear that they had an overwhelmingly positive reaction cognitively and emotionally when exposed to nature. This can be seen with one participant commenting, "*all the plants and nature make me feel really safe and comfortable. It's really relaxing".* Another participant commented, *"I think when I see a lot of plants, I'm a little bit happy".* The data captured here suggests the participants are aware of the therapeutic value of plants and greenery, and the positive impact it has on their wellbeing. This is supported by Hartig et al. (2014) who argue that research has consistently shown that interactions with nature, and the natural environment, help to: improve mood, increase focus, and reduce stress.

Experiencing nature in the BSE was highlighted as an embodied experience by one participant who noted that *"in a closed space I cannot breathe the same and I enjoy touching the grass and getting the sun, and breathing air that's clean".* The participant is implying that physically being in nature is enjoyed because of the sensorial benefits that are received through engaging with the natural environment, which is contrasted with the sense of confinement which comes from being in school buildings. Puhakka & Hakokõngäs (2023) clarify that for adolescents to gain benefits from natural environments they must be given time to explore their surroundings in a leisurely

manner to truly benefit from it. Whilst this immersive experience can be a challenge to achieve, the positive effects of nature for adolescents can be felt, as seen in the following comment from a participant who states, *"I think class can be super awful but like if you look out of the window it will get a little bit better. I like the flowers. The power of nature".* The use of "super awful" to describe the classroom environment again contrasts sharply with the relief that the participant feels when observing nature. Observations of nature also have cognitive benefits which can be seen by the participants comments on the uplifting nature of seeing nature through windows, and this is explored further by Vella-Brodrick & Gilowska (2022) who contend that there is substantial support for introducing into schools cognitive-nature interventions to enhance wellbeing in different shapes and forms.

Outdoor Reflection Spaces as Emancipatory

Participants made thoughtful comments on the usefulness of outdoor reflective spaces. For Freshwater (2005) reflective spaces are intimately connected with feminist emancipatory spaces, arguing that reflective spaces provide opportunities to break away from dominant ideologies and take ownership of space for the self. Participants in the study commented on the desire for solitary spaces for reflection, noting the difficulty to fully engage with their natural environment, seen in the following: *"even though there's nature there's no place I can go alone and chill for a minute".* One participant comments on their sense of freedom being connected with being physically far away from 'learning buildings', stating when being far from said buildings, *"it's like you're away from all the pressure that comes from these places. You can just leave it all behind you and can just be moving around and jumping and dancing and be happy".* Another participant commented, *"some days I like being alone and walking around"*. Participants showed a desire to be in reflective spaces and lamented the restriction of heavily scheduled time sanctions and routines which schools operate in.

What participants expressed was a desire for reflective spaces which can help with emotional regulation and participants were aware of the powerful effect reflective spaces could have. One participant commented on the emotional regulation which can be achieved when students are allowed to be in reflective spaces, stating, *"when people have a place to escape and kind of reset their thoughts and minds, it kind of also reduces the risk of having problems between students or teachers".* Dedicated spaces and time for reflection can be part of a school toolkit to help

students with emotional regulation and the participants in the research showed not only a desire for this space but an understanding of how spaces of reflection can be beneficial in multiple ways.

Nature Bathing and Wellbeing

Whilst mental health and well-being are addressed as a theme unto their own, the close connection between nature and wellbeing for adolescents came up repeatedly in the data generation and warrants a brief discussion here. As mentioned earlier Vella-Brodrick & Gilowska (2022) argue for a greater understanding of the nature-cognition connection between wellbeing and adolescents, and Kil et al. (2023) have also argued similarly. They conducted research amongst 9–14 year olds where they engaged in mindfulness activities involving 'nature bathing'. The participants were led to a forested area and took part in mindfulness activities. Their initial results showed that this 'nature bathing' significantly improved the mood of the participants and reduced negative emotions.

This focus on improving mental wellbeing for young people is something Dong & Geng (2023) argue is of utmost importance with the rapid urbanisation of living spaces. This nature deficit was exacerbated by the Covid-19 pandemic which Jackson et al. (2021) emphasise, positing that their research finds adolescents' mental-wellbeing decline can be reversed with more time spent making connections in nature. However, as one participant noted in the research, being close to nature does not mean being connected to it, with the participant arguing that *"the school is really pretty in nature and like the architecture sometimes doesn't feel like a nice place to be in*". The participant is exposing the tensions between her BSE and the nature within it, highlighting that the sense of unease she feels is connected to a potential missed opportunity of complementing the school buildings with its natural environment. Her comment also shows that increasing wellbeing may not be quite as simple as increasing time in nature, considering the participants who were in the research spent their every school day immersed in the nature that their school was built around.

6.4.4 Patriarchal Experiences

Preamble

Whilst I journeyed with the participants and empathised with their struggles of being a woman - limited bathroom access, stories of periods, being seen as stupid - commentary on how they experienced patriarchy in the BSE was particularly startling to me. There were comments on the invisibility of girls and how teachers often ignored girls, not because they were misbehaving or not intelligent, but simply because the boys were louder, and more the centre of attention. This sharing of moments made me reflect on my own classroom experiences as a teacher, and the humbling moment of realisation that I probably did pay more attention to boys. Returning to the participants I was not only impressed by their ability to verbalise and describe how they felt the patriarchy shaped their experiences throughout childhood in their BSE, but also inspired by their stories of how they resisted and asserted their own agency.

Figure 40

Research Participant. (2023). A Man's World [Collage].

I think there came a point in my life, and I don't know if in any other woman's life, that I was, well, I was not stupid, but I was seen as stupid from everyone's perspective in my life. So for example, the men in my classroom didn't see me as someone they wanted to work with in a school project, rather they had to work with. The teachers didn't know my name because I was not a troublemaker in school, nor was I getting the best grades. I was not seen as someone important in a classroom. So, I think, I remember when I started 10th grade, I was like, I need to do something. I need to change. I need to, I at least want teachers to know my name for something.

Gendered Space and Feeling Patriarchal Power

Space as biased has been explored in detail in this thesis, and the participants echoed some of the research conducted on how space is experienced as "part of patriarchal power" (Rose, 1993, p.146). What participants explored in their conversations and commentary is affirming de Beauvoir's (1949) statement of man as "the Subject; he is the Absolute. She is the Other" (p.26). This can be seen in the excerpt from the collage which heads this theme, and also in the words of another participant who noted that, *"when I was in a mixed classroom it has always been a man that was in the centre of it. There was always someone, a boy, who always got the attention of everyone".* The participants strongly felt that their position in the BSE was secondary compared to boys.

Furthermore, the sense that there is a male gaze which controls the behaviour of girls was also discussed, with participants sharing the ways in which this patriarchal corrective gaze was used to keep women from expressing their views. One participant analysed an aspect of her collage stating it refers to the idea of, *"they [men] think that we're delicate and they see us as flowers that need to be taken care of just because we express how we feel and talk about what makes us unhappy".* Ahmed (2004) refers to this dismissal of emotion by males, towards females as a method to conceal and allow harmful action to be justified, using the common proclamation of 'don't take it so personally' as an example of how dismissing female emotions is a form of patriarchal control.

What was clear from the research was that the participants were quite aware of the different ways that they were second class citizens within the BSE because of their gender. A key discussion point became how their voice was minimised in the school space with one participant noting, *"voices of women are silenced and it's easier for men to be heard".* Denner & Dunbar (2004) critique the lack of research in the area of a loss of voice and power with Latina girls, and consider that Latina girls actually find ways to combat this sense of a loss of voice in their adolescent years through subversive actions which are not recognised. This very sense of subversion and a struggle to retain and regain control over their own sense of voice is explored by a participant who paints a vivid daily interaction she goes through:

> *I remember always being interrupted. Every single day by a boy, he would always… like I would start talking, he would interrupt me, speak loudly, say his idea and be completely fine with it. And it didn't happen once, it didn't happen twice, it happened every time. And he started talking and I would just stop, but then I just started talking louder than him, and he wouldn't stop, we were just progressively getting louder, but yeah, that's what you have to do.*

These moments, when the participants voiced their experiences of powerlessness, their sense of the patriarchy around them, and the way they combatted their othering, were deeply emotional for me and I truly sensed in those moments of analysis and sharing how the research had become a heterotopic space where these young women could go through the experience of sensemaking and sharing.

Gendered Power Dynamics and Identity Building

Participants used the phrase "growing up" often when discussing how they felt the way boys and girls were treated differently in their BSE over their schooling years. Conversations about gender and the shaping of identity took place during artmaking and in the participants', collage sharing and analysis. The two quotes below, each from a different research group, explore how gender and identity is shaped by imposed gender norms onto the participants from a young age:

> *Growing up I always thought like girls were like the one that did the list, organised, had the nice clean neat notepads and men were just the ones that participated in class, always got the*

answer right, and we were just there to send pictures of the class notes when the boys missed class.

The other participant states:

When we were little we had to do pairs and we had the worksheet and we had to write the answers out. I would always be told, no, you're the girl, you write and I'll tell you what to write.

Kågesten et al. (2016) posit from research conducted amongst adolescent girls that gender attitudes of girls are shaped by parents, peers and teachers, and these attitudes are enforced and policed covertly, however, just as I found in this research, they also found that girls find ways to challenge gender norms and are not passive victims of gender discriminatory practices. I also discovered that the girls were very aware of the different ways their behaviour was seen depending on their gender and how these often mimic broader societal expectations, especially in regards to physical and violent behaviours. One participant noted that *"for their [boys] action, if they are violent, they are like oh that's their nature. If a woman does it, it's like oh my god she's crazy or it's weird".* Furthermore, another participant commented on the unjustness and lack of parity between girls and boys in the BSE, stating that:

growing up a man, like if he was causing trouble in a classroom and all that stuff he would still be called gifted and like he was just a troublemaker but inside he had a good heart and he was smart but a girl that was just sitting there paying attention in class was never seen and never heard and there was so much more expected of her.

Another participant reflected on the experiences of women as adults, commenting that, *"women have to suffer a lot of violence and their life is mainly violence".* Reviewing my field journal when these conversations took place shows that in these moments, I sensed the participants felt disillusioned with their BSE. The quotes share insight into the frustration the participants feel with the double standard they face in their BSE, but also show a deep sense of empathy with the plight of girls and women in general. The data suggests that the participants have a sophisticated awareness of how gendered power dynamics play a role in their experiences of the BSE, but also the role these dynamics will play in their future lives as women.

Patriarchy in the BSE and Long-Term Impact

The conversations around feeling the patriarchal control around them in their BSE led to revelations about how participants found ways to attempt resistance. The participant who created the collage which heads this theme poignantly noted that:

> *I realised I needed to play by their rules and for them success might be like, well, they kind of care about their grades, but just by being a man they're already called smart. And they have to be really, really lazy to be called stupid. But I feel like as a woman, you're already stupid, you have to do a lot of stuff to be called smart.*

The participant shows awareness of the systems of patriarchy which are forces against her and attempts to find ways to negotiate with them. Navigating societal expectations plays a significant role in the future of girls and the participants observed that their time in school, and the experiences they had in their BSE, have had a heavy influence on their future career choices. One participant noted, *"there was a time in my life when I wanted to be a writer, but I remember thinking I can't because I've only read things by men so there must be no women writers"*. This is important to note as McMahon & Patton (1997) highlight career choices made at a young age and gender socialisation are influencers of adult career choices. Bowen et al. (2013) found that adolescent views on occupational roles were heavily influenced by media and literature children are exposed to, and Olsson & Martiny (2018) highlight unequal distribution of women in a range of occupational roles is a result of negative stereotypes and lack of counter stereotypic female role models which children lack. This pervading sense of stereotyping is highlighted by a participant who reveals that being a woman is, *"being seen as having ovaries which somehow makes you automatically stupid"*.

The research conducted indicates that the BSE for the participants is a space which remains heavily gendered and under a patriarchal gaze. The experiences of the participants from a young age shape their view of what society expects from them as they are older, and also shows them how girls and boys, women and men, are treated differently. However, the research also indicates that the participants have a sense of agency, awareness and subversive attitudes towards their gendered BSE and are not passive victims of the patriarchy which exists in their BSE.

6.4.5 Body Politics

Preamble

I was frequently struck by how similar the experiences of the participants were to my own childhood, and my own reflections on my BSE. Reviewing my field notes when making sense of how the body was discussed I came across a note in one of the sessions when the collages were being created about a light-hearted, but serious discussion we had about mothers constantly being on fad-diets. This scrutiny of the female body seems omnipresent in the lives of girls, and the theme of body politics and the pressure to conform to societal beauty standards weaved a common thread through many conversations.

Figure 41

Research Participant. (2023). Forever Condemned [Collage].

My collage is very clear, the image I'm going to show you is centred on body issues and body image. So here in the centre, I have a drawing of a woman's body, very, very skinny. Basically, showing her ribs and her stomach. And these words around it, clean, and I put bake, like you should be doing that, you should be cooking. And umm...to clean, like you should be clean, free from impurities. It is centred around reflecting about your body and yourself and how that fits into an image or into a stereotype and wondering why can't you fit in those stereotypes and be beautiful.

Surveillance and Sensemaking

Figure 41 and the accompanying excerpt of the participant analysing their collage captures not only the internalised pressure the participants feel to conform to unattainable beauty standards but also reveals the feeling of dehumanisation and psychological toll that a sense of relentless surveillance has. Foucault's panopticon (1979) appears in implicit ways from the point of view of the participants in the form of the participants exploring their feeling of an omnipresent sense of being watched. This sense of surveillance, be it societal or self-imposed, is dominating in the collages and presentations of the collages, which one participant captures saying, *"I feel very seen, and not in a good way. I hate the anxiety from the trip from the bus and arriving to class because I think everyone is watching you".* Bartky's (1997) ideas on the matter continue to remain relevant today, who argues that self-surveillance and self-policing is a form of modern-day panopticon for women to remain obedient in patriarchal society. This sense of self-policing penetrates into daily routines and habits according to Bartky (1997) who mentions checking makeup and watching what you eat as examples of control. The pervading sense of surveillance is something which multiple participants of the study mentioned, with one participant highlighting the anxiety that surveillance causes, saying *"I'm unable to think as I'm always being watched".*

The internalised self-policing gaze shapes the way participants see their BSE; as an arena of contention, anxiety and discomfort which they must navigate on a daily basis. Rose (1993) analyses this very experience arguing that "women's sense of embodiment can make space feel

like a thousand piercing eyes [...] this produces a sense of space as a hazardous arena" (p.146). This is further exacerbated for adolescents who Lesko (2012) describes as already being a group of people "who watch and correct themselves" (p.91, 2012). Another participant of the research comments on the feeling of being watched at school, saying *"when I'm alone I start to feel intimidated by people watching you and everyone thinking the same thing about you".* Whilst the participants explored how this affects their mental health, they also show that they are fully cognizant of how this continues into adulthood with another participant asserting, *"women are always judged by what they do, what they don't do, what they say, what they don't say, what they wear".*

Childhood's Rooted in Internalising Societal Expectations

The participants spoke about the pressures they felt at achieving an unattainable form of beauty and the struggle for body acceptance. This begins in the BSE from a young age with the participant who created the highlighted collage at the beginning of this theme referring to a section of the collage, describing *"a picture I took in the little children's playground because I wanted to represent how it is imprinted in our bodies from such a young age and we start internalising".* McDowell (1999) argues that conventional notions of beauty are weaponized against women, and this is sensed by one participant who elucidated, *"I think everyone feels it, but there's a specific pressure in women. To be divided between your heart and your mind and they don't go together".* This comment implies the participant is aware of and acknowledges the binary roles women are expected to adhere to, as well as the specific gendered conflict women and girls are expected to balance between rationality and emotions. This sense of a never-ending battle between the body and societal expectations is what Duncan (1994) considers a tool to subdue women indefinitely as the pursuit to achieve bodily beauty requires vast quantities of energy, and spendable income, and this distracts women from battling gender inequalities (p.49).

The physical toll of this strive for an idealised beauty standard was discussed around body image and developing disordered eating habits. Ganesan et al. (2018) conducted a study amongst adolescent girls and found that 77.6% of the girls interviewed stated they were dissatisfied with their body image and body weight, with the most common habit forming being restricted diet practices and skipping meals. Neumark-Sztainer et al. (2006) highlight the dangers of low body satisfaction amongst adolescents, noting that low body satisfaction often led to unhealthy weight

management strategies. This sense of women experiencing extreme pressure to be thin is highlighted by a participant who shares her struggles, saying that this pressure is felt from childhood:

> *Here's an illustration of little kids and I put like a red cross over the only girl that's here and like I put marks where her arms should be, and like cutting away the fat in the legs to show they should be thinner.*

The same participant commented that she felt the societal pressure to be thin reached the desire of wanting to look skeletal and, *"only then can you be skinny, when there's absolutely nothing in your body"*. I note from my research field journal that these two preceding comments from the participant brought me to tears, especially when considering the desire for self-mortification the participant expressed. Emma & Harjunen (2004) argue that schools must take greater responsibility for guiding adolescents on navigating societal pressures, especially when bodies do not fit normative standards and being mindful of the development of negative body image which can develop through peer pressure, teacher comments, and PSHE classes (p.184). Jones et al. (2014) also highlight the dangers of 'fat talk' which is becoming all pervasive due to social media, and note that fat talk participation is particularly dangerous. Fardouly et al. (2017), Papageorgiou et al. (2022), and Andrew et al. (2016) have also analysed the effects of social media usage on adolescents and note the trend for increased negative mood when comparing body image on social media. Cribb & Haase (2016) argue that from their research they have conducted girls have lower esteem in mixed sex which leads to developing disordered eating practices. The comments from the participants' reveal the early imposition of harmful gendered norms which have been internalised in the school space.

Beauty, Bathrooms and Body

Aside from struggling with impossible societal expectations with weight, the participants also spoke candidly about notions of beauty and competition they experienced in their BSE. One participant highlighted the burdening presence of beauty on their minds saying, *"appearances are the most important thing for a woman to be able to say she's happy"*. This complex relationship between beauty, appearance and emotions is a research avenue for Fingerson (2005) who argues that girls need more spaces and educational opportunities to fully understand their

body so that they can see its connection with society and their emotions. This sense of self-criticism is viewed by O'Dougherty et al. (2011) as crucial in combatting as their research conducted on 60 recently graduated college educated women found that women spoke positively about other women's bodies but were far more critical of their own bodies and were self-imposing unattainable body goals.

This sense of societal pressure is again shown to be something participants are aware of, with one participant noting that they, *" pasted two definitions, which are "neat" and "race" which is how [they] feel like society had made women feel like everything's a race and that they need to look neat."* The feelings of a race and a sense of competition centred particularly around the school bathrooms for the participants. The following comments were said by different participants, in different groups, around the bathroom space:

> *I feel like especially in school, in our bathrooms, we have a lot of competition. At least I feel that kind of when we get to the bathrooms and everyone is getting ready and everyone is putting on their makeup, it can feel good but it can also feel overwhelming.*

> *I don't like the bathrooms because there are mirrors in it and yeah I just don't like it and they make me overthink.*

> *I feel not comfortable because of the lights in the bathroom and my skin looks all dark and it's weird. The reflective glass.*

> *I did a broken mirror because I just wanted to symbolise connecting to this picture I took in the school bathroom because I think we are very centred in our image.*

The quotes show that the bathroom space exists in a dual environment, bringing a sense of pleasure or comfort, but also being a source of competition and anxiety for participants. The mirror and reflections of the self-seem to have a particularly complex relationship with the

participants. Simonsen (2005) posits that the mirror shapes social life in dual ways, with the mirror reflecting back self-perception, and is a powerful force in shaping self-image in an imaginary space.

A common occurrence in the research analysis I discovered was that participants continued to express subversive views and a deep sense of reflexivity when sharing their thoughts. Participants found ways to express their combatting of social pressures especially found and developed in their BSE to conform to ideal beauty standards by looking to other ideals of womanhood. One participant included images of strong role female models, stating that, "*I put these pictures of actresses, like Ann Mary Cole, because they are like role models, also Meghan Markle I really like her a lot. And Kamala Harris, I think those are really powerful women"*. Participants also talked about counteracting the dangers of idealised beauty standards by valuing and sharing the beauty in other bodies, with the creator of the collage of this this theme sharing:

> *I put Princess Diana and a little drawing of someone, like an older woman, like a character, and in a crossword with the word perfect to symbolise that both of them can be perfect, even if they have completely different bodies and there shouldn't be a definition of a perfect body.*

The participants shared deeply profound commentary about how societal expectations shape their daily routines and lives. The value of a woman, when listening to their reflections, seems still firmly placed in patriarchal ideas about beauty and the female body.

6.4.6 Periods

Preamble

A discovery I made through the research is that intergenerational and cross-cultural boundaries made little impact on how I had, and the participants had, and even their mothers and grandmothers had, experienced a lack of education around menstrual health. The whispering of friends, the confusion of first periods, the fear, the shame and stigma which continues to exist is brought into stark daylight with the participants' art and conversations around menstrual care. In

the artmaking, collage-making, presenting and participant analysis periods were a topic which reoccurred.

Figure 42

Research Participant. (2023). Shhhh! [Collage].

Everyone was so embarrassed about getting a period, about pads, about everything. Because first, they didn't want the boys to know, because that was so embarrassing. And second, if you were in the bathrooms you were listening, if somebody had gotten a period, and there were gossips, like, oh, you heard that she got her period? I know because I heard her opening a pad in the bathroom. So, like there's this whole thing about menstruation being so taboo but it's something so natural.

Re-thinking Menstrual Trauma

Labelling this section as menstrual trauma is quite intentional as listening to the conversations participants felt like I was listening to negative moments in their life which continue to affect them in their daily lives. Figure 42 and the accompanying excerpt captures the absurdity of period related stigma, the pervading sense of surveillance around periods, and societal taboos which the participant must navigate in her BSE. When referring to menstrual trauma I am making reference to not just physical pain that menstruators experience, but also the emotional distress which comes with being an adolescent menstruator and the psychological harm caused by shame, stigma and poor education around women's health needs.

Schmitt, Gruer, et al. (2022) conducted qualitative research into the experiences of black and Latina girls around menstrual care and discovered that girls struggled with knowing who to talk to about menstrual care due to the tensions between the home and the school regarding taking responsibility for period education. This highlights the importance of clear educational policies as clear educational policies, interventions and deliverable content about periods, is not just important so adolescents are fully informed but also connects to mental preparation for menstruation. Herbert et al. (2016) conducted a systematic literature review on adolescent preparedness for periods with results suggesting a strong relationship between lack of preparedness and distress. This can be seen in the following description from a participant who says that:

> *It can cause many traumatic experiences when that shame in periods starts because, for example, my aunt got her period when she was nine and my mother had never heard the word menstruation or blood and neither had she and when her period came, she was like I'm going to die.*

This underlines the fear and danger that can arise when periods are not fully understood by girls and is described in the following admission from a participant who shares, *"I knew I was on my period but I started to cry and I thought I had to go to the hospital".* These insights from the data reveal reactions which are imbued with anxiety, fear and confusion and which could be addressed with better menstrual health education.

Trauma associated with periods is further compounded by what can be considered dismissal of period pain. Several participants brought up the dismissal of their pain by family members and the psychological shame and trauma which can come from this. One participant described waking up at her father's home and discovering she had stained the bed without knowing. Describing the encounter she says:

> *I woke up and of course my pyjamas and the sheets of the bed were stained. And then his wife just came up to me and was like, what's wrong with you? Why would you stay in the bed? And I was like, well I didn't know I was on my period. She got really mad at me for staining the bed.*

Additionally, participants strongly felt that non-menstruators lacked empathy towards period pain. This is particularly highlighted in the following encounter another participant has with her father where she describes the dismissal:

> *I get extremely bad period cramps. Many times I have puked and passed out, and because of my cramps, I tell my dad I can't go to school because I genuinely can't stand up and he's like, no that doesn't hurt. How would he know?*

Another participant from a different group reflected on the sense of denial that women have to outwardly exhibit, stating that the experience of being a menstruator is, *"denying that you are in pain and you suffer a lot of things*". What emerged from the rich narrative the participants shared was that not only were they contending with stigma and shame around period care, but there was a normalisation of ignoring or dismissing their pain, invalidating their very real lived experiences in and out of the BSE.

Additional psychological trauma around periods can be caused by different cultural contexts. Kirk & Sommer (2006) consider culture as a seminal foundation as to how girls perceive periods, noting that some cultures celebrate the moment of menarche, but others ignore it entirely. This ignoring of menstruation later comes to cause emotional trauma in the participants who commented on the negative stereotypes that a lack of education around periods causes them with one participant exploring the prejudiced suffered through being a menstruator and being labelled as "crazy" when being on their period, *"I put this in like the commentaries that are you on your*

period? And it's a myth that women become crazy on their period". What participants revealed in their conversations and collages was that trauma around periods is very much a presence in the lives of the girls and an empathetic and open approach to periods is essential to prevent the continuous negative connotations in regard to being a menstruator.

Period Shame, Stigma, and Schools

Negative connotations around periods were interwoven with the shame and stigma of being a menstruator in the BSE. Stubbs (2008) documents that whilst girls are taught the biological processes of menstruation the emotional context around menarche is rarely discussed, and as a result menstruation is seen as something that should be hidden, contributing to body shame.

Menstruation as taboo is what Fingerson (2006) argues as a "masculinist-based notion of the body" (p.15) which means menstruation is considered as something out of the ordinary as it does not happen to a male body. Ahmed (2003) considers the shame around menstruation as a method to enforce societal expectations of women, which is a silenced discourse around menstruation, whilst Elkin (2023) hypothesises that women and girls are not naturally disgusted by periods but taught to be repulsed by societal norms. The shame and stress around periods is shared by one participant who states *"I'm always worried that I'm going to show that I'm on my period because I think blood is associated with being dirty".* The participant breaks down that there exists a fear of judgement in her life around "showing" she is on her period, as well as a deep-seated self-consciousness around the biological nature of being a girl.

The cultural beliefs, stigmatisation, and lack of holistic education around periods in schools is also shown to impact girls' understanding of sexuality as well as menstruation with one participant describing being told that she *"couldn't put in a tampon because that would be losing her virginity".* The belief that tampon usage as something that would lose your virginity shows the misinformation which can arise through a lack of carefully planned education around the topic of menstruation. Beausang & Razor (2000) consider the possible causes around poor menstrual education and describe unwillingness of educators to discuss periods, lack of school time dedicated to the topic, vague policies, and group learning as key points to reconsider to combat ignorance and misinformation.

The BSE Versus Caring for Menstruators

A clear message that participants shared in the research is their desire for the BSE to become better equipped and designed for the needs of menstruators. Participants shared that bathrooms, lack of privacy, shame, lack of water, hard seats, cold temperatures and lack of space all contributed to anxiety when they were on their periods in school. Schmitt, Hagstrom, et al. (2022) note that schools are not fully designed with menstruating adolescent girls in mind, especially when considering their unique sanitation needs, and this creates barriers to changing menstrual products which can lead to staining, health consequences and teasing. Additionally, the controlling of student bodies in schools in regard to visiting toilets in lessons becomes a detrimental factor with girls sharing anxiety around having to ask teachers to leave the class for period related reasons. To combat this Thomas & Melendez-Torres (2024) argue schools should challenge period stigma, provide better sanitary facilities, and provide support for students who are absent for period related reasons so that menstruators do not suffer unfair academic disadvantage.

Menstrual stigma appears to be rooted in discomfort around bodily fluids, which Turner (2012) argues is because "bodily fluids flowing from the inside to the outside body are dangerous, fearful and contaminating, because external fluids challenge our sense of completeness, order and orderliness" (p.3). Regardless, I would strongly assert that menstruation must not be a reason why academic disadvantage is faced. The participants discussed the injustice of attending institutions which did not even consider how period pain and the discomfort of periods could affect their learning. The following statements depict the participants sense of injustice at having to endure the lack of inequity in schools around periods in their own powerful words:

I feel sometimes school cultivates kind of like an idea of losing touch with your feelings and your body and your pain so that you can be productive.

Period pain is considered not a valid excuse to miss school.

Even though we're on our periods, even though we have cramps, we still need to show up to school, pay attention, do our work.

I think there's just this idea that you have to deal with the pain, and I think that with normalising it's like you're not really feeling pain and you're not actually sick.

I think when I'm on my period, I'm uncomfortable about everything, like the chairs, the space, the teachers, they just never help.

The participants of the preceding comments break down and reveal that there is a disconnect between their experiences of discomfort and pain in the BSE with the priority of the school on academic expectations, a minimisation of their pain, and a lack of support leading to alienation in their BSE. Preventing inequity in educational spaces for menstruators can be improved and Secor-Turner et al. (2020) conducted a qualitative focus group study around adolescent girls' experiences of periods and emphasise that better designed bathrooms, well developed curriculums around menstruation, normalising speaking about periods, and well-positioned school nurses can create school environments that better support menstruators.

6.4.7 Environmental Comfort

Preamble

The design choices of the BSE predominantly revolved around discussing temperature, light and sound, and how the participants experience these three design choices regarding comfort. What came about from the participants was that these three design elements had an impact on teaching and learning, but also on mental wellbeing. The participants shared very clearly what they felt was wrong with their BSE, factoring in temperature, light and sounds, and how these could be improved.

Figure 43

Research Participant. (2022). My Wish [Collage].

On one side I made the textures that I don't like at school that make me feel physically uncomfortable and the other side where I feel comfortable. The school is really pretty, and the architecture sometimes doesn't feel like a nice place to be in. My wish is that it would be better.

Temperature

Figure 43 and the accompanying quote encapsulates the participants' discussions around the discomfort they feel in the physical environment of their BSE. The topic of temperature, and particularly feelings of coldness, came up as the second most talked about code across the groups (see Table 2). Although participants frequently mentioned feeling cold, I had not fully comprehended how feeling cold played a major role in the physical discomfort the participants

experienced in their BSE. Participants shared very clearly how they felt the cold weather affected them with one participant saying, *"you sit in pain with coldness all around"* and another remarking that, *"when it's cold you feel trapped".* The sense I gathered from the participants was that the cold was an omnipresent force in their daily lives and one which had a negative impact on their experience of the BSE. Comfortable temperatures in the school environment are not a new topic of discussion by any means and there has been much research on the topic, with Earthman (2002) noting that older school buildings struggle to balance comfortable temperatures in particular. Chang and Kajackaite (2019) highlight that for women and girls' temperature becomes vitally important as their research indicated that performance on cognitive tests is better when girls are in warmer temperatures.

Participants also talked candidly about how the weather and warmer temperatures affect them mentally, with one participant describing her favourite space in the school being a place where the sun could warm her, like the *"tables in front of the sun"*. Another participant also commented on the connection between learning and feeling warm stating that she *"loved classrooms that were really warm"* underscoring the significance of warmth for the participant. Puteh et al. (2012) suggest regular and systematic evaluation of learning environments, particularly focused on thermal comfort, must take place to improve teaching and learning in schools. I would additionally add that it is vital to include student's opinions on their environment so that an accurate representation of stakeholders in schools is found, but it is also clear that warmer temperatures clearly had a positive effect on the participants, and colder temperatures a negative effect.

Light

Natural light and artificial lighting design choices also came up in conversation and in the collage sharing. Again, this is not ground-breaking research, but it is worth repeating again that natural light in classrooms and indoor spaces has shown to improve visual comfort and mental wellbeing of users (Uc, 2023). Baker (2012) notes that lighting in the BSE should be systematically reviewed, especially in the U.K. with its abundance of schools built in the 1950's, as older buildings have uneven distribution of natural light. Regardless of the documented importance of well-lit areas in schools' participants remarked on areas of darkness which they found disturbing and uncomfortable with one participant describing how a lack of natural light affects her mood:

> *there are some spaces, for example, where the high school lockers are downstairs, that is really, really, really a dark space. Because of all the trees that block out the light and don't let the light in and I think that affects my mood in a very strong way because I feel very down when I'm in a very dark room*.

The participant's reflections on how darkness impacts her mood is an astute observation but also offers simple ways to improve the situation. Winterbottom and Wilkins (2009) make clear that when natural light is lacking, artificial lighting should be used to supplement the design of the environment, specifically artificial lighting which avoids using 100 Hz fluorescent bulbs which can lead to impaired vision and headaches. Van Mil (2020) argues that architects must shift their focus more on artificial lighting which is appropriate for all users as this has a greater impact on stimulating indoor spaces for learners.

Additionally, participants also connected feelings of warmth with access to natural light with a whole conversation revolving around how rooms with bigger windows let in more light, were warmer and more comfortable to be in. This can be seen clearly with one participant describing her favourite spaces being, *"the dance room because of all the big windows that let in sun and light, and the library because of the heaters".* This comment implies that the participant is aware of the positive impact natural light and the functionality of heaters has. Goldhagen (2019) contends that by having occupants, especially women and girls, know how light and temperature affects them, will lead to a greater mastery of personal resources, increase emotional regulation and lead to better wellbeing (p.140). This highlights the importance of girls and women understanding the factors which make up their built environments and the impact it has on them.

Sound

Another factor which impacted student comfort was sound, and the connection of sound with feelings of being in spaces which are overcrowded. Bluyssen et al. (2018) conducted research with children in schools and discovered 87% of children in their focus groups stated they were unhappy with noise levels in their school. A 2019 study by Schneider documented that high levels of noise in the BSE caused students stress and difficulty in concentration. This is also seen in participants' commentary where one participant says, *"I like when there's a little bit of sound,*

but not in crowded places, or when there's just screaming and you can't be in peace, I just don't like it". The participant notes that silence is not desirable either in the BSE, but neither is a cacophony of sounds. Interestingly in Colombia research has been conducted on appropriate sounds levels in efforts to improve school environments, and as a result the government has presented regulation around school design and sound in an effort to combat the negative effects of poor acoustic design (Martinez et al. 2016). This is particularly important for students who are sensitive to noise.

Once again participants reflected on their collage analysis and not only highlighted spaces where sound affected them negatively but also referred to what acoustic experiences they preferred with a participant noting that, *"last week we spent the whole of recess here [referring to a back area of the school] and I just felt really relieved because of the quietness".* Another participant also noted the importance of appropriate levels of acoustics in connection with relationship building with peers stating that, *"we connect better when there's a peaceful place".*

Crowded spaces were a particular note of frustration for participants, and this is what Brännström et al. (2017) consider a challenge for school designers to address, but they also note that acoustic anxiety comes from noise inside classrooms, noise leaking into spaces from outside of schools and hearing teachers in other classrooms. This is particularly detrimental for learners who have special educational needs (Brännström et al., 2017). Additionally, Connolly et al. (2013) discover that noise annoyance particularly impacts older students, and adolescents become more sensitive to noise as they grow older which could be a reason why sound was a prominent issue for the participants.

Understanding how the participants experience environmental comfort with temperature, light and sound is important because, as Gifford (2014) states, we are always embedded in place and those places often have layers. By analysing the experience of their temperature, light and sun in their BSE participants are able to begin to understand how these layers shape their everyday lives. The participants reveal that designers of the BSE should create school environments which are multi-layered and which incorporate natural light, temperature regulation which addresses girls' needs and acoustic designs which minimise disruption to learners.

6.4.8 School Architecture, Safety and Exclusion

Preamble

What participants showed me during the research process is that school architecture goes well beyond buildings and environmental comfort and what impacts the participants is how school architecture shapes their sense of belonging and their feelings of safety. They made clear school buildings can provide opportunities for creativity or create an oppressive environment which leads to feelings of alienation and frustration.

Figure 44

Research Participant. (2023). Leave It All Behind [Collage].

The collage is about movement and how you're more calm in spaces that allow you to move and also allow you to think and expand yourself. The bottom part, it's inspired by Dante. So,

this part is like hell. Then you have the stairs, purgatory. So here, in the first part of the Inferno, it's more about classrooms and hallways and darkness. I put a special emphasis on the chairs because I hate them. Like the pupitres[1]...I think they are so painful. I get a lot of leg cramps and so I just really hate that I cannot stand up when I need to. Sometimes I'm just trying to pay attention and my legs are really hurting, and you really want to stand up, but I can't, so I feel very repressed.

Disconnection and Exclusion

Figure 44 and the references to the "Inferno" from the collage above show insight into how the participant feels spaces, furniture and restrictive learning environments lead to a strong sense of repression and disengagement in her BSE. This sense of disconnection between place and participants became apparent when participants talked about their collages, specifically strong emotions of exclusion were apparent in the conversations. Participants often talked about the size of the campus, and more importantly how they had to navigate several flights of stairs and buildings which were often located quite far from each other. One participant noted that, *"there are classrooms super far away from each other, and I personally hate that"*. This physical separation of infrastructure from the body causes anxiety, which Ahmed (2023) considers an occurrence when bodies feel like "bodies out of place, as not belonging in certain places" (p.210). The difficulty in navigating the BSE caused the participants to feel this sense of disconnection. The BSE and the exclusionary design choices were further discussed by students who talked about the small tables they must use, which come with small hard chairs. Participants were very open with highlighting how simple architecture and design choices could make their lives less exclusionary, with one student discussing the difficulties with the right-handed desks used in the high school for a left-handed participant commenting, *"when you're in high school, you have these awful tables, and I'm left-handed so it's very uncomfortable for me to write on them".* The participants showed a clear preference for design choices which were more inclusive for all learners.

[1] Spanish for describing small tables with chairs attached normally found in school classrooms.

Additionally, a sense of emotional exclusion, or the illusion of emotional inclusion, was connected to architectural design choices by the participants. The participants noted the contradiction between the location of the school versus the design choices of the school buildings they found themselves in most of the day and explored how this affected them. One participant described their environment, stating that:

> *I took a picture from a magazine that is basically a horrible grey city and that is to represent what I feel like is happening at the school and what makes the school so special is the green we have. The colour scheme of the buildings, like the huge grey columns that are downstairs I find so dull and boring, and scary too because it's really dark. This picture is great because it came out really dark here, even darker than it is, so I feel that's what this whole building makes me feel.*

The participant highlights that the design choices of her BSE, such as materials and colour choices, create a continuous long-term impact on her and how she connects to her BSE.

Feelings of Safety in the BSE

Spaces of safety were discussed by participants, beginning during their emotional cartography map-making, and extending to their final focus group discussions. The participants explored how the physical design of their BSE shaped their sense of security or could contribute to feelings of anxiety in their daily experiences. Change of class and the commotion which comes with this was highlighted by one student as a source of anxiety, with the participant stating, *"I feel really anxious during the change of lessons because I feel like there are way too many stairs, and this building is really high up, and I feel like I have no escape".* This sense of vulnerability due to congregations of people in stairwells points out design choices, but also movement within the building, which can cause a sense of unsafety. This is especially highlighted by the following participant who shares, *"I hate going up the stairs because everyone is just held up there and I feel like there could be a really big accident"*. This idea of being trapped is discussed by another participant who noted that, *"the hallways are very dark, and faces are very close, and they're very dark. You can't run away"*. The feeling of closed and cramped spaces as spaces which can cause anxiety is noted as common by Nasar and Jones (1997) who argued that heavy circulation and low visibility are associated with fear. This is seen in the participants' commentary with

sights of congregation in peak movement times creating a sense of stress and lacking in security. The quotes from the participants reveal that crowded spaces are a source of danger and anxiety and that the design of the BSE has a direct impact on the participants' sense of physical and emotional safety.

Conversely participants also discussed sites where they felt safer, with the bathroom being one such space of refuge. One participant described the refuge that the bathrooms brought her, stating that, *"I have the space to hide in the school which is the bathroom. I feel like many people in the school use the bathrooms as an escape"*. This shows that students actively search for spaces of safety, and when those spaces are lacking, they seek alternative spaces such as bathrooms. What is revealed is a design flaw in the participants' BSE where a need is going unmet.

Searching for Creative Freedom in the BSE

Whilst design choices were a topic that appeared, so too was how the BSE affected participants' sense of creativity and freedom. Moser et al. (2008) investigated into the different ways design choices can influence cognitive ability and discovered that high ceilings can affect creativity levels. This sense of searching for inspiration in space is explored by a participant who describes her collage as being, *"about movement and how spaces that allow you to move and also allow you to think can also allow you to expand yourself"*.

School design choices, and the appreciation of how different spaces have impact on students, was shown to be of value to the students with another participant commenting that she had written a haiku in her collage, explaining *"I wrote a little haiku for the theatre, like the theatre stage, the spotlight ever so bright, allowing us to fly"*. This sense of freedom in the theatre space and the connection it has with creativity is noted by participants. Another participant noted of the music room and orchestra that, *"when I first joined the orchestra and the musical it was really important to me, like finding a place where I felt comfortable".* Additionally, another participant in a different group also highlighted the importance of the art room space for a similar reason. Aside from specialised subjects and their spaces as areas of comfort and safety, places like hallways and pathways were found to be contentions spaces for participants, but also seen as spaces of opportunities for freedom of movement. One participant on walkways stated that, *"sometimes you're stressed going to class, you have to move very quickly, and it doesn't give you*

time to breathe because you have to enjoy the time walking between classes because it's the only movement you have". The findings suggests design choices where possibilities for creative connection and stimulation are clearly what participants were seeking, and can be achieved through small design choices like engaging more with walkways and creating learning spaces where all participants can engage in learning.

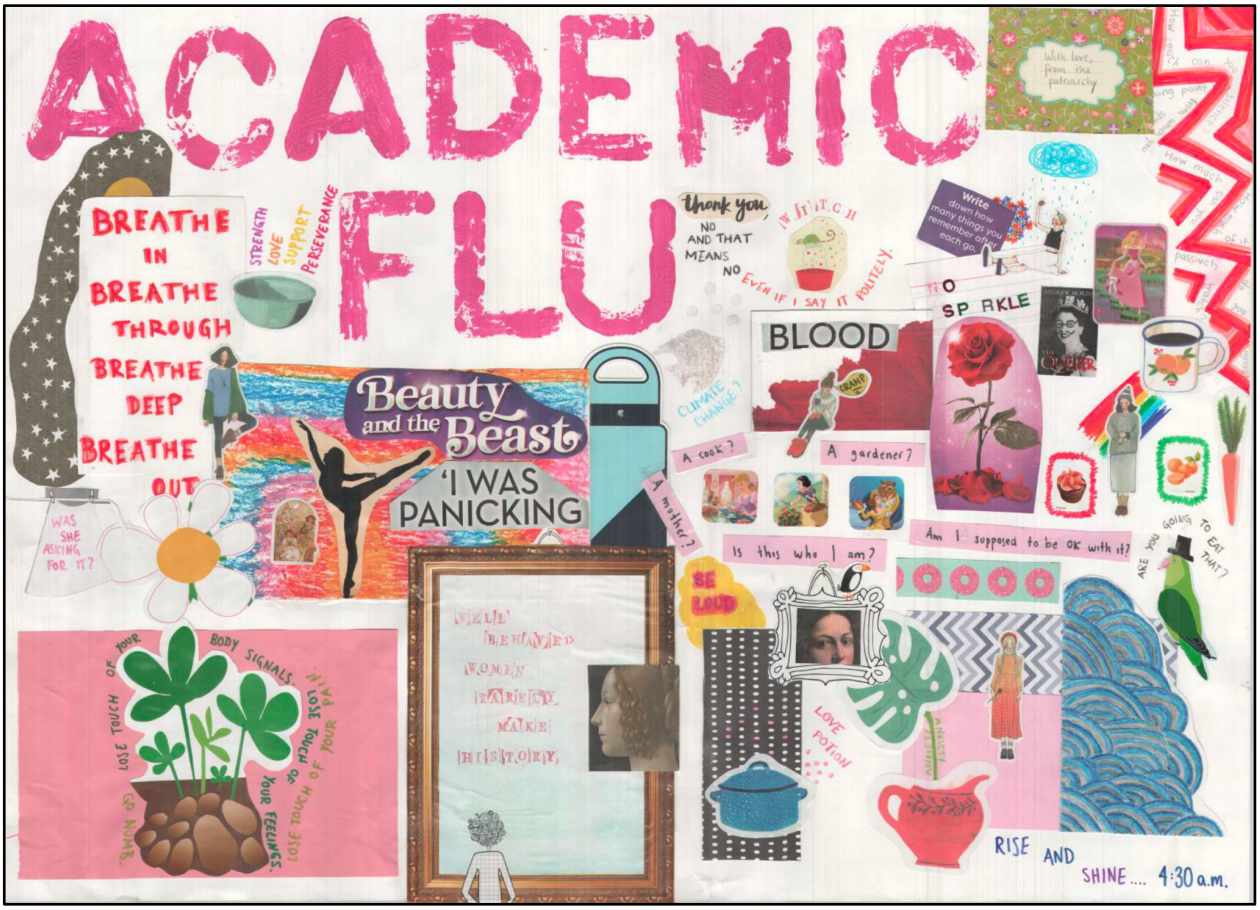
6.4.9 Mental Wellbeing

Preamble

Mental wellbeing is something that the participants talked about, with each other and with me, across the year of research conducted for this thesis. At times the descriptions of the experiences the girls had, and the impact it had on their mental wellbeing, had an impact on my own mental wellbeing and I would leave sessions filled with sympathy and sometimes guilt. As a researcher and educator, I find the discussion around mental health to be vitally important and it seems to be not just on the forefront of my mind, but a strong shaper of the daily lived experience the participants had in their BSE. Topics such as academic expectations, the pressure to perform when experiencing painful periods, and how their school environment impacted them were some of many topics shared connected to mental wellbeing.

Figure 45

Research Participant. (2022). Academic Flu [Collage].



I remember before I went to school, like when I was a little kid, I only dressed in pink and I kind of like was in love with sparkles and kind of like magic. And I feel like when I went into school, it immediately like dimmed that light that was a big part of my personality and kind of made it all towards school and education and studying. And I feel like that is very damaging because I feel sometimes that I lose sight of who I am and how I feel in my pain and my joy as well.

The Impact of the BSE on Emotions

The participant who created Figure 45 and the excerpt which follows suggests that the "sparkles" and "magic" which symbolised her imaginative personality has been dimmed by attending school through conformity, suppression of the self, and emotional strain from academic expectations.

From an educational perspective schools are places where teaching and learning occurs, and as an educator myself my main focus is on teaching the learners I have in my classroom. However, it is clear from the research I conducted that being in the BSE for participants is challenging in multiple ways for their mental wellbeing, and thus this has an unknown impact on how they learn and feel in space. I reiterate again Rose (1993), who writes that for women and girls, "being in space is not easy. Indeed, at its worst, this feeling results in a desire to make ourselves absent from space" (Rose, 1993, p.143). This sense of space as difficult to navigate is expressed by multiple participants in the research, with one participant commenting that the BSE *"drowns my energy completely, and I feel trapped".* The lack of safe spaces contributes to a detrimental effect on the participants' wellbeing, as they clearly are aware of how they feel in their BSE but lack spaces where they can share these feelings.

Participants explored how social interactions, gender norms, and design flaws exacerbate mental health issues. Nind et al. (2022) explore this in their analysis of the spatial turn, arguing that schools are not simply containers of students, but spaces where meaning emerges from interchanges between people, objects, hierarchies and experiences. This combination of interchanges shapes and impacts students' daily lived experiences in their BSE. As a result of this, what happens in a classroom with exchanges between student and teacher becomes only one small part of how the participants relate their emotions to their built environment. This can be seen with one participant saying, *"I only relate this building to stressful situations"*, and another using symbolism to describe their BSE and commenting, *"I put a knife because I think it represents [the] kind of harm that school causes on mental health".* Navigating the BSE clearly takes its toll on a student's mental wellbeing and leads to feelings of disconnection and suppression which the participant who created the collage headlined in this theme discusses in the excerpt of her analysis of her collage.

Academic and Social Competitiveness

The pressure to be an academically strong student was a prevalent theme across the three groups. The feeling of needing to excel academically had students sharing profound moments of anxiety, stress and academic fatigue. The perception of participants was that the value of academic success superseded everything else in their school, social, and familial environment. This can be seen in the following quote where a participant says, *"sometimes I feel like the pressure to be a*

good student is kind of more important than being physically and emotionally safe". This comment exposes not only the emphasis of academic success over mental wellbeing that the participant feels the BSE places on her, but also the emotional neglect and internal conflict faced on a daily experience in her BSE.

The competitive nature of comparisons with other students and its detrimental effects on health are found with participants battling the self, as seen in the previous quote, but also against spatial choices made in the school, and with their peers. Social competitiveness was spotlighted as mental health trauma which follows students from a young age, with one participant noting that the hostile environment means, *"you have to fight tooth and nail for what you believe in to be heard or seen"*, highlighting the constant battle that girls face to be recognised. This has been previously discussed in 2.6 when discussing the experiences of the patriarchy in schools. Both Sullivan (2009) and Parker et al. (2018) found that girls' sense of self-achievement has them underestimating their own abilities which increases academic pressure on them. The participants of the research described how they knew they were experiencing mental distress because of this competitive feeling in the school, but additionally understood that they were experiencing intense pressure over areas of academic success in which they had no real interest in. This can be noted in one participant's analysis of her collage where she says, *"it stresses me out because sometimes I feel like I am suffering a lot with some classes that aren't in anything I really want to do".*

The use of schoolwork in displays was brought up by participants, including the prolonged effects of this on mental health. The participants explored how the toxic nature of the competitiveness they felt at school was exacerbated by teachers displaying student work deemed 'good' and how they felt when they were not included in this. This is seen with one participant stating, *"I think everything the teachers put up on the walls of schools has an impact because other people see it all the time. And especially in pathways because we have to go through the pathways to get everywhere".* The emphasis from this comment on high traffic areas in her BSE suggests that she is aware of the symbolic importance the messages displayed in these areas have. Blaikie (2021) posits that observing places, the objects within them, objects which are kept, discarded and displayed, show the value that is placed on norms, behaviour and bodies. It is this sense of discarding that some of the girls talked about, showing that seemingly innocuous

teaching practices like displaying work and giving awards can increase toxic competitive environments and cause long term mental health impacts on students.

Identity and Self-Worth

The pressure to achieve academically and its conflation with self-worth and identity troubles the participants' mental wellbeing. One participant describes how when she feels she has failed to reach the expectation set for her it can lead to a complete crisis of identity, explaining that, *"it's good to push yourself to be better, but it also comes to a point where that becomes your whole identity, and if you fail, you fall apart"*. Here, it is clear that the sense of impending failure without reaching academic expectations leads to feelings of inadequacy and anxiety.

Participants also shared that they understood that their education was for their benefit, but they also pointed out that there seemed to be an imbalance between love of learning and achieving high grades. The data suggests participants' perceptions of being connected to their school revolves around feeling personally respected, included and supported, and participants discussed their crisis of identity being tied to high grades and the need for validation. One participant reflects, *"I love school, and I want to graduate, but at the same time I have a tough relationship with grades and needing validation from them"*. The mental toll of this pressure, and the exhaustion this causes, is movingly described by a participant who in her collage analysis says, *"here's a picture of a woman in a very uncomfortable position. Because that's how I feel…very uncomfortable. I'm very tired too…she looks tired"*.

The need for movement, freedom, and escape was a motif repeated throughout the girls' collages, across all the groups, highlighting the desire to escape from the relentless pressure the participants faced in their BSE. Goldhagen (2019) argues that this is a natural feeling for women as they, "want to escape, to flee to a more cognitively engaging and healthful place" (p.4). Kaltiala-Heino et al. (2003) and Hinze et al. (2023) comment on the fragile mental health that adolescents are facing in the current epoch, noting that adolescent females suffer twice the rate of depression than males, increasing over time. The emotional impact of the BSE showed that much work needs to be done to bring balance to academic learning experiences and mental health awareness.

The mental wellbeing of the participants is shaped by multiple factors in their BSE, with the focal point in this research emerging as academic pressure that girls face, the competitive nature of schools, and the close connection between identity and academic success. The participants raise multiple points which can be addressed to foster a greater understanding of their mental wellbeing needs and sense of positive belonging to their BSE.

6.5 Chapter Conclusion

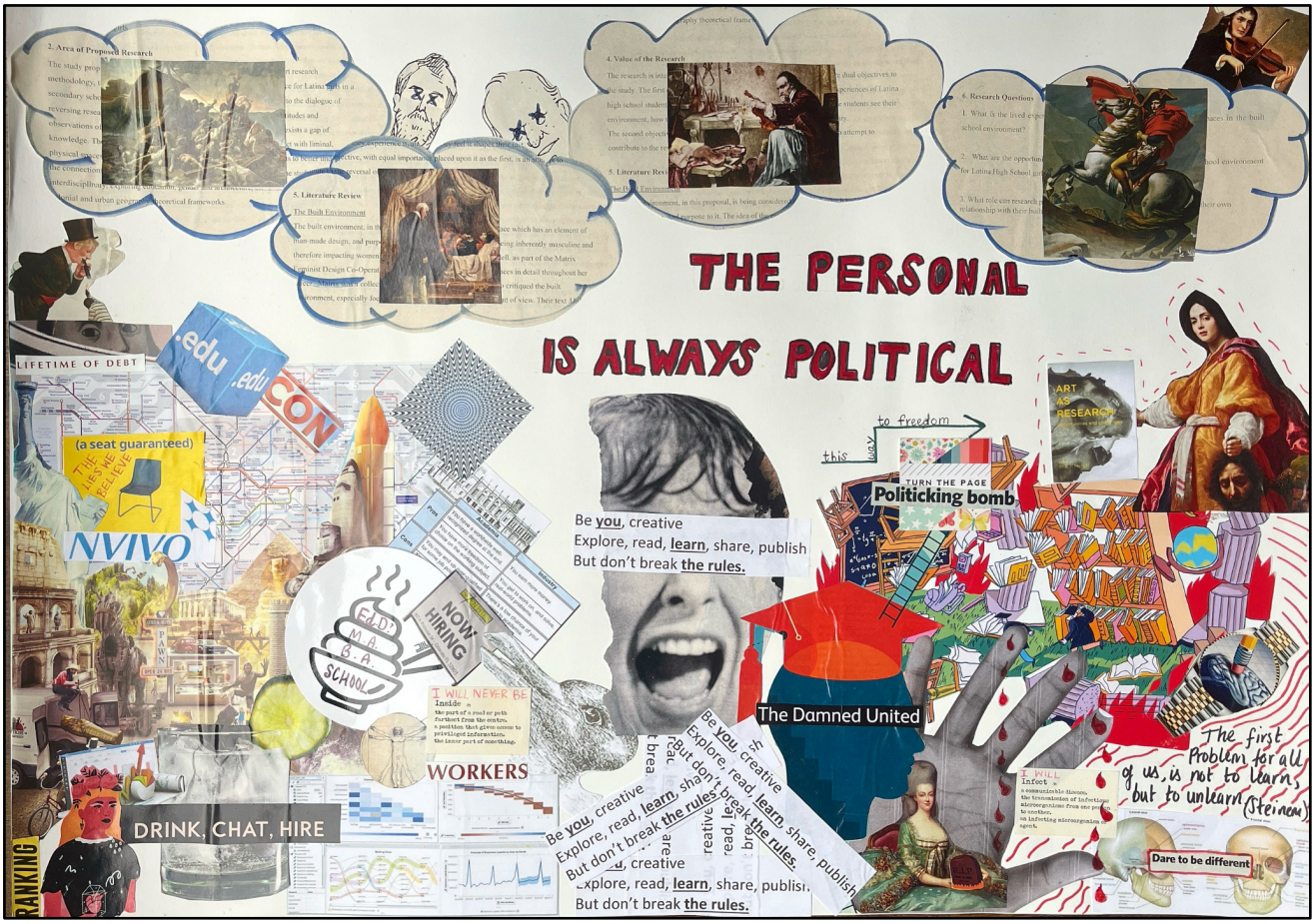
This chapter has explored the data from the research with findings shared around the participants' own set of themes which arose from their group analysis of the collages they created, and my own set of researcher-identified themes. Additionally, the chapter describes the process of IPA used which enabled the final set of researcher-identified themes to be uncovered. The final set of researcher-identified themes were **Memories**, **Nature**, **Patriarchal Experiences**, **Body Politics**, **Periods**, **Environmental Comfort**, **School Architecture**, and **Mental Wellbeing**. These identified themes encapsulate the findings and provide insight into complex daily lived experiences which the participants navigate in their BSE.

The interpretation and analysis suggest that the participants want a more empathetic and inclusive attitude from school designers, policymakers and educators to improve the experience of being girls. Surveillance, societal pressures and stigma in the BSE have been placed on the participants since their childhood and the participants strongly commented on their desire to be in close connection with nature, speaking about the positive effects that this had on their cognitive and mental health. Participants showed a longing for spaces of quiet, private reflection and articulated their wish to be heard, alongside their wish for their BSE to foster mental-wellbeing and a sense of empowerment. This is explored in more detail in the concluding chapter (Chapter 7).

Chapter 7 - Conclusions

Figure 46

R.K. Saghera (2024). Conclusions: The Personal is Always Political [Collage].



7.1 Introduction

The concluding chapter revisits the aim and objectives of the research, summarising the findings which answer the research question. Figure 46 visualises this summary along with my own concluding thoughts on my doctoral journey in collage form. Additionally, insights are given as to the contributions the research makes, the originality the research brings to children's geographies focusing specifically on Latina girls, and research in education which focuses on school design and built environments. The chapter concludes with a discussion on the limitations of the research and recommendations for future research around girls and their experiences in the BSE.

7.2 Aim and Objectives Revisited

7.2.1 Aim of the Research Revisited

The introduction chapter of the thesis (Chapter 1) outlined the aim of the research (1.8.1) as principally about gaining and sharing an understanding of how the participants involved in the research experienced their BSE. In that aim I initially outlined the built environment as consisting of architectural aspects, however since completing the research it is clear that the built environment goes far beyond architectural spaces such as buildings and walkways for the participants and includes an emotional and political dimension. Thus, the aim of the research organically shifted to include these wider facets that the participants elucidated through their exploration, and which are detailed in section 7.3.

7.2.2 Objectives Revisited

There were two objectives framed for the study, each being equally as important as the other. Outlined in section 1.8.1 I wrote about the first objective which was focused on the participants exploring and understanding how their BSE impacted their daily lives. This required participants to be actively engaged in a process of investigation so that participants could share their reflections through art making, but also explicitly share their reflections with each other. I believe the art, sharing, and thematic analysis the participants engaged with over the course of the year led to a sense of meta-cognition where participants were able to articulate their complex experiences in the BSE, identifying patterns and analysing their observations during the various stages of the research.

The second objective of the research was to contribute to a reversal of epistemicide (Santos, 2016/2018) which would come about from the participants sharing their reflections and discoveries and thus contributing to research as an underrepresented group, and by going through the process of exploration via a/r/tographic methods. This objective is discussed in 7.4.

7.3 Answering the Research Question and Key Findings

In subsection 1.9 the research question for this thesis was stated as being “what is the lived experience of Latina High School girls of their built school environment?”.
To answer this question below is a synthesis of the key findings of the research.

The findings, as analysed and discussed in Chapter 6, reveals that the participants’ experiences of their BSE is constructed and shaped by a rhizomatic relationship between memories of their spatial triad, somatic experiences of their BSE, and social contexts. Participants shared reflections on how past experiences shape their present-day identity and how this impacts their mental, physical and social health. For example, the use of public spaces to display work which meets specific criteria, the displaying of academic reward charts and the emphasis of getting good grades at the expense of their wellbeing were all brought up by participants as exacerbating factors which increased a feeling of competitiveness in their BSE. This is particularly impacted by academic expectations and the sense of being under an omnipresent surveillant gaze.

Additionally, the research participants described with cognizance the experiences of being a girl in a patriarchal space which enforces gendered expectations on them. Participants reported their struggles with combatting impossible gender norms placed on their bodies, leading to poor body image and disordered eating habits which they knew were harmful mentally and physically. Furthermore, the participants’ candid sexist encounters with boys and male teachers were shared, with particular focus placed on the struggle to be seen and heard and the double standard the girls must face in their BSE. The struggles of a patriarchal gaze which enforces bodily norms, and shame around menstruation creates an environment where the participants feel stigmatised and stereotyped. Participants shared their frustration with the societal taboo around periods, school bathroom spaces which were not designed for menstruators in mind, and the distress at period pain being dismissed. Participants specifically shared their discomfort with discussing periods with adult males and with each other when at a young age. They also spoke of their desire for bathroom spaces where there was better access to water, bigger toilet space and more time in their daily schedule to use the bathroom to address their period related needs. Their longing for simple measures to be changed in their BSE to make their period more comfortable shows that there is much work to be done on this matter, but which is achievable quickly.

The school architecture, its infrastructure, and environmental design choices were also explored by participants. They particularly highlighted their somatic sensitivity to light, sound and temperature. Temperature and feeling cold was a particular dislike for the participants with coldness leading to a sense of lethargy, pain during menstruation, and being a source of distraction. Furthermore, participants identified dark hallways and busy paths as spaces which they felt unsafe. Contrary to this, participants highlighted art rooms and their library as spaces where they felt liberated, warm and safe. The participants also highlighted the importance of nature and reflective spaces in the BSE as a tool of mindfulness, and the need for spaces which are designed to be inclusively shared by all bodies.

The participants displayed subversive behaviour by calling attention to the injustice they felt, but also by sharing personal stories of how they resisted an omnipresent patriarchal gaze and authority in their BSE. They rejected being seen as passive victims in the BSE, calling out spaces which fell short of equitability and challenging through their agency the patriarchal norms they felt they were scrutinised against. Participants highlighted several physical spaces in their BSE which were actively used as spaces of resistance. The library was described as a counter space to the rest of the school, with participants gravitating towards it due its warmth, open spaces and the sense of independence participants could have there. This sense of freedom was emphasised as a positive factor in mental health, and could also be achieved in spaces on the peripheral edges of the school such as somewhat abandoned spaces, and spaces which were messy. Spaces which received sunlight were also identified as spaces which were positively empowering, contrasting with closed and cold spaces such as dark hallways, steep stairways, and repressive classrooms. The bathrooms were also highlighted as a physical space which was malleable to either toxicity through gossip or resistance due to its informal space as a space of recreation and a space where one could ‘escape’ to during hypercontrolled school timetables.

The comments that participants shared with their respective groups were vulnerable and raw, however this act of sharing through vulnerability also felt like subversive behaviour, with the critical commentary of the participants creating an atmosphere of quiet empowerment. The

reflexivity they engaged with highlighted how young women and girls, when given access to heterotopic spaces, can become active agents of change through sharing.

7.4 Recommendations for Schools in Policy and Practice

In light of the findings and analysis, several recommendations can be made which improve the participants' experiences of their BSE through careful reflection and improvement in school policy and practice. These insights can also be applied to other BSEs to enhance critical awareness of how the BSE impacts girls. The implementation of suggestions may contribute to the creation of a more equitable BSE.

1. School designers should consider more carefully architectural aspects of the BSE such as dark spaces, and spaces which become crowded during peak movement times. Overcrowded spaces caused the participants anxiety and fear (6.4.8) and this can be negated with either larger spaces of communal divergence, or staggered timetables in the day to avoid overcrowding. Additionally, school administration and designers should be aware of the positive impact of natural light to the learning environment. The participants also discussed optimal sound conditions, and the distractions that can be caused when exposed to loud sound levels (6.4.7). This should be carefully considered when thinking of acoustic insulation between classrooms and be addressed during the planning of exceptional circumstances such as building work taking place in the BSE. Ambient temperatures should be viewed as of vital importance given that the impact of temperature can be felt on mental and physical wellness (6.4.7). Student input into policy design in regard to environmental comfort would allow for proactive problem solving which would align with the creation of effective learning environments.

2. There is a need for greater consideration of the specific gendered requirements in the BSE by those responsible so that girls feel comfortable in their BSE. This includes designing bathroom spaces which accommodate menstrual needs (6.4.6), building on the research of Randhawa et al. (2021) and Secor-Turner et al. (2020). Recommendations are also made for classrooms which can be flexibly arranged to allow girls to work together to suit their preferences. This can also be achieved via multifunctional spaces which allow for

creativity (6.4.8). Additionally, the participants showed a strong preference for connecting with nature in authentic ways (6.4.3). This could be developed into adaptive spaces which are centred on natural elements, and which allow for social or pedagogical use.

The participants also shared their discomfort with the sense of being watched, and the use of materials which reflected their body back to them. This could be resolved through sensitive creation of changing rooms where there is improved privacy, and increased focus on topics such as body positivity during personal and health education classes. Quiet spaces, and spaces which are 'hidden' also provide spaces which girls crave where they can socialise away from large groups, without feeling relentlessly observed.

3. Combatting patriarchal dominance in the BSE requires recognition from school policy makers and teachers of the experiences that girls' face in their BSE. Classroom dynamics where girls are silenced (6.4.4) was a common occurrence and shown in the literature review (Chapter 2) to be normalised. This requires a rethinking of spatial hierarchies in the classroom so that girls feel empowered to speak up, share ideas and be a visible presence in the classroom. Teachers require continuous professional development around the topic of spatial and gender inequalities so that their pedagogy can be cognizant of the power dynamics at play in the BSE. Additionally, the dominance of boys in social spaces in the BSE should be reconsidered as it appears that the participants are pushed to the periphery during recreational times, making them feel less empowered and engaged in their BSE.

4. Stress and feelings of anxiety were a dominating conversation topic, and the participants suggested that they felt their negative mental wellbeing connected to their BSE (6.4.9). Mental health deterioration derived from feeling cold, poor lighting and overcrowding in school spaces (6.4.7 and 6.4.8), but was primarily sourced from being overwhelmed by schoolwork, lack of education around building self-confidence in regard to body image (6.4.5), the continual silencing of their voices in their BSE (6.4.4) and a sense that their educational productivity was prioritised over their wellbeing. A recommendation for the school that the participants studied in would be to prioritise student mental wellbeing in

staff training and encourage teachers to use breaks which allow students to move around in class. Additionally, it is recommended that restorative spaces in the BSE are established which provide safe spaces for students to use as spaces which support mindfulness.

Although these recommendations focus on gender sensitivity and the needs which the participants expressed, they could ultimately produce more equitable learning environments for all. The research advocates for and underscores the importance of listening and respecting the views of students in discussions to do with their own built school environments.

7.5 Reflections on the Theoretical Framework

The intersection between Foucault (1967/1984), Lefebvre (1974/1991), Massey (1994), Matrix (1985), and Rose (1993) amalgamate in the experiences which the participants explore in their collages and conversations. Foucault's (1967/1984) theory on biopower, panopticon, and heterotopias, as well as Lefebvre's (1974/1991) theories on the spatial triad, give insight into how the BSE is a space of bodily regulation, but also a space of resistance and possibility.

The participants' explorations of how their BSE is felt somatically provided an example of how the panopticon is felt in school environments, with participants referring to the patriarchal gaze they feel and how that shapes their daily lived experience. Furthermore, participants brought to light the embodied experience of being in their BSE, highlighting how different types of violence: physical, emotional and psychological, are experienced in the BSE. This sense of regulation and control is an example of Foucault's (1967/1984) theory of biopower in action. Schools as sites of regulation is heavily implied within the discourse that the participants shared, and which the participants themselves showed self-awareness of. This also speaks of the heterotopic nature the BSE can become. Participants showed subversiveness and agency when sharing how they combatted gender stereotypes, body shaming and their outspokenness on what they wanted from their BSE. The research group space itself became a heterotopic space and provided a space of safety where participants could engage in building heterotopic discourse.

The details in which the participants discussed aspects of their BSE: the light, sound, temperature, the use of building materials and distribution in space and its effects on them show how Lefebvre's (1974/1991) spatial triad is constructed in their BSE. The perceived space, which is constructed from tangible characteristics, is critiqued by the participants who explore how natural light benefits them, how the cold has a negative impact on physical and mental wellbeing, and how their sense of safety is connected to sound. Additionally, participants also reflected on the conceived space, critiquing the placement of buildings in the school grounds, unfulfilled menstrual needs hindered by design flaws, and the power held in spaces by authoritative figures who design administrative buildings in specific ways. Regardless of living a BSE which the participants feel is designed to be an impediment, they continue to show agency in their lived space: participating in the research group, sharing a desire for learning spaces which are designed with their needs in mind, and challenging oppressive structures which impact their mental health.

The participants' explorations around menstrual care, the patriarchal gaze, and the power of memories on emotion align with the feminist arguments outlined in Chapter 3 by Massey (1994), Weisman (1994), Rose (1993), and Matrix (1985). The critiquing of space by women is something feminist geographers advocate for, and which the participants in the study engaged with so that the critique can expose the different ways space can be oppressive. The participants' collages and reflections on classrooms, hallways, green spaces, parking lots and bathrooms showed how their BSE is inculcated with patriarchal norms and is structured in ways that reinforce gender inequality.

A critical aspect of research conducted through a feminist geographical lens is to centre on empowering participants through spatial analysis. In the research, the participants were able to articulate through the various stages of the research, not only how they felt negatively and positively about their BSE, but also into what they envisioned a more inclusive BSE could look like. This reimagining of the BSE by tackling the inequitable power dynamics in the BSE is what has left a lasting impression on me as the researcher, and hopefully on the participants themselves.

7.6 Reflections on Arts-Based Methodology, Emotions and Reflexivity

Arts-Based Research, specifically a/r/tography and its blending of visual and written art played a pivotal role in the methodology as it allowed me and the participants to explore and traverse the research process and phenomena at study in creative ways. The choice to have the study take place over several months for each group allowed for creative processing that was not hurried but considered and circumspect. Through emotional cartography, photography, painting, drawing and collage, participants articulated experiences and perspectives on their BSE that may not have come to light through more traditional forms of data generation. The methodology and the art creation were particularly powerful as a method to illuminate the emotions the participants felt in the BSE. Furthermore, the creation of the final culminating collage for each participant was an effective method to scaffold the participants' sharing of their art. This process of sharing, which began in the first session and finished with the last, also added additional layers of sensemaking and interpretation that the participants went through. These aspects of the methodology led to retrieval of data which, through its complexity, may have been difficult for participants to articulate without the help of arts-based methods.

Whilst the use of arts-based methods was an empowering experience, it also brought challenges to the research. Due to the desire for the participants to fully engage with the artistic process, a considerable length of time was needed to fully execute the methodological design. Additionally, logistical challenges were ever-present. This included sometimes taking time to develop and print photographs for participants. Some participants also felt initially unsure of their artwork, and this also required additional sensitivity to address through encouragement and reassurance.

Regardless, the research has illustrated that a/r/tography is a rich and insightful method to assist participants in exploring their BSE. An aspect of the research which will remain with me is how through empathetic ABR methods like a/r/tography participants were able to imagine and share ideas of a world where they did not feel like second class citizens. This reflects writings by Leavy (2015) who advocates for ABR to be used as a tool of socio-political innovation. Using PAR and ABR research methodologies has resulted in findings which show the embodied lived experience of the participants, and which can be used to rethink school design, the importance of memory in understanding space, and the complexity of the lived BSE.

Explicit engagement with emotions became a tool with which participants could deepen understanding of their BSE. Ahmed' (2004) thoughts on how emotions are politicised, and how they can be used as a political force, can be observed in the research. Emotions in the research were explored and embraced in the research through artmaking, sharing and self-analysis. This allowed participants to understand the emotional landscapes of daily lived experiences, and reflect on where those emotions were spruced from. This can be seen with exploration of where and when shame and feelings of stigma were encoded in the menstrual lives of the participants, and how light and nature were directly impacting the positive emotional experience of the BSE. The insights gained from analysis of emotions allowed the participants to exercise agency, generating a sense of reclaiming and reimaging of the BSE.

Whilst the participants emotions were central to authentic I.P.A. in the research, my ongoing reflexivity must also be acknowledged as having an impact on the findings. Researcher reflexivity was a key feminist methodological choice (Finlay, 2002; Rose, 1997b) in the research, guiding decisions around the methods used and ethical considerations. Through the use of my research diary and researcher journal I attempted to document how my identity and the memories and thoughts which emerged of my own experiences of my childhood BSE shaped the research findings. I practiced transparency in these moments by writing them into the findings and discussion chapter. I have also shared my own journey of the doctoral research, layered in descriptive passages of my positionality in the introduction, artwork shared in the appendices, and collages created and shared in the thesis and photobook. The aim of this was to enrich the research with a sense of a/r/tographic expression of the rhizomatic experience of being a teacher-research-artist when conducting reflexive educational research.

7.7 Research Gaps Revisited

In subsection 1.5 three research gaps were identified which I attempted to fill to contribute to knowledge about girls in educational spaces. The following section outlines insights from the research will help fill the identified gaps:

1. Population Gap - The participants of the study were Colombian teenage girls from an affluent background with little research on them existing. What research has existed on adolescents' experience of their BSE in Bogotá is focused on a different socio-economic background and focuses on boys and girls (Maldonado et al., 2023). The hope is that the research helps to diversify the definition of a Latina girl, building on the work of Mohanty (2003) and definitions of what constitutes girlhood for different girls around the world. The research for this doctoral research has helped to fill this gap as the participants' reflections, voices and opinions on their BSE will be shared through this research.

2. Methodological Gap - This research uses the tenets of arts-based research, specifically a/r/tography, to answer Finley's (2008) call for research in arts to be democratised. Through the use of ABR the research welcomes readers, and a wider audience, to fully explore the participants and the researcher's representations of the BSE, and the theory and literature around the BSE through visual immersion. The collages, photographs and photobook are employed in this research to create a thesis which is also a piece of a/r/tography and which I once again invite the reader to fully immerse themselves in by viewing the art created for the thesis in Chapter 5 and in the photobook.

3. Knowledge Gap - I highlighted how girls and the daily experiences they have of their BSE is an area of research paucity in the literature review (Chapter 2). Through the methodological framework described in Chapter 5 which interweaves feminist participatory methods, I have attempted to ensure that the participants' voices are not superseded by my own, and do so through presenting the themes interpreted in Chapter 5 as amplifications of what the participants shared and analysed themselves. This aligns and builds on research conducted by Morris & Paris (2021) who focus on increasing participation of participants in educational research through ABR, and Harasym et al. (2024) who advocate for ABR as a method which empowers traditional silenced sections of society. The research has contributed to the field of feminist geography and children's geography, elucidating the complex patriarchal structures in which the participants experience their BSE, building on the work of Stannard (2022).

7.8 Limitations of the Research

The research is conducted on a small scale, with 26 participants in total, and therefore the results and findings of the research cannot be applied to broader populations. Furthermore, the group of participants are similar in social and educational background having attended the same school since a young age, and having similar experiences and privileges as a result of coming from the same background. A result of the specific cultural background of the participants means that although patterns and themes were identified, they cannot be used as conclusions which apply to all Colombian children, girls or teenagers.

The research also took place in a private school, and this means that the daily lived experiences which the participants explore is based upon a life which is very different in terms of resources, educational experiences and societal norms to other Colombian girls. An example of how this background can affect the research is that the arts-based nature of the research was very easily adopted by the participants as the school they attend has a rich culture of appreciating arts, and values arts highly. This meant participants were well versed, and comfortable with creating different types of art before the research began. The findings of the research may be applicable to similar Colombian teenage girls, but those who have similar backgrounds in their education. Additionally, the research is difficult to replicate not just because of the unique location of the school and the cultural background of the participants, but also because of the unique power dynamics between myself as the researcher and the participants. This is because I had already built a trusting and close relationship with participants in the position of their teacher. I had known some of the participants for three years and had a unique rapport with them which would be difficult to replicate.

Moreover, although the research being arts-based is one aspect which I am most proud of, and which the participants enjoyed, it also produced data which is deeply subjective and open-ended. Without the explorations and explanations of the participants about the art they had created it would be difficult to ascertain the experiences the participants wanted to share.

The multilingual nature of the study, where participants switched between English and Spanish presents both and asset and limitation to the study. Participants were encouraged to express

themselves during the research in whichever language they wanted, though all participants conversed with me in English and presented their collages and analysis in English. The use of Spanish words and expressions seen in some collages reflects the duality of the participants' lives, where they are able to think and share in both English and Spanish. However, though I speak and understand Spanish at a fairly advanced level there may have been conversations which I misinterpreted in my research diary, and additionally insights which may have been lost for emotional and contextual significance. The research shows that embracing the multilingual identities that participants had created a complex and challenging dilemmas when thinking of interpretation of ideas and expressions.

7.9 Recommendations for Future Research

There are several areas which I believe could be further researched and explored, as outlined below:

1. Equitable Educational Environments - The participants strongly expressed their desire for school spaces to be redesigned with inclusivity for all bodies in mind. This re-designing includes spaces which accommodate the needs of girls, but also a thorough re-designing of school spaces to combat mental health issues. Future research needs to focus on how schools can be redesigned, areas of current success and an honest approach to deconstruct and reconstruct spaces which develop inequity in the BSE. This could be achieved by working closely with organisations such as Make Space for Girls (Make Space For Girls, n.d.) who specialise in improving the experiences of girls in their built environments through outdoor spatial design which girls benefit from. This focus would benefit all inhabitants of the BSE and build towards more equitable educational environments.

2. A/r/tography in Educational Research - The use of a/r/tography in this research created some tension between the academic expectations of doctoral research and conducting research through the arts, however the result is a doctoral thesis which attempts to share research in a democratised way. Additionally, working with adolescents and young children through ABR advances on Modi (2020) who advocates for research with young people in which they can benefit from. Future research could continue to build on the

blending of research with a/r/tography and expand understanding of what constitutes rigorous research practices, and its potential for being a research method of empowerment for young people.

3. Cross-Cultural Research - Although the research is based on a small number of participants in a specific cultural background it would be insightful to further explore the themes identified by participants in different cultural contexts to ascertain whether there exists a broader pattern amongst the experience of the BSE for teenage girls. This could be researching in different socio-economic contexts in Colombia or conducting the research in different countries.

4. Heterotopic Spaces in Research – The weekly research group became a space of heterotopic safety (Foucault, 1984; Kannen, 2013) for the participants where they could share their lived experiences, memories, emotions and art without fearing judgment, outside the omnipresent surveillant gaze which is their norm in their BSE. As a result, participants were able to share and critique their BSE in depth, and were able to authentically share their experiences of the phenomena. This has wider implication for both educational spaces, and research in education. Future research could explore how heterotopic research spaces can be used to research in conjunction with children, and specifically girls. Additionally, schools could use heterotopic spaces as intentional pedagogical spaces created where students can share their thoughts on safety, marginalisation and identity in spaces where they exercise a sense of agency.

7.10 Concluding Thoughts

This doctoral research has been a labour of love, challenging myself as a researcher, artist, teacher, and woman. The mental toll it has taken on me is not just because of the nature of a doctoral thesis being a solitary path, but because of the understanding of how the BSE has shaped my life, and continues to shape the lives of girls, experienced under a relentless patriarchal gaze. Regardless of the struggles I have experienced during this research I have also reaffirmed my belief that space and place can be rethought, and reconstructed to benefit all people, and I have a profound respect for the participants of this research who placed faith in the research to do good,

and who shared their experiences with a sense of fierce courage, placing their trust in me to authentically share their experiences.

Taking an artistic journey of exploration of the research objectives and aim, alongside more traditional doctoral writing, has been an enlightening and powerful path. The hope is that those who read this research, and view the artistic creations produced from it, can immerse themselves into the complex world of architecture and art as I, and my participants have done. At the end of this doctoral research I am once again reminded of the pertinence of the feminist slogan ‘the personal is always political’ and it is through respectful exploration, sharing and interpretation of the personal that insight into patriarchal societal structures can be revealed. I hope to continue to work with girls, for girls, across the world, to make their built school environments a more equitable and safer space for all.

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Appendices

Appendix A - Excerpts from Researcher Field Diary

Some P's walked alone, and others in groups.	Keeping distance/giving space is the hardest thing
Photography was used by some P's to recall key spaces for later. (this ended up being used in their collages).	

How I was feeling:

- Excited for their emotional mapping.
- Pensive as what if they did not engage fully.
- Curious about the actual activity - must do myself at some point too.
- Conflicted when students reveal things teacher/researcher conundrums.

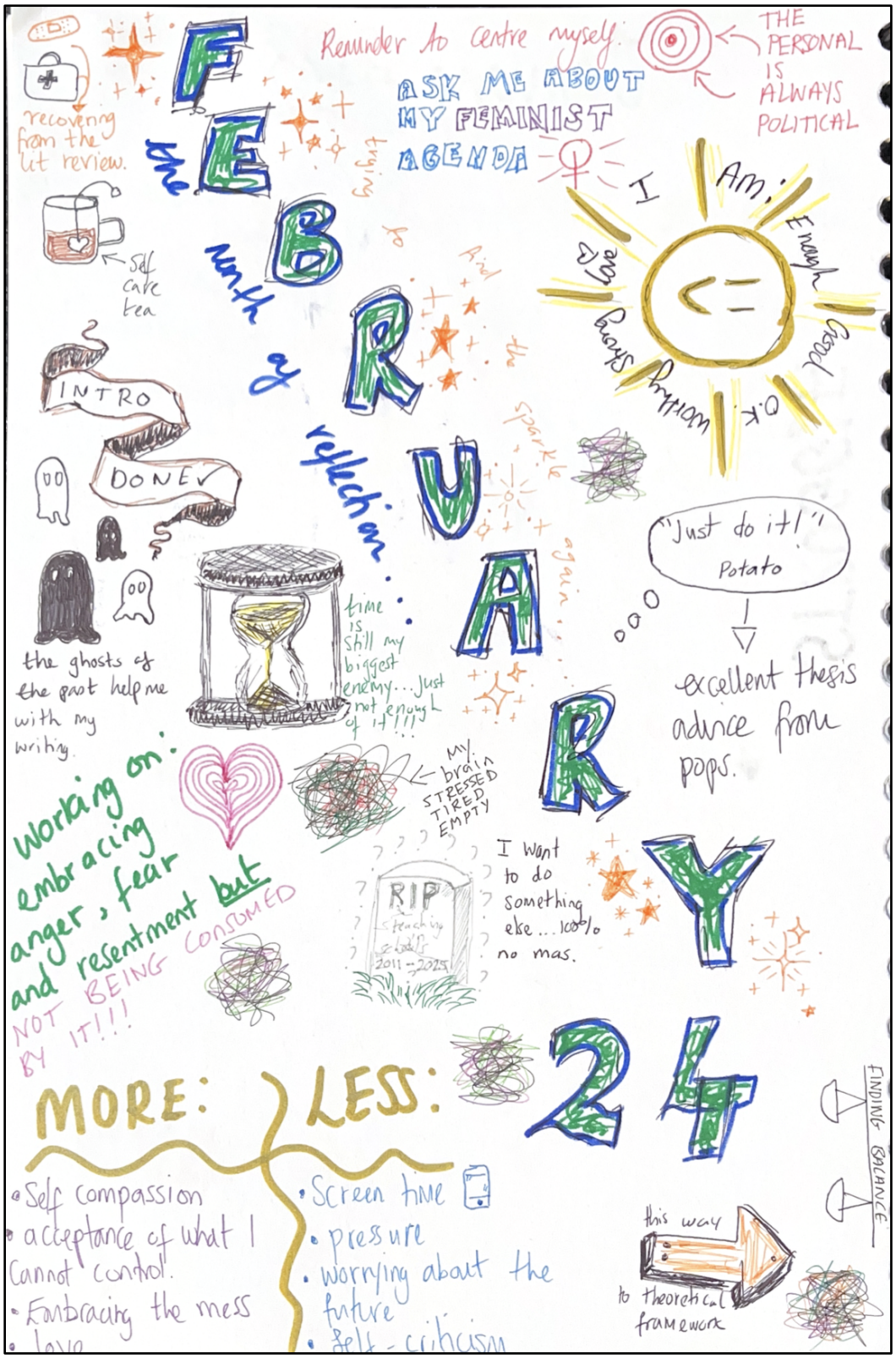
Session 5/6

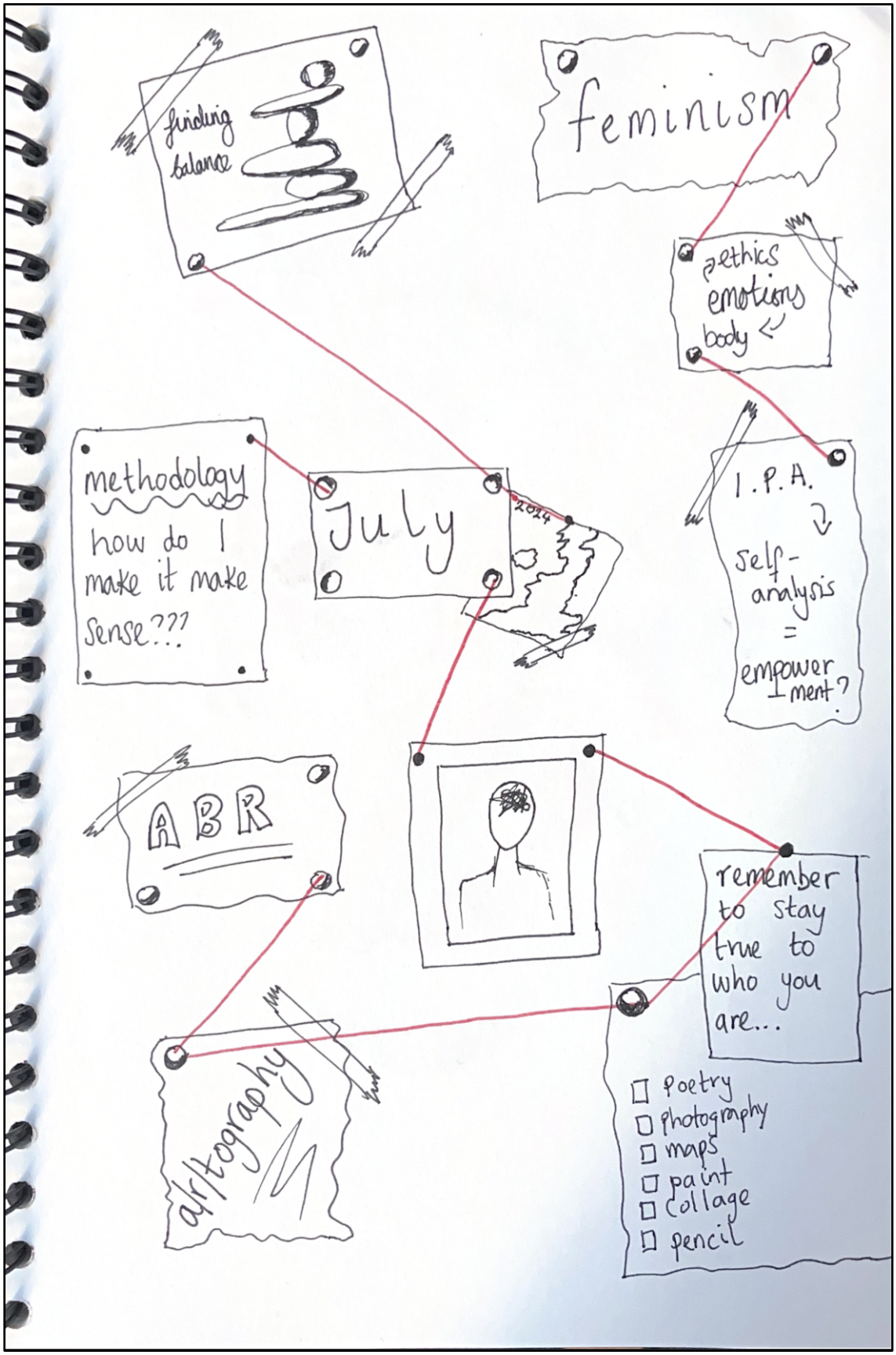
Activity:

Group analysis of maps

Observations	Personal Reflections
Discussion about how boys purposefully play football around the girls to make them afraid.	I feel the same way about many spaces e.g. field, football etc.
Bus as a liminal space, but without the same rules as school.	P's vented about the lack of resources the school provides, What do I do in this situation?
No privacy in the nurse's office is a huge issue. Should be a space of safety, but feels the opposite. One P remembered how when P was younger they overheard a very private conversation in the nurse office about how a student had cancer- rights of the child?	Conversations about the lack of privacy in nurses office prompted self reflection and changed course of my teacher interactions later on in a diff situation
Fear of admin/HOS offices as "nothing good ever happens there", "you can't defend	

Appendix B - Excerpts from Researcher Journal




finding balance
feminism
ethics
emotions
body
methodology
how do I make it make sense???
July
2024
I.P.A.
self-analysis
=
empowerment?
ABR
remember to stay true to who you are...
a/r/tography
Poetry
photography
maps
paint
collage
pencil

Appendix C - Ethics Approval Letter

The University Of Sheffield.

Downloaded: 01/10/2024
Approved: 18/10/2022

Rajwant Saghera
Registration number: 200192473
School of Education
Programme: EdD

Dear Rajwant

PROJECT TITLE: Gender, art and architecture: an A/r/tographic exploration of the built school environment for Latina high school girls
APPLICATION: Reference Number 049568

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 18/10/2022 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 049568 (form submission date: 12/09/2022); (expected project end date: 30/06/2023).
- Participant information sheet 1111813 version 1 (12/09/2022).
- Participant information sheet 1111811 version 1 (12/09/2022).
- Participant information sheet 1111810 version 1 (12/09/2022).
- Participant consent form 1111815 version 1 (12/09/2022).
- Participant consent form 1111814 version 1 (12/09/2022).

If during the course of the project you need to deviate significantly from the above-approved documentation please inform me since written approval will be required.

Your responsibilities in delivering this research project are set out at the end of this letter.

Yours sincerely

ED6ETH EDU
Ethics Admin
School of Education

Please note the following responsibilities of the researcher in delivering the research project:

- The project must abide by the University's Research Ethics Policy: https://www.sheffield.ac.uk/research-services/ethics-integrity/policy
- The project must abide by the University's Good Research & Innovation Practices Policy: https://www.sheffield.ac.uk/polopoly_fs/1.671066!/file/GRIPPolicy.pdf
- The researcher must inform their supervisor (in the case of a student) or Ethics Admin (in the case of a member of staff) of any significant changes to the project or the approved documentation.
- The researcher must comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data.
- The researcher is responsible for effectively managing the data collected both during and after the end of the project in line with best practice, and any relevant legislative, regulatory or contractual requirements.

Appendix D - Participant Consent Form

The University Of Sheffield.

Gender, art and architecture: an arts based exploration of the school environment for Latina high school girls - Consent Form

Please tick the appropriate boxes	Yes	No
Taking Part in the Project		
I have read and understood the project information sheet dated 01/10/2022 or the project has been fully explained to me. (If you will answer No to this question please do not proceed with this consent form until you are fully aware of what your participation in the project will mean.)	☐	☐
I have been given the opportunity to ask questions about the project.	☐	☐
I agree to take part in the project. I understand that taking part in the project will include investigating, and creating art to share my experiences of school design and architecture.	☐	☐
I understand that by choosing to participate as a volunteer in this research, this does not create a legally binding agreement nor is it intended to create an employment relationship with the University of Sheffield.	☐	☐
I understand that my taking part is voluntary and that I can withdraw from the study at any time. I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.	☐	☐
I wish to be named in the introduction of the research. I understand that my actual artwork and commentary will remain anonymous. I understand I can ask for my name to be removed at any given time,	☐	☐
How my information will be used during and after the project		
I understand my personal details such as name, phone number, address and email address etc. will not be revealed to people outside the project.	☐	☐
I understand and agree that my words and art work created may be quoted in publications, reports, web pages, and other research outputs. I understand that I will not be named in these outputs unless I specifically request this.	☐	☐
I understand and agree that other authorised researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	☐	☐
I understand and agree that other authorised researchers may use my data in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.	☐	☐
I give permission for the artwork that I provide to be deposited in the University of Sheffield repository ORDA so it can be used for future research and learning	☐	☐
So that the information you provide can be used legally by the researchers		
I agree to assign the copyright I hold in any materials generated as part of this project to The University of Sheffield.	☐	☐

Name of participant: Signature Date

Name of Researcher: Rajwant Saghera Signature Date

Project contact details for further information:

Lead Researcher Supervisor

Rajwant Saghera
rsaghera1@sheffield.ac.uk

Dr. Kirsty Liddiard
k.liddiard@sheffield.ac.uk

Supervisor
Dr. Ryan Bramley
r.bramley@sheffield.ac.uk

Head of the Education Department
Rebecca Lawthom
r.lawthom@sheffield.ac.uk

Appendix E - Participant Information Sheet

Participant Information Sheet

1.Research Project Title:
Gender, art and architecture: an arts based exploration of the school environment for Latina high school girls

2. Invitation paragraph
You are being invited to take part in a research project. Before you decide whether or not to participate, it is important for you to understand why the research 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. Ask us 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. Thank you for reading this.

3. What is the project's purpose?
The research project aims to understand better how female students in Grade 10 and 11 experience the design of the school. The research is attempting to share the views of Latina students as their voices do not often appear in research papers. The research is arts based, so you will explore the idea of the school space through different forms of art. You do not need to be an artist or have artistic skill to take part. The research will not take away from your normal class time, and it will not be graded. The research will take place over 4 months during your regular school term.

4. Why have I been chosen?
You have been chosen as you fit the criteria for the participants needed in the research, being someone who identifies as female, in grade 10 or 11 at the school in which you study in.

5. Do I have to take part?
It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form, as well as your parents as you are still in school) and you can still withdraw at any time without any negative consequences. You do not have to give a reason. If you wish to withdraw from the research, please contact the primary researcher, Rajwant Saghera.
You may withdraw from the study at any time, however the data collected from yourself from session 2 onwards may still be used, completely anonymised. By participating in this research you are not entering into any formal contract of employment with the University of Sheffield and there will be no monetary reward for taking part in the research. It is completely voluntary.

6. What will happen to me if I take part? What do I have to do?
The research will take 4 months to complete, and you will be involved in a weekly workshop to do with the research. This will last 90 minutes.
The research is attempting to discover how you feel about your local school design and how you experience the school environment. This involves looking at how the school buildings and space are designed and what you feel/experience in these spaces. You will be asked to express this through using artistic methods which we will cover in the workshops. At the end of the research

project you and your fellow participants will look at each other's art pieces and analyse if there are any common themes occurring. These will then be presented in the research in written form.

7. What are the possible disadvantages and risks of taking part?
There may be topics which come up in your investigation that can be triggering or cause you discomfort. The school wellbeing officer is aware of the research and is available to support you in case of this. You can stop participating in the workshop if you feel it is harming you in some way, and join in again when you feel ready.
8. What are the possible benefits of taking part?
Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will help you understand how your environment can influence your daily life and steps you can take to use the environment to your full potential. The research could also be an interesting discussion point in university/intern/work experience interviews and applications. The research will give you an opportunity to understand better how research is conducted.

9. Will my taking part in this project be kept confidential?
All the information that we collect about you during the course of the research will be kept strictly confidential and will only be accessible to members of the research team. You will not be able to be identified in any reports or publications unless you have given your explicit consent for this. If you agree to us sharing the information you provide with other researchers (e.g. by making it available in a data archive) then your personal details will not be included unless you explicitly request this'. If you wish to be named in the introduction of the research as a research collaborator you will be given explicit opportunity to consent to this. Regardless, the work and opinions you share will be kept anonymous.
In case you bring up a safeguarding issue, I will be obligated to report it to the head of High School and Well Being Coordinator. This is for your safety and follows school policy and regulations.

10. What is the legal basis for processing my personal data?
According to data protection legislation, we are required to inform you that the legal basis we are applying in order to process your personal data is that 'processing is necessary for the performance of a task carried out in the public interest' (Article 6(1)(e)). Further information can be found in the University's Privacy Notice https://www.sheffield.ac.uk/govern/data-protection/privacy/general.'
11. What will happen to the data collected, and the results of the research project?
Once the research is complete you will be able to take the hard copies of the work you produce home. Digitised copies will be kept securely on the University of Sheffield server, and be encrypted for further protection. The data will be used to write a research report, and due to the nature of this research it is very likely that other researchers may find the data collected to be useful in answering future research questions. We will ask for your explicit consent for your data to be shared in this way.
You should expect the research to be published in some format, most likely in a journal. When there is an expected publishing date of the research you will be contacted and informed of this information. Your data will be anonymised throughout the research, and regardless of where it is published.

12. Who is organising and funding the research?

The research is being organised by the University of Sheffield. There is no funding for this research.

13. Who is the Data Controller?
The University of Sheffield will act as the Data Controller for this study. This means that the University is responsible for looking after your information and using it properly.
14. Who has ethically reviewed the project?
This project has been ethically approved via the University of Sheffield's Ethics Review Procedure, as administered by the Education department.

15. What if something goes wrong and I wish to complain about the research or report a concern or incident?
If you are dissatisfied with any aspect of the research and wish to make a complaint, please contact Rajwant Saghera (rsaghera1@sheffield.ac.uk) or Dr. Kirsty Liddiard (k.liddiard@sheffield.ac.uk) in the first instance. If you feel your complaint has not been handled in a satisfactory way you can contact the Head of the Department of Education, Professor Rebecca Lawthom (r.lawthom@sheffield.ac.uk). If the complaint relates to how your personal data has been handled, you can find information about how to raise a complaint in the University's Privacy Notice: https://www.sheffield.ac.uk/govern/data-protection/privacy/general.

If you wish to make a report of a concern or incident relating to potential exploitation, abuse or harm resulting from your involvement in this project, please contact the project's Designated Safeguarding Contact Dr. Kirsty Liddiard (k.liddiard@sheffield.ac.uk). If the concern or incident relates to the Designated Safeguarding Contact, or if you feel a report you have made to this Contact has not been handled in a satisfactory way, please contact the Head of the Department of Education Professor Rebecca Lawthom (r.lawthom@sheffield.ac.uk) and/or the University's Research Ethics & Integrity Manager (Lindsay Unwin; l.v.unwin@sheffield.ac.uk).

16. Contact for further information
Lead Researcher
Rajwant Saghera rsaghera1@sheffield.ac.uk
Supervisor
Dr. Kirsty Liddiard k.liddiard@sheffield.ac.uk
Supervisor
Dr. Ryan Bramley r.bramley@sheffield.ac.uk

You will be given a copy of this information sheet, as well as the signed consent forms you must sign in order to take part in the research. Remember that your parents must also read their copy of the information sheet and sign their consent forms to allow you to take part in the research.

Thank you for taking part in this research! Rajwant Saghera - Lead Researcher

Appendix F - Participant Debriefing Information Sheet

Participant Debriefing Information Sheet

1. What did we do and what happens to the research project now?
We looked at how the architecture and the built environment of your school has affected you and the experiences you have had in those spaces. You explored particular aspects of this through art workshops and created artwork which expressed your feelings. As a research group you analysed each other's ideas and picked key aspects which you think should be shared with the public. The analysis, conclusions and thoughts you have had will be put together into a thesis report. This may take between 1-3 years to complete. After it has been written and submitted to the university it may also have parts of it, or summaries of it, published in educational or architectural academic journals. The lead researcher may also talk about the research at conferences, and give presentations about it.

2. What about my work?
Your art work has been returned back to you and belongs to you. Digital copies of your work may be used in the final thesis report which you have given consent for in the participation information sheet, and in the consent forms you and your parent/guardian have signed.

3. Will people know I participated?
If you chose, and consented to include your name in the introduction of the thesis report, then your name will appear there. The research report may contain images of your work, and explanations of your ideas, however your actual name will not appear in these sections to protect your privacy.

4. What do I do if I feel triggered by the research?
Here are some suggestions for you in case something about the research is making you have a negative experience:

1. Contact the lead researcher. Contact details are below.
2. Discuss your thoughts with the school's wellbeing coordinator.
3. Share your thoughts with your parent/guardian, especially if you are feeling unsafe.
4. Contact the following charities which help young people with their mental health:
   https://www.youngminds.org.uk/
   https://choosementalhealth.org/
   Childrenchangecolombia.org
   https://www.caringforcolombia.org/
   www.dunna.org

5. Who do I contact if I want to talk more about the project?
If you would like to know more about the next steps for the research, or would like to keep up to date with the publications of the project, please contact the lead researcher. Details are at the end of this information sheet.

Rajwant Saghera - Lead Researcher rsaghera1@sheffield.ac.uk

Appendix G - Parent Consent Form

The University Of Sheffield.

Gender, art and architecture: an arts based exploration of the school environment for Latina high school girls - Consent Form Parent/Guardian

Please tick the appropriate boxes	**Yes**	**No**
Taking Part in the Project		
I have read and understood the project information sheet dated 01/10/2022 or the project has been fully explained to me. (If you will answer No to this question please do not proceed with this consent form until you are fully aware of what your participation in the project will mean.)	☐	☐
I have been given the opportunity to ask questions about the project.	☐	☐
I agree for my child to take part in the project. I understand that taking part in the project will include investigating, and creating art to share experiences of school design and architecture.	☐	☐
I understand that by choosing to let my child participate as a volunteer in this research, this does not create a legally binding agreement nor is it intended to create an employment relationship with the University of Sheffield.	☐	☐
I understand that my child taking part is voluntary and that I can withdraw them from the study at any time. I do not have to give any reasons for why I no longer want them take part and there will be no adverse consequences if I choose to withdraw.	☐	☐
I wish for my child to be named in the introduction of the research. I understand that my child's actual artwork and commentary will remain anonymous. I understand I can ask for my child's name to be removed at any given time	☐	☐
How information will be used during and after the project		
I understand personal details such as my child's name, phone number, address and email address etc. will not be revealed to people outside the project.	☐	☐
I understand and agree that my child's words and art work created may be quoted in publications, reports, web pages, and other research outputs. I understand that they will not be named in these outputs unless they specifically request this.	☐	☐
I understand and agree that other authorised researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	☐	☐
I understand and agree that other authorised researchers may use the data in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.	☐	☐
I give permission for the artwork that my child provides to be deposited in the University of Sheffield repository ORDA so it can be used for future research and learning	☐	☐
So that the information you provide can be used legally by the researchers		
I agree to assign the copyright my child holds in any materials generated as part of this project to The University of Sheffield.	☐	☐

Name of Parent/Guardian: Signature Date

Name of participant (your child):

Name of Researcher: Signature Date
Rajwant Saghera

Fecha

Nombre del Investigador: Rajwant Saghera

Firma

Fecha

Datos de contacto del proyecto para más información:

Investigadora Principal
Rajwant Saghera
rsaghera1@sheffield.ac.uk

Supervisora
Dra. Kirsty Liddiard
k.liddiard@sheffield.ac.uk

Supervisor
Dr. Ryan Bramley
r.bramley@sheffield.ac.uk

Jefe del Departamento de Educación
Rebecca Lawthom
r.lawthom@sheffield.ac.uk

Appendix H - Parent Information Sheet

1/10/2022

Parent/Guardian Participant Information Sheet - Spanish Below/Espanol Abajo

1. Research Project Title:

Gender, art and architecture: an arts based exploration of the school environment for Latina high school girls

2. Invitation paragraph

Your child is being invited to take part in a research project. Before you decide whether or not to grant them permission to participate, it is important for you to understand why the research 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. 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 for your child to take part. Thank you for reading this.

3. What is the project's purpose?

The research project aims to understand better how female students in Grade 10 and 11 experience the design of the school. The research is attempting to share the views of Latina students as their voices do not often appear in research papers. The research is arts based, so your child will explore the idea of the school space through different forms of art. Your child does not need to be an artist or have artistic skill to take part. The research will not take away from their normal class time, and it will not be graded. The research will take place over 9 weeks months, beginning after October midterm break, and ending before Christmas break.

4. Why has my child been chosen?

Your child has been chosen as they fit the criteria for the participants needed in the research, being someone who identifies as female, in grade 10 or 11, at the school in which they study in.

5. Does my child have to take part?

Your child has expressed interest in participating but it is up to you to decide whether or not they child can take part. If you do decide to let them take part you will be given this information sheet to keep (and be asked to sign a consent form), and you can still withdraw your child at any time without any negative consequences. You do not have to give a reason. If you wish for your child to withdraw from the research, please contact the primary researcher, Rajwant Saghera.

You may withdraw from the study at any time, however the data collected from your child from session 2 onwards may still be used, completely anonymised. By participating in this research they are not entering into any formal contract of employment with the University of Sheffield and there will be no monetary reward for taking part in the research. It is solely entered through volunteering.

6. What will happen if my child takes part? What do they have to do?

The research will take 16 weeks to complete, and they will be involved in a weekly workshop to do with the research. This will last 90 minutes.

The research is attempting to discover how they feel about their local school design and how they experience the school environment. This involves looking at how the school buildings and space are designed and what they feel/experience in these spaces. They will be asked to express

this through using artistic methods which we will cover in the workshops. At the end of the research project they and their fellow participants will look at each other's art pieces and analyse if there are any common themes occurring. These will then be presented in the research in written form.
The below image shows an approximate research schedule and activities planned for that schedule.

7. What are the possible disadvantages and risks of taking part?
There may be topics which come up in your investigation that can be triggering or cause your child discomfort. The school wellbeing officer is aware of the research and is available to support them in case of this. They can stop participating in the workshop if they feel it is harming them in some way, and join in again when they feel ready.

8. What are the possible benefits of taking part?
Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will help your child understand how their environment can influence their daily life and steps they can take to use the environment to their full potential. The research could also be an interesting discussion point in university/intern/work experience interviews and applications. The research will give your child an opportunity to understand better how research is conducted.

9. Will taking part in this project be kept confidential?
All the information that we collect about your child during the course of the research will be kept strictly confidential and will only be accessible to members of the research team. They will not be able to be identified in any reports or publications unless you, and they, have given your explicit consent for this. If you, and they, agree to us sharing the information they provide with other researchers (e.g. by making it available in a data archive) then their personal details will not be included unless they explicitly request this. If they wish to be named in the introduction of the research as a research collaborator they will be given explicit opportunity to consent to this. Regardless, the work and opinions they share will be kept anonymous.In case your child brings up a safeguarding issue, I will be obligated to report it to the head of High School and Well Being Coordinator. This is for your safety and follows school policy and regulations.

10. What is the legal basis for processing personal data?
According to data protection legislation, we are required to inform you that the legal basis we are applying in order to process your personal data is that ‘processing is necessary for the performance of a task carried out in the public interest’ (Article 6(1)(e)). Further information can be found in the University’s Privacy Notice https://www.sheffield.ac.uk/govern/data-protection/privacy/general.’

11. What will happen to the data collected, and the results of the research project?
Once the research is complete your child will be able to take the hard copies of the work produced home. Digitised copies will be kept securely on the University of Sheffield server, and be encrypted for further protection. The data will be used to write a research report, and due to the nature of this research it is very likely that other researchers may find the data collected to be useful in answering future research questions. We will ask for explicit consent for your data to be shared in this way.
You should expect the research to be published in some format, most likely in a journal. When there is an expected publishing date of the research you will be contacted and informed of this

information. Your data will be anonymised throughout the research, and regardless of where it is published.

12. Who is organising and funding the research?
The research is being organised by the University of Sheffield. There is no funding for this research.

13. Who is the Data Controller?
The University of Sheffield will act as the Data Controller for this study. This means that the University is responsible for looking after your information and using it properly.

14. Who has ethically reviewed the project?
This project has been ethically approved via the University of Sheffield's Ethics Review Procedure, as administered by the Education department.

15. What if something goes wrong and I wish to complain about the research or report a concern or incident?
If you are dissatisfied with any aspect of the research and wish to make a complaint, please contact Rajwant Saghera (rsaghera1@sheffield.ac.uk) or Dr. Kirsty Liddiard (k.liddiard@sheffield.ac.uk) in the first instance. If you feel your complaint has not been handled in a satisfactory way you can contact the Head of the Department of Education, Professor Rebecca Lawthom (r.lawthom@sheffield.ac.uk). If the complaint relates to how your personal data has been handled, you can find information about how to raise a complaint in the University's Privacy Notice: https://www.sheffield.ac.uk/govern/data-protection/privacy/general.

If you wish to make a report of a concern or incident relating to potential exploitation, abuse or harm resulting from your involvement in this project, please contact the project's Designated Safeguarding Contact Dr. Kirsty Liddiard (k.liddiard@sheffield.ac.uk). If the concern or incident relates to the Designated Safeguarding Contact, or if you feel a report you have made to this Contact has not been handled in a satisfactory way, please contact the Head of the Department of Education Professor Rebecca Lawthom (r.lawthom@sheffield.ac.uk) and/or the University's Research Ethics & Integrity Manager (Lindsay Unwin; l.v.unwin@sheffield.ac.uk).

16. Contact for further information
Lead Researcher
Rajwant Saghera rsaghera1@sheffield.ac.uk
Supervisor
Dr. Kirsty Liddiard k.liddiard@sheffield.ac.uk
Supervisor
Dr. Ryan Bramley r.bramley@sheffield.ac.uk

You will be given a copy of this information sheet, as well as the signed consent forms you must sign in order to take part in the research.
Thank you for taking part in this research!

Rajwant Saghera - Lead Researcher

1/10/2022

Hoja de información para los padres participantes

Título del proyecto de investigación:

Género, arte y arquitectura: una exploración basada en las artes del entorno escolar de las chicas latinas de secundaria

Párrafo de invitación
Su hijo/a está siendo invitado/a a participar en un proyecto de investigación. Antes de que decida si le concede o no el permiso para participar, es importante que entienda por qué se realiza la investigación y en qué consistirá. Tómese el tiempo necesario para leer detenidamente la siguiente información y coméntela con otras personas si lo desea. Pregunte si hay algo que no está claro o si desea más información. Tómese su tiempo para decidir si desea que su hijo participe o no. Gracias por leer esto.

¿Cuál es el objetivo del proyecto?
El proyecto de investigación tiene como objetivo comprender mejor cómo viven las alumnas de los grados 10 y 11 el diseño de la escuela. La investigación intenta compartir los puntos de vista de las estudiantes latinas, ya que sus voces no suelen aparecer en los trabajos de investigación. La investigación se basa en las artes, por lo que su hija explorará la idea del espacio escolar a través de diferentes formas de arte. No es necesario que su hijo sea un artista o tenga habilidades artísticas para participar. La investigación no les quitará tiempo de clase y no se calificará. La investigación se llevará a cabo durante 9 semanas, comenzando después de las vacaciones de octubre y terminando antes de las vacaciones de Navidad.

¿Por qué se ha elegido a mi hijo?
Su hijo ha sido elegido porque cumple con los criterios de los participantes que se necesitan en la investigación, siendo alguien que se identifica como mujer, en el grado 10 u 11, en la escuela en la que estudia.

¿Tiene mi hijo que participar?
Su hijo ha expresado su interés en participar, pero es usted quien debe decidir si puede o no participar. Si decide que participe, se le entregará esta hoja informativa para que la conserve (y se le pedirá que firme un formulario de consentimiento), y podrá retirar a su hijo en cualquier momento sin ninguna consecuencia negativa. No tiene que dar ninguna razón. Si desea que su hijo se retire de la investigación, póngase en contacto con el investigador principal, Rajwant Saghera.
Puede retirarse del estudio en cualquier momento, pero los datos recogidos de su hijo a partir de la sesión 2 podrán seguir utilizándose, de forma totalmente anónima. Al participar en esta investigación no están suscribiendo ningún contrato formal de trabajo con la Universidad de Sheffield y no habrá ninguna recompensa monetaria por participar en la investigación. Se entra únicamente a través del voluntariado.

¿Qué ocurrirá si mi hijo participa? ¿Qué tiene que hacer?

La investigación durará 16 semanas y participarán en un taller semanal relacionado con la investigación. Éste durará 90 minutos.
El objetivo de la investigación es descubrir cómo se sienten con respecto al diseño de su escuela local y cómo experimentan el entorno escolar. Se trata de observar cómo están diseñados los edificios y espacios escolares y qué sienten/experimentan en estos espacios. Se les pedirá que lo expresen a través de métodos artísticos que trataremos en los talleres. Al final del proyecto de investigación, ellos y sus compañeros observarán las obras de arte de los demás y analizarán si hay temas comunes. Estos temas se presentarán en la investigación de forma escrita.

La siguiente imagen muestra un cronograma aproximado de la investigación y las actividades previstas para ese cronograma.

¿Cuáles son las posibles desventajas y riesgos de participar?
Puede haber temas que surjan en la investigación que puedan ser desencadenantes o causar malestar a su hijo. El responsable de bienestar de la escuela está al tanto de la investigación y está disponible para apoyarlos en caso de que esto ocurra. Pueden dejar de participar en el taller si sienten que les perjudica de alguna manera, y volver a participar cuando se sientan preparados.

¿Cuáles son los posibles beneficios de participar?
Aunque no hay beneficios inmediatos para las personas que participen en el proyecto, se espera que este trabajo ayude a su hijo a entender cómo su entorno puede influir en su vida diaria y los pasos que puede dar para utilizar el entorno en todo su potencial. La investigación también podría ser un punto de discusión interesante en las entrevistas y solicitudes de universidad/pasantía/experiencia laboral. La investigación dará a su hijo la oportunidad de entender mejor cómo se lleva a cabo la investigación.

¿Se mantendrá la confidencialidad de la participación en este proyecto?
Toda la información que recojamos sobre su hijo en el transcurso de la investigación será estrictamente confidencial y sólo podrán acceder a ella los miembros del equipo de investigación. No podrán ser identificados en ningún informe o publicación a menos que usted, y ellos, hayan dado su consentimiento explícito para ello. Si usted y ellos están de acuerdo en que compartamos la información que proporcionan con otros investigadores (por ejemplo, poniéndola a disposición en un archivo de datos), sus datos personales no se incluirán a menos que lo soliciten explícitamente. Si desean ser nombrados en la introducción de la investigación como colaboradores de la misma, se les dará la oportunidad explícita de dar su consentimiento. En cualquier caso, el trabajo y las opiniones que compartan se mantendrán en el anonimato.

En caso de que su hijo saque a relucir un tema de salvaguardia, estaré obligado a informar al director de la escuela secundaria y al coordinador de bienestar. Esto es por su seguridad y sigue la política y la normativa del colegio.

¿Cuál es la base legal para el tratamiento de los datos personales?
Según la legislación sobre protección de datos, estamos obligados a informarle de que la base jurídica que aplicamos para tratar sus datos personales es que "el tratamiento es necesario para el cumplimiento de una misión de interés público" (artículo 6, apartado 1, letra e)). Puede encontrar más información en el Aviso de Privacidad de la Universidad

https://www.sheffield.ac.uk/govern/data-protection/privacy/general.

¿Qué pasará con los datos recogidos y los resultados del proyecto de investigación?
Una vez finalizada la investigación, su hijo podrá llevarse a casa las copias impresas del trabajo realizado. Las copias digitalizadas se guardarán de forma segura en el servidor de la Universidad de Sheffield y se codificarán para mayor protección. Los datos se utilizarán para redactar un informe de investigación, y debido a la naturaleza de esta investigación es muy probable que otros investigadores puedan encontrar los datos recogidos útiles para responder a futuras preguntas de investigación. Le pediremos el consentimiento explícito para compartir sus datos de esta manera.
Es de esperar que la investigación se publique en algún formato, muy probablemente en una revista. Cuando haya una fecha prevista para la publicación de la investigación, nos pondremos en contacto con usted y le informaremos de ello. Sus datos se mantendrán anónimos durante toda la investigación, independientemente de dónde se publiquen.

¿Quién organiza y financia la investigación?
La investigación está organizada por la Universidad de Sheffield. Esta investigación no cuenta con financiación.

¿Quién es el responsable de los datos?
La Universidad de Sheffield actuará como controlador de datos para este estudio. Esto significa que la Universidad es responsable de cuidar su información y utilizarla adecuadamente.

¿Quién ha revisado éticamente el proyecto?
Este proyecto ha sido aprobado éticamente a través del Procedimiento de Revisión Ética de la Universidad de Sheffield, administrado por el Departamento de Educación.

¿Qué ocurre si algo va mal y quiero quejarme de la investigación o informar de un problema o incidente?
Si no está satisfecho con algún aspecto de la investigación y desea presentar una queja, póngase en contacto con Rajwant Saghera (rsaghera1@sheffield.ac.uk) o la Dra. Kirsty Liddiard (k.liddiard@sheffield.ac.uk) en primera instancia. Si considera que su queja no ha sido tratada de forma satisfactoria, puede ponerse en contacto con la directora del Departamento de Educación, la profesora Rebecca Lawthom (r.lawthom@sheffield.ac.uk). Si la queja está relacionada con el tratamiento de sus datos personales, puede encontrar información sobre cómo presentar una queja en el Aviso de Privacidad de la Universidad: https://www.sheffield.ac.uk/govern/data-protection/privacy/general.
Si desea denunciar un problema o incidente relacionado con una posible explotación, abuso o daño derivado de su participación en este proyecto, póngase en contacto con la Dra. Kirsty Liddiard (k.liddiard@sheffield.ac.uk). Si la preocupación o el incidente está relacionado con el contacto designado para la protección de la infancia, o si cree que un informe que ha hecho a este contacto no se ha tratado de forma satisfactoria, póngase en contacto con la directora del Departamento de Educación, la profesora Rebecca Lawthom (r.lawthom@sheffield.ac.uk) y/o con la directora de ética e integridad de la investigación de la Universidad (Lindsay Unwin; l.v.unwin@sheffield.ac.uk).
Contacto para más información
Investigador principal

Rajwant Saghera rsaghera1@sheffield.ac.uk
Supervisor
Dra. Kirsty Liddiard k.liddiard@sheffield.ac.uu
Supervisor
Dr. Ryan Bramley r.bramley@sheffield.ac.uk

Se le entregará una copia de esta hoja informativa, así como los formularios de consentimiento que debe firmar para poder participar en la investigación.
Gracias por participar en esta investigación.

Rajwant Saghera - Investigador principal

Appendix I - Full Set of Participant-Generated Codes

Participant-Generated Themes, Definitions and Original Codes from Collages

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
Architecture	Group 1: Spaces, architecture and emotions - "How emotions are connected to space and architecture"	Need to use more spaces Volume of people Always inside Library is quiet Happiness - freedom Sports/Coliseum Table size - uncomfortable Bathroom - design flaw but important space Stairs - anxiety Noise/lack of quiet Indoor vs outdoor Art class - freedom/happiness Bathroom as private Toilets - lack of privacy
	Group 1: Sensations and architecture - "The close connection between architecture and our physical/emotional sensations"	Floor/carpets make impact Small pathways - danger Hallways - too many people Stairs - so many people Soft vs Hard Tired - building drowns my energy Grey walls and columns - dull, boring, scary Distance between classes/pathways Free space - no rules Height of buildings - no escape Texture Buildings/cement Green space not used

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
Architecture	Group 3: "Specific places and design choices that impacts us mentally, physically and emotionally"	Messy places = you feel on the street Entry of school = anxiety Steep stairs are tiring Abandoned places=unsafe Bathrooms=uncomfortable Lockers are overwhelming Window views are important Bathrooms=gossip I hate bathrooms here Bathrooms are toxic Bathrooms-unsafe Library=productive Stairs are chaotic In closed spaces I can't breath Reflections in glass=uncomfortable Library=comfortable Hallways are narrow Library=chill and independence Pile of bags in hallways-danger Many hidden places-unsafe
Temperature	Group 1: "The importance of temperature"	Really cold - hurts physically Temperature is key Cold materials Cold leads to tiredness Temperature-cold Sun- warmth Temperature and emotions
	Group 2: "Importance of light and warmth on mental and physical health. The toll that darkness and coldness takes on our mood, emotions, learning and body"	Temperature Temperature and mood sun=happier Cold=trapped Windows=sun Coldness all around
	Group 3: "Temperature affects how we feel and how productive we are. School is built to be pretty, not to be functional. We need warm places"	I wear 3 jackets to feel warm Windows=sun I can't write, I'm frozen School = really cold School made for hot weather Always cold

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
		Warm places=favourite places Music=fun/warm Classrooms don't have sun in a.m. Ceilings make it colder High school= cold temperature and in mood Sun in classes=warm Library=warm Sun/warmth/light/colour=positive The school buildings are in the wrong place - don't get sun Cramps + cold =sadness Hard to concentrate in cold I have a blanket to be warm I wear two jackets Cold Cold days Freezing Sun=warmth School is cold Always cold=confusion Hard to concentrate
Being a Woman	Group 2: "The struggle of female students through their academic lives"	Gender stereotypes/Hormones Violence Sit and be quiet Childbirth/death Rules set in childhood Life=pain Pretending to be ok Invisible girls Voices of women silenced Be the secretary Can't speak/silenced Needing to shout Negatively First Fight to be seen Quiet girl= stupid girl Neatness=female Always judged Women= a life of pain Easy to be invisible

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
		"Acting bitchy"
Judgement	Group 3: "When you're in school, you feel everyone is watching you, causing you to feel constantly judged"	Mirrors=judgement Everyone is watching you Strangers=fear Judged by clothes I see my reflection everywhere Always judged Music room=no place to hide Inner self= safety Feeling observed
The Female Body	Group 1: "How school architecture is not designed for body comfort"	Losing touch with your body Disconnection between mind and body Comfortable in body impacts mind Things that touch my body impact Physical environment and feelings Movement - less boring Period pain - not an excuse for resting Physical comfort Sickness (x) Physical health Body/mind connection Division Pain Periods Female body Cramps
	Group 2: "Body Image - effects of norms and standards that girls and women face to do with their bodies"	The body (x2) Food Body is natural Fat=bad Body image/issues Violence against the body Vulnerability Self-acceptance Skinny=good Female=body shame Self-Worth Self-Worth Questioned

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
		Identity Bathroom/gossip Counting Calories Bathrooms/competition Mirrors induce anxiety Reflections Conventional=good Centred on mirrors
Patriarchy	Group 2: “A space where boys & men are treated and judged differently than women”	Patriarchy rules Male superiority Male p.o.v dominates Gender defined roles Gender stereotypes Anger Man as the centre Men allowed to be violent Violence=men Discrimination as normal Men disbelieve you Loudness=male No accountability=men
	Group 3: “Girls and women in general live under the judgement and constant critique of men and the patriarchal society. Society has a solid conception on what women should be and how feminine they need to be. Through architecture, comments and excuses, women are being limited and out into a stereotype”	Looking neat=feminine “Are you on your period” Gender inequality The patriarchy “Cramps are not an excuse” The things men say- stereotypes of being a woman Women don't have it “easier” I am my uterus? I am not delicate Beauty=female Accused of being dramatic Cold=worse menstruation Expressing feelings=bad

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
Periods	Group 2: "The struggles and life experiences of having periods in school"	Women=suffering Health Education Staining clothes/stress Shame (x2) Periods (x3) Period shame=danger First period=fear Periods/disgust Chairs on periods are uncomfortable Womanhood Embarrassment (x2) Health education as empowerment Blood=dirty Toilets/Bathrooms Memories of periods Judgement Deny pain Blood Period pads/sound Learn to live with shame
Mental Health	Group 1: "Impacts of school on mental health"	Pain Anxiety (x2) Mental Health Stress (x3) Overwhelmed Fear Foggy mind Mantras to deal with school Shared emotions/thoughts Social environment/judgement School dims my "light" Intensity of feelings Identity crisis
Academic Damage	Group 3: "School starts becoming a burden to students. It creates a toxic space for them and makes coming to school a stressful situation in which students feel anxious, stressed and they start losing interest. Students	Time is always limited Long day- 5am to 6pm Future=scary/stress The future is stressful Arts pressure is by choice Is the pressure worth it? Overwhelmed with work

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
	feel like being at school is always a race between them”	Time controls you You should feel good in school School makes me cloudy I have no option but to pass an exam Unsure of the future School harms mentally School damages me School=stress/doubt Academic pressure (x2) School can be toxic Essays=anxiety Academic validation=toxic Pressure (x2) I suffer a lot Everything is a race Fulfilling expectations
Safe Spaces	Group 2: “Spaces where you feel comfortable and safe”	LGBTQ+ safe spaces Acceptance Nature helps Bathroom as safety Childhood=safety Dance=freedom Stairs=new directions Humanities/nurturing Comfort in corners Window views help Hiding places as necessary Space/movement is freedom Bathrooms as private space Corner=safety Solitude is needed Nature as healing Good materials=glass and wood Walking=contemplation and movement Needing movement Field=movement Importance of art Nature as necessary Solitude

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
Light	Group 1: “How light affects your mood”	Light spaces vs dark spaces Dark hallways are scary Light and dark spaces Dark can be positive Natural light - yellow Nature blocking light Light makes a different to mood White light vs warm light
	Group 2: “Importance of light and warmth on mental and physical health. The toll that darkness and coldness takes on our mood, emotions, learning and body”	Light Darkness Darkness=shadows Hallways - darkness Lockers = dark/closed Bathrooms - dark/cold I can’t see: fear/danger
	Group 3: Light/Sound - “Light related to safety, to being comfortable in a space”	Lockers = dark/cold Hallways are dark/cold Not a lot of light I don't like dark places Dark hallways Light=safety Dark places-unsafe Bathroom lights are bad Bathrooms are dark Inside school=dark Bright places - feel good
Nature & Reflection Spaces	Group 1: Nature & Reflection - “The need for open spaces for reflection”	Need reflection spaces Free - run to nature Animals - nature - connection Open space is better Thinking clearly away from buildings Escape Nature Need for being alone Looking for places to breathe Indoor vs Outdoor

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
	Group 3: “Nature is seen everywhere at school. It's really important for students because in an academic environment it can help release stress. It's also a comfortable and safe place to relax. In general its really good for both physical and emotional health”	Outside of school=green Without nature I’d go crazy Being surrounded by life/nature is peaceful Nature is everywhere Touching grass is happy Each plant is important Nature is safe and comfortable Walking and seeing flowers=relaxing Class outside=calm Nature/flowers feel friendly Sun=safety Being outside is nice Flowers/nature = safety
Memories	Group 1: “How memories affect your relationship with spaces”	Memories Good part vs bad part Sharing myths Friends Memories connect with space and emotions Memories and places connect Childhood memories Friendship
	Group 3: Memories & Reflections- “Childhood is the colourful part of innocence where you get amazed by everything”	Love & hate school I don’t feel excited about school anymore Friends are happiness Childhood (happiness) vs adolescence (pressure) Childhood shapes you Sticker charts are traumatising for life Childhood has quiet safe spaces Good memories are long lasting childhood=colour/joy Material in primary school are joyful Childhood=movement Competition starts in childhood School is a journey Childhood=movement

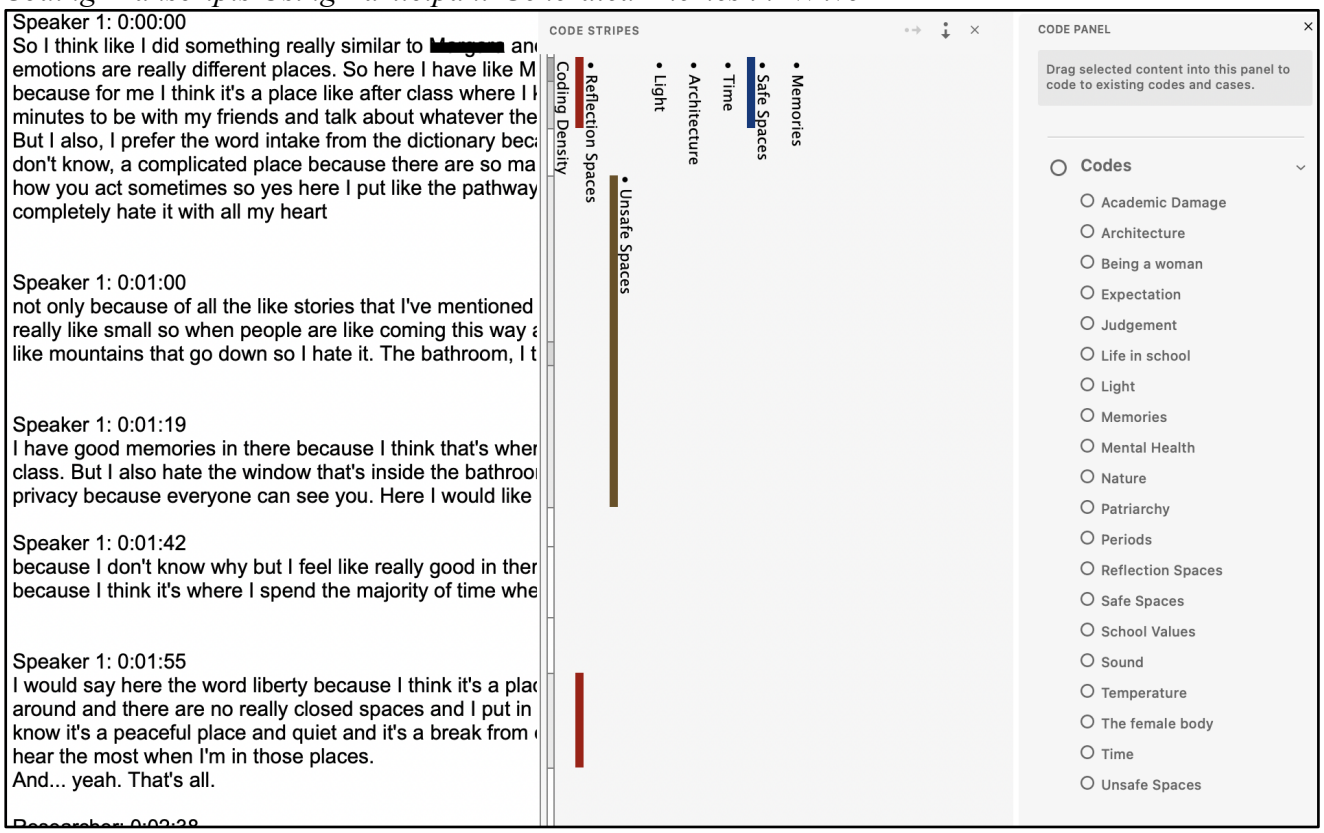
Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
		Primary is more colourful
Unsafe Spaces	Group 2: "Spaces where you feel uncomfortable and trapped. Places you wish you could leave immediately"	Chairs-pain/repression Chairs as uncomfortable Forced to sit School=repression Trapped in school Feeling trapped Trapped in rooms Time running out Noise all around Rushing to get to class/no time No time Sound/noise Stairs-lead to positive or negative spaces School=hostile environment School smells bad
School's Values	Group 3: "The school's architecture focuses on how it looks but not on our experiences as people using the building. This reflects how the school treats us and our work. We feel limited by the schools values and expectations and we excluded when we don't fulfil these expectations"	Money shouldn't make a pretty school The things on the walls have an impact Tables become smaller School only values what they care about Purpose of school is to make you care about money How do they decide which art work goes where? Showing art is important School trains you to be a work slave Chairs=control Left handed-limited resources We should all we be equal Admin office only show art work they think is "good" Architecture shows the best parts but the other parts are hidden

Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
		Unique design=cool Arts vs Academics Displays show what the school thinks is important Being able to question is important
Life in School	Group 2: “Daily struggles in the academic environment”	Judgement (x2) Pressure (x2) Need to be perfect Prove your worth Invisible Toxic competition Expectations (x2) Maturity Memories Academic pressure Schools are secrets Self-destruction School=pressure It's never enough Frustration Mental exhaustion Loneliness Higher expectations Fighting Isolation Survival of the fittest Internalising Memories haunt
Expectation	Group 1: “Success and value as defined by school vs. ourselves”	More value over productivity than expression/freedom Productivity (x2) No balance Pressure Division Suppression of myself Expectations So many expectations What is success? Be successful!

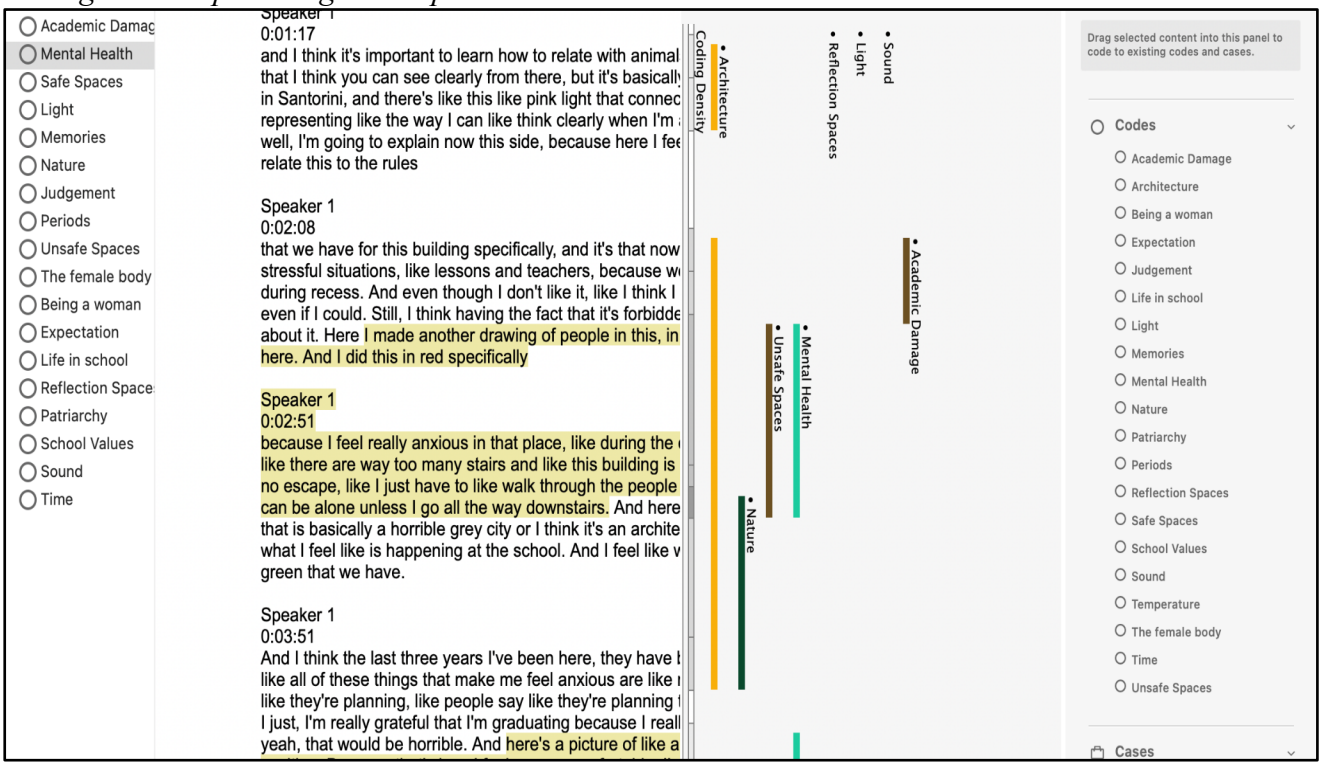
Participant-Generated Themes	Participant Definitions of Themes	Coding from Collages
Sound	Group 3: Light/Sound - “Sound relates to being overwhelmed in a space. A lot of sound can be stressful”	Quiet reflection=safe Screaming=overwhelming Crowds=overwhelming No place for quiet/privacy A little bit of sound-soothing Need a quiet corner Crowded places are horrible
Time	Group 1 - “There isn’t enough time”	5 min in-between classes Time in between classes is positive Time - need more/rushing Free time Lack of time Moments in between classes/socialising in hallways Classes-time-always rushing

Appendix J - Examples of Coded Themes using NVivo

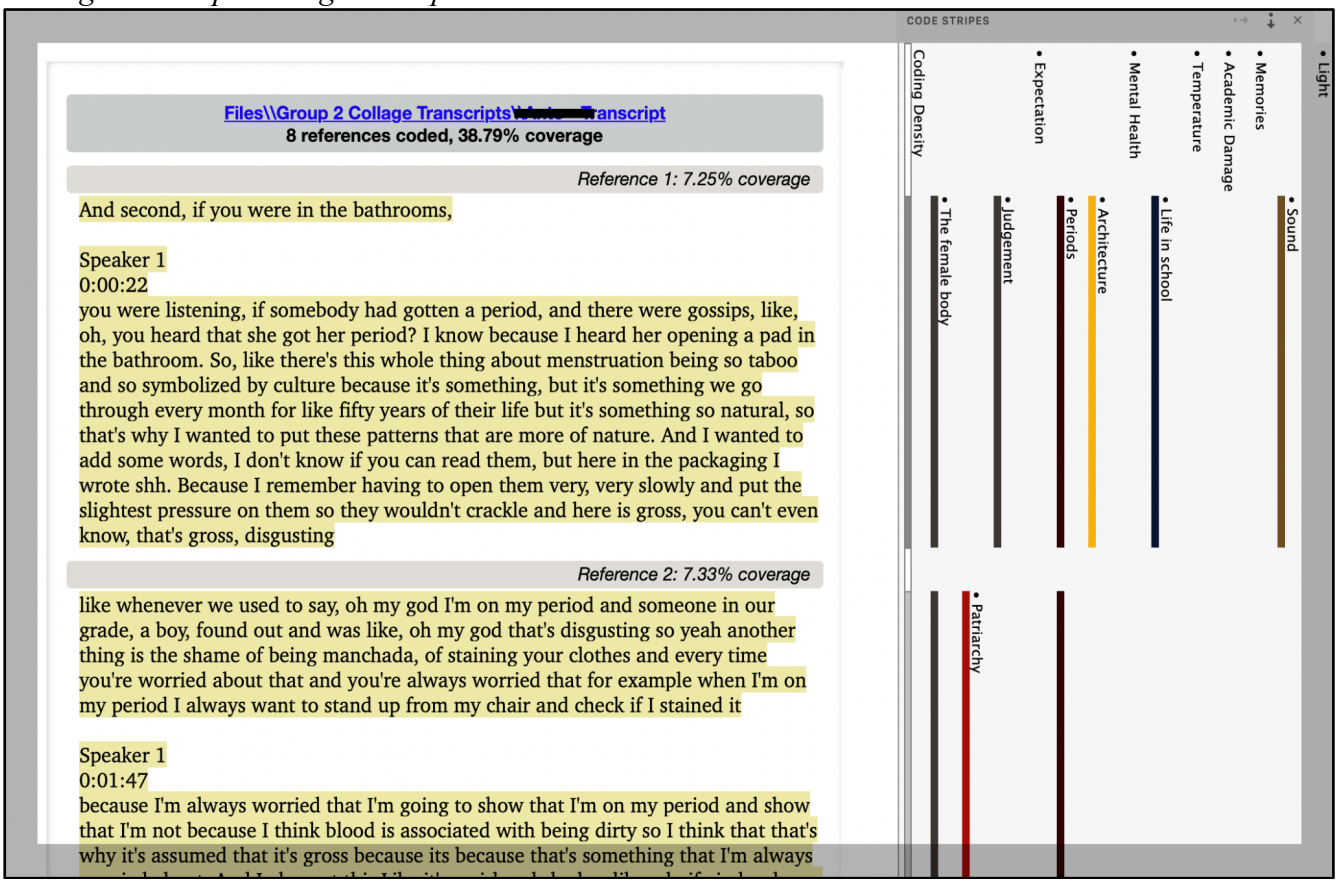
Coding Transcripts Using Participant-Generated Themes in NVivo 1



Coding Transcripts Using Participant-Generated Themes in NVivo 2



Coding Transcripts Using Participant-Generated Themes in NVivo 3



Appendix K - Excerpts of Collage Analysis Transcription

Extract 1

Collage Presentation Transcription – Participant 8
Group 1

Speaker 1: Okay, so my collage is much less kind of organized than the other ones. It doesn't have like a timeline or certain places dedicated to certain spaces or feelings. Um...It's kind of like a mixture of everything. Umm...and this is very important to me because last year when we were in final exams, I heard that from a speech in the university and then I kind of like, I had it in my mind on the day of my final exam that I failed, and I failed math, my mom gave me like a little piece of paper that said that.

Speaker 1: 0:00:56
So that was, kind of became my, kind of like a mantra that I have for school. And it's kind of like a way to release and to kind of like get away from some of the things that I feel in school that I kind of think are really intense and kind of like,umm.. can make me feel overwhelmed with the situation. And then this is also important to me

Speaker 1: 0:01:26
because I feel sometimes like school cultivates kind of like an idea of losing touch with your feelings and your body and your pain so that you can be productive. And so they kind of nourish that so that you can be productive and do what you have to do and be the best student you can be. And I feel like that is very damaging because I feel sometimes that I lose sight of who I am and how I feel in my pain and my joy as well. And this has to do a bit with the same thing

Speaker 1: 0:02:08
because...um... when I was, I remember before I went to school, like when I was a little kid, I only dressed in pink and I kind of like was in love with sparkles and kind of like magic. And I feel like when I went into school, it immediately like dimmed that light that was a big part of my personality and kind of like made it all towards school and education and studying. And then, while this is very important to me, I get really, really bad cramps and sometimes I feel like I can't be in school because I feel really sick. And I can't do that because in school, period pain is like not a valid excuse to miss school.

Speaker 1: 0:03:14
So I have to come, and I'm in incredible amounts of pain. And I feel, and I feel sometimes like that there's no way to escape that. And then some of these things, like this one, this one, and these colors here, is because I have something called synesthesia, which basically means that my neurons are connected in a way that makes it that I can't disconnect one sense from the other. So sometimes feelings or words or letters or things like that connect to colors. So that is, for example, these are the colors that I feel when I'm in Zori's classroom, and these are the ones that I feel, for example, in the library, and these are the ones that I feel downstairs in the front desk.

Speaker 1: 0:04:19

So, yeah, that's kind of my view. Am I academic? ah... Okay, so because sometimes I feel like the pressure to be a good student is kind of like more important than being... being physically and emotionally safe and I have to suppress that so that I can do what teachers and people are asking me to do.

Researcher: 0:04:55
Okay. What do you think are some key words that you want to bring out from your collage?

Speaker 1: 0:05:02
Um, I think disconnection. Um, and... Mental health.

Speaker 2: 0:05:16
and... mental health mental health?

Speaker 1: yeah, right, mental health

Speaker 1: 0:05:36
Ummm and also physical pain, period pain

End of transcript

Extract 2

Collage Presentation Transcription – Participant 6
Group 3

Speaker 1
0:00:00
Okay, so I didn't focus much on a specific topic, I think I wanted to be like pretty much have the expression of what I think of when I think about school. So the first thing I think of is the green aspect of it and like all the plants and all the nature and it makes me feel really safe and comfortable and I really like walking around and seeing all the different types of flowers and the different types of trees it's like really relaxing for me and the other thing I think about is that it's really cold and so yeah like I think Sara already explained that part like I have to go with like three jackets to feel a little bit warmer. And parallel to that, the place I feel it is the warmest

Speaker 1
0:00:54
is the library. And I think the only thing I do in the library is reading, but I try to represent it in a lot of books. I think it's a place where I have great conversations for some reason and feel comfortable in it. And if I want to be like alone,

Speaker 1
0:01:09
I think there's a space to do that as well. Or just if you want to chill and have something on the balcony and in here, I think compared to my previous school I think this school has given me the chance to explore fashion and my personal style

Researcher
0:01:29
Because you don't have to wear a uniform

Speaker 1
0:01:31
Yeah, and also because in my previous school they were really strict and like, breast coat so like, this wasn't allowed

Researcher
0:01:42
like the ripped jeans?

Speaker 1
0:01:44
yeah, and like, also seeing people with really different styles and how they dress, it like, makes me really curious and I really like exploring that and exploring it for me as well and I think jewelry was also

Speaker 1
0:02:01
also wasn't allowed and in this part, something that I really realized is that there are a lot of places where I feel really observed

Speaker 1
0:02:14
and between those there's like the music room

Speaker 1
0:02:25
and it was the music room

Speaker 1
0:02:28
I like it, but I also feel like it's really observed. Because the way it's organized, there's like the place where I sit, there's the piano, it's like on the back and I can see like everything. So there's not a place where I can look at without seeing somebody. So I always feel observed.

Researcher
0:02:48
And it has really big windows too.

Speaker 1
0:02:53
Sometimes when I'm down on the Canchal look into the music room and see what's happening in there. It's weird. But when things like work out and like finish a song I did actually that sounded really good, that makes me like really excited. And the other place I go upstairs in is the place just in front of the store, the tienda, like the white tables, that's a place where I've also had great conversations about seeing other people pass and like looking at people, I think it's the same exact situation, like there's not a place I can look at without seeing somebody.

Researcher
0:03:26
So would you prefer like it to be a bit more enclosed or a bit more private or do you like the fact that you can see everything all the time?

Speaker 1
0:03:33
I like the fact that the place is outdoors, in that case, I like it, like it's fresh and sometimes it's sunny, like today, but in the music room it's closed, but it still feels really open. And the last place is like the hall, where you walk in the morning. It's pretty little, so like people sometimes like stop and talk there, and it's stressful and the other place I feel observed but it's more in the good way it's with musicals when I first joined the orchestra and all the musical part of it and

being part of the school musicals It was really important to me, like finding a place where I felt comfortable and although it's true that all of us felt a lot of pressure, the end result was a really exciting part. And I was really satisfied with the result and with the results of everybody.

Researcher
0:04:32
So what's the difference then between pressure for academic subjects and the pressure of things like the theatre and the musicals and those kind of events, because if that's a positive one but the other one is negative, what's the difference?

Speaker 1
0:05:01
because that pressure I decided to have it you know. Academic pressure I have no option to pass a mathematics exam and this is something I chose and although I know like what it brings me and the consequences I am happy to be a part of it. And also something that I noticed that was really interesting is that the amount of windows and glass in the school So I see my reflection everywhere

Speaker 1
0:05:16
I don't know how to explain it but I really notice it like I pass and I see my reflection everywhere

Speaker 1
0:05:23
everywhere

Speaker 1
0:05:24
and like sometimes I feel confidence and stuff and then I see my glasses and I think oh I'm like not well dressed

Speaker 1
0:05:33
or I feel like not comfy

Speaker 1
0:05:35
or because of the lights in the bathroom my skin looks all dark it's weird like the amount of glass in the school is impressive

Speaker 1
0:05:44
so

Speaker 1
0:05:45
uh ah ok like at last, it's shared with the fact that there's a lot of people in this place, like it's a tienda, and it's that sometimes when there are a lot of people, there are a lot of, like, agonizing, like groups of people, like, really close together, and you feel a little bit overwhelmed, and there's not a place where I can feel alone and just chill for a minute.

Speaker 1
0:06:28
And that is the space I normally need. Because I remember when I was little, like if you were overwhelmed or stressed, there was this corner with really comfortable sofas, and there were pictures of your family, you wanted them.

Researcher
0:06:43
The quiet corner.

Speaker 1
0:06:44
Yeah, the quiet corner. But it was actually really cool. And when you grow up, there's not really that space and there's all these really big groups of people and if you're just a children's architect you just have to remain seated after you can go to lunch. But overall, I think I went for the positive aspects, like exploring my personal style and all the nature and the musical part of it, and yeah.

Researcher
0:07:09
Beautiful. Thank you,. Would you add any more keywords to? Again, it's interesting that you're talking about childhood, and the happiness of childhood,

Speaker 1
0:07:21
and those elements that get taken away. Yeah, I wasn't sure, I was really drawn on when I arrived, but I can compare it to some aspects of childhood. Yeah, you have those safe spaces, the quiet corners, the big books, and it's like a very like comforting space and like somehow that like gets lost as you get older.

Researcher
0:07:44
Yeah it's beautiful, really pretty. Thank you very much.

End of transcript

Appendix L - Excerpt of Final Focus Group Transcription

Gender, Art and Architecture Research Project

Transcript
Final Reflection on Research Project
Focus Group
Group 2

Researcher: The first activity, if your remember was the brainstorm, mind map of the built school environment and that's what we have: So you had things like it's creative, it's structural, it's sunny, it's cold, exhausting, uncomfortable.

Researcher: 00:14 There's too many people. It's artistic, it's nature, it's laid back, stirred and open. Our final activity that we're going to do for the research is to do this again, the built school environment bubble.

Researcher: 00:27 But now it's after you've done all this exploration and investigations. And we've come up with our themes of as a group, what your experiences of the built school environment, specifically of this school are. We're going to do this again and see if some of the things are the same, if they're different? And how you feel about the built school environment now that we've really thought about it for all of these months.

Researcher: 00.50 So jump in with what comes to your mind now?

Speaker 1: 00.51 Cold.

Speaker 2: 00.52 Yeah.Cold.

Speaker 3: 00.53 Judged.

Speaker 1: 00.58 Sunny as well.

Speaker 4: 1.01 It's just the architecture of the built school we're talking about?

Researcher: 1.06 yeah, and it could be what you think the messages of the themes you came up are telling you.

Speaker 5: 1.10 judgement.

Speaker 6: 1.25 put sunny no?

Speaker 7 : 1.27 write sunny here.

Speaker 5: 1.31 I think we should put vulnerable.

Speaker 2: 1.33 Solitude.

Speaker 5: 1.35 Impact…impact mood maybe.

Researcher: 1.46 So coldness impacts your mood?

Speaker 5: 1.49 uh huh

Speaker 8: 1.50 Can I put an arrow from cold to mood?

Research: 1.51 Yup.

Speaker 1: 1.52 productivity…productivity…productivity.

Speaker 4: 1.57 It depends on the people…if the school was filled with a different kind of people the school would be different.

Speaker 4: 2.10 put a place constructed by its people.

Speaker 1: 2.15 a social construct.

Researcher: 2.20 a place constructed by its people…or a place constructed by the people within it?

Researcher: 2.25 what do you mean by people? Do you mean students, teachers, adults who work there or everyone?

Speaker 1 and 4 simultaneously: 2.30 everyone

Speaker 5: 2.34 I think that's true, like what we were talking about Bali. Im very mad about that.

Speaker 2: 2.42 Why are you mad about Bali?

Speaker 5: 2.44 Because they gave them a day to rest and I think its very hypocritical that, because we asked for a day after ICFES and they won't give it to us but they will give it to them who have been travelling and saying oh they have jet lag, or I was tired I didn't sleep.

Speaker 8: 3.05 The thing is like we both should've got a day off, both things need rest.

Speaker 5: 3.07 Yeah exactly.

Speaker 8: 3.08 Both things need rest.

Speaker 1: 3.11 It should be both of us or neither of us.

Speaker 3: 3.16 Its a lack of empathy.

Speaker 2: 3.17 [Speaking over]misunderstanding.

Speaker 4: 3.20 its a lack of empathy in general, by students, by teachers.

Researcher: 3.25 So cold and sunny, but what do you want to say about those.

Speaker 5: 3.30 Mood, how they impact our mood.

Speaker 2: 3.34 The impact of temperature on us.

Researcher: 3.37 Have you realised something new about how the architecture and the environment, specifically the school environment, shapes your experiences and feelings that you were not aware of before, like buildings, spaces, hallways, light, temperature, stairways.

Speaker 4: 3.57 mmmm maybe crowds.

Speaker 5: 3.60 I think crowds can be like, those spaces can be the ones with crowds and that tends to make you feel uncomfortable physically and mentally.

Speaker 3: 4.07 Stairs are usually very crowded.

Researcher: 4.09 okay.

Speaker 5: Like oh my god move.

Researcher: 4.13 So crowds make you feel physically and mentally uncomfortable…what are the key things you want to share, especially looking at these themes, like how would you summarise those.

Speaker 3: 4.19 I think. I think being judged and constantly watched, you feel like your being pursued. Like constantly judged.

Speaker 5: 4.38 Constantly being judged and watched over.

Speaker 2: constantly being vigiled.

Speaker 6: 4.50 observed?

Researcher: 4.52 Observed.

Speaker 3: 4.54 and judged.

Researcher: 4.55 And is that a good thing or a bad thing?

Speaker 4: 4.57 That depends on who you are. Some people like being in the spotlight.

Speaker 2: 5.00 Yeah, that's true,

Speaker5: 5.10 Constantly being observed and judged.

Speaker 1: 5.20 There is a big brother.

Researcher: 5.21 Do you think the school architecture has an effect on your lives?

Speaker 1: 5.26 Yes.

Speaker 4: 5.30 Its designed to look and be very free, in an open way, but that's not how you feel, that's not how the school system makes you feel.

Researcher: 5.46 so what you're saying is the school architecture can have one philosophy but its your daily experiences, and your feelings in and around the school architecture that shape your experiences?

Speaker 5: 5.59 I think our school represents itself as were very liberating.

Speaker 4: Interrupting 6.01 understanding.

Speaker 5: 6.02 and I don't think that's always the case.

Speaker 4: 6.11 Something that I was thinking…uhm…uhm…

Speaker 8: 6.25 And that's like, even though the ceilings are very high and there are windows, in class you still feel very trapped.

Researcher: 6.50 If you were going to design a school, or you got to talk to an architect who was going to make a new building here what kind of things would you tell them that are important?

Speaker 5: 6.58 Like, I would tell them, like I wish…I like rooms like this that have high ceilings, windows, lots of light.

Speaker 3: interrupting 7.07 lots of light so its sunny.

Speaker 5: 7.07 because if not you feel so trapped.

Speaker 4: 7.13 better lighting in the bathroom, because you feel ugly with that lighting, it doesn't help…

Speaker 1: 7.21 but its not your fault.

[Laughter]

Speaker 8: 7.24 and they should like change the chairs.

Speaker 3: 7.25 …[interrupting] yeah.

Speaker 1: 7.25 [interrupting] oh yeah.

Speaker 2: 7.26 [interrupting] honestly they should.

Speaker 8: 7.28 the chairs make me want to die.

Speaker 7: 7.29 and the floor.

Speaker 2: 7.30 and they should do like actual desks.

Researcher: 7.31 and the floor? How?

Speaker 7: 7.33 I don't know… I feel like the floor is really cold.

Speaker 1: 7.35 [interrupting] a wooden floor would be better.

Speaker 3: 7.49 for example the library has a wooden floor and it super beautiful.

Speaker 4: 7.50 Something that I think is important is that the school is situated in a very pretty place but we learn to hate it because of our experiences in the school and its because of the structure of the school, and by that I mean not the school building but the school system, and if the system of the school was better maybe we would love the place we are in. Its very beautiful but we don't like it because we always feel bad when we are here…well not always…

Speaker 3: 8.15 and I think we've normalised the mountains and when someone says we're going to go on a hike in the mountain we just think been there done that.

Researcher: 8.30 okay, and do you think all of these things that we've realised with these themes that are laid out here: body image, being a woman, safe spaces, periods, temperature and light, the patriarchy, do you think we would have come up with similar themes if we had explored the topic of the built school environment and the school architecture through interviews and questionnaires, or do you think this process of art making and exploring your feelings through art, and the mapping that we did has changed the direction of your thinking or like shown you things you might not have come across, or do you think it would have been the same, we would have come up with the same things?

Speaker 5: 9.05 I think we focused more on like, like…there were themes that are very, are very, that could be the same like temperature and light or like in school, periods also because there were a lot of experiences we had in school, like the shame and the embarrassment and everything that came also from our peers in school, but other things are more associated not with the school structure or the architecture but with the individuals and our society, like our society.

Speaker 3: 9.48 I don't think I would have come up with something like about periods and the shame about it if I hadn't saw it through something creative because if had done just interviews I would be talked more about structural and architecture and temperature and light and less about my personal experience through my whole school life. So I think doing it through art made me have another perspective that I don't think I would've gotten.

Speaker 8: 10.22 and like when we were doing the map that really made me realise that like I…eh, spaces that allowed movement where I was the happiest.

Speaker 2: 10.36 I think I wouldn't have realised if we hadn't have done the map with like how we feel..eh…In like each place I wouldn't have realised that actually its school that makes me like aggressive and angry and mad because I realised most of the places I felt like that were spaces in which competition existed and I realised it was in those places that I felt like, very, that pressure of competition.

Speaker 7: 11.12 I feel like, well with the maps, it sounds dumb, but I realised why I hate school, like I realised the amount of places in which I feel unsafe and judged and uncomfortable and I feel really bad with myself so that makes me hate this space even more. So it made me like, it was kind of bad because I realised that I hate all of this school and if could I wouldn't come back and that was really hard and with the part that we did about the collage, I felt like I could explore some things that I wouldn't have done otherwise. Like I hadn't thought about secrets, or like eh feeling trapped, or hiding things in school about yourself so you fit in better. Like I think I wouldn't have mapped it out as well if I had been speaking or writing. So yeah I felt like the images and putting art and words and kind of like making sense of what you feel like inside and in your mind and putting it on paper, it was easier for me doing it artistically.

Researcher: 12.50 Do you think we would have come up with different things if we had boys in the class?

Group: 12.55 : [murmur] "yes".

Speaker 3: 12.56 I would never have done that collage.

Speaker 4: 12.59 No, me neither.

Speaker 3: 13.00 Like I'm not ashamed of my period, but doing it so…I wouldn't have done it.

Speaker 5: 13.04 [interrupting] I wouldn't have done it, I wouldn't have done it. I don't think I would have done my collage either.

Researcher: 13.10 and the final comment and question is do you think this experience, the whole aspect of looking at the school architecture, the space and coming up with these themes and discussing how the emotions of mapping out your own emotions on the maps too, do you think its changed your understanding , going into your future life, how space has an impact on you?

Group: 13.32 [murmur] yes.

Speaker 7: 13.36 I feel like now I can analyse that maybe if I can't concentrate in one class, or if I'm feeling uncomfortable, maybe it isn't me, and if I feel like every time Im there I feel like that maybe there's a reason for it and maybe there's something I can do to prepare myself to get into that environment and deal with it.

Speaker 5: 14.04 I think I've never really thought about how much it impacted me, like a place. I've always felt, like I love this classroom for example because its very sunny and I don't like our classroom because..I don't like it and I didn't realise how much that space impacts me and how much I enjoy a class.

Speaker 4: 14.26 I wonder if like for example we go to our future universities and see them and think its so pretty and so perfect how will we end up seeing them because if we enter this place right now we would think its so pretty, its so perfect what would happen? What will happen to us at the end of university regarding that place that was once so amazing to us which is what happened here.

Speaker 5: 14.51 but the difference is in you, we changed a lot in the space.

Speaker 7: 15.18 I think over time, it makes a difference because you have more experiences, and at university the newness of the ideas makes it exciting, and not so much the place.

Speaker 3: 15.52 The school for me will always be special and there are a lot of places where I still feel like a little kid and we talk about things like remember when we played here and had lunch here. I feel like the school left a mark in me that I will always like this place and I would come back. It's not like my house but I've always felt good in school.

Researcher: 16.29 Why do you think some of the themes that came up are negative then?

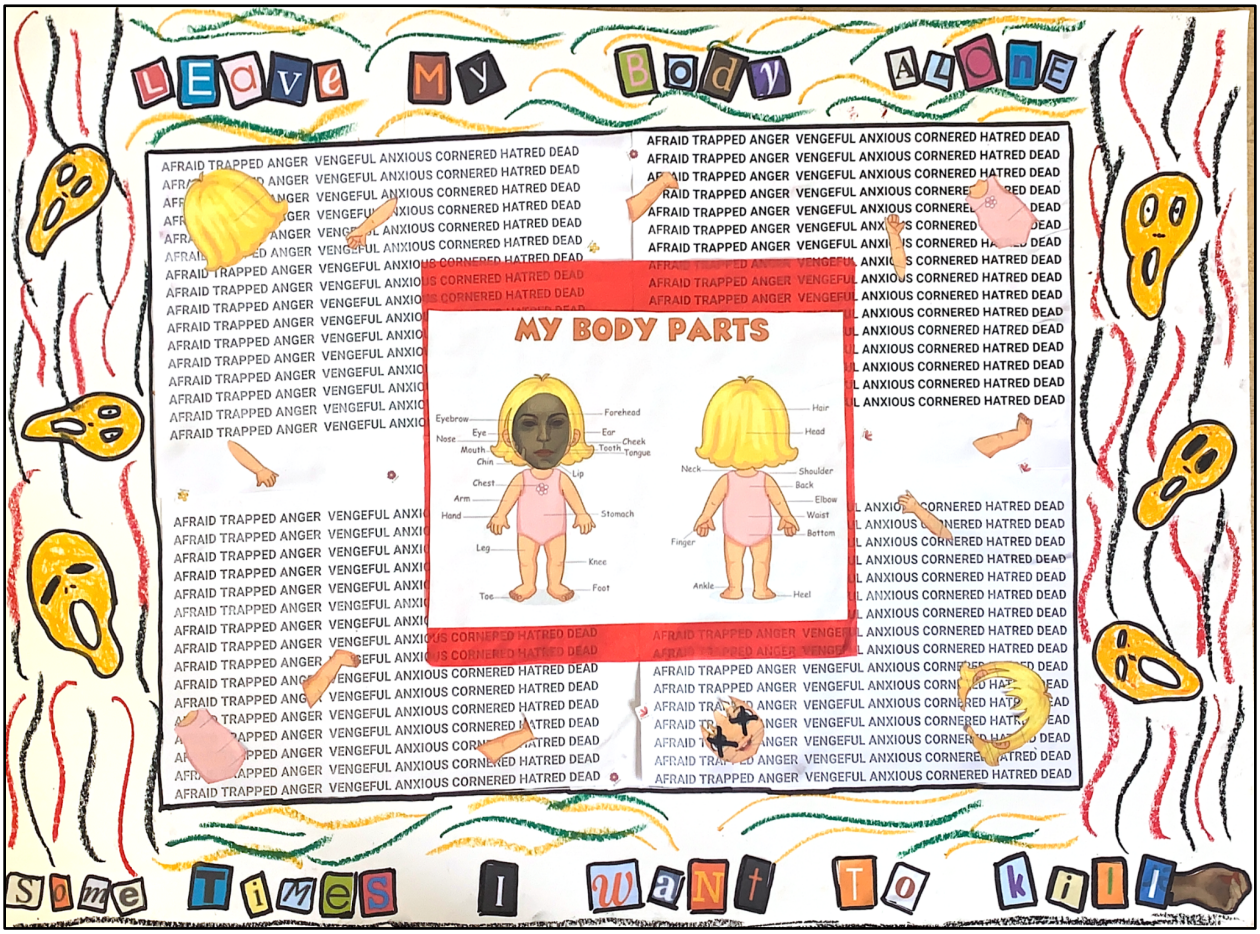
Speaker 4: 16.31 Maybe its because we never get to speak about the negative stuff, we don't enjoy it, it because we never get to do it.

Researcher: 16.40: Its an opportunity you don't have often. Okay. Any final comments?

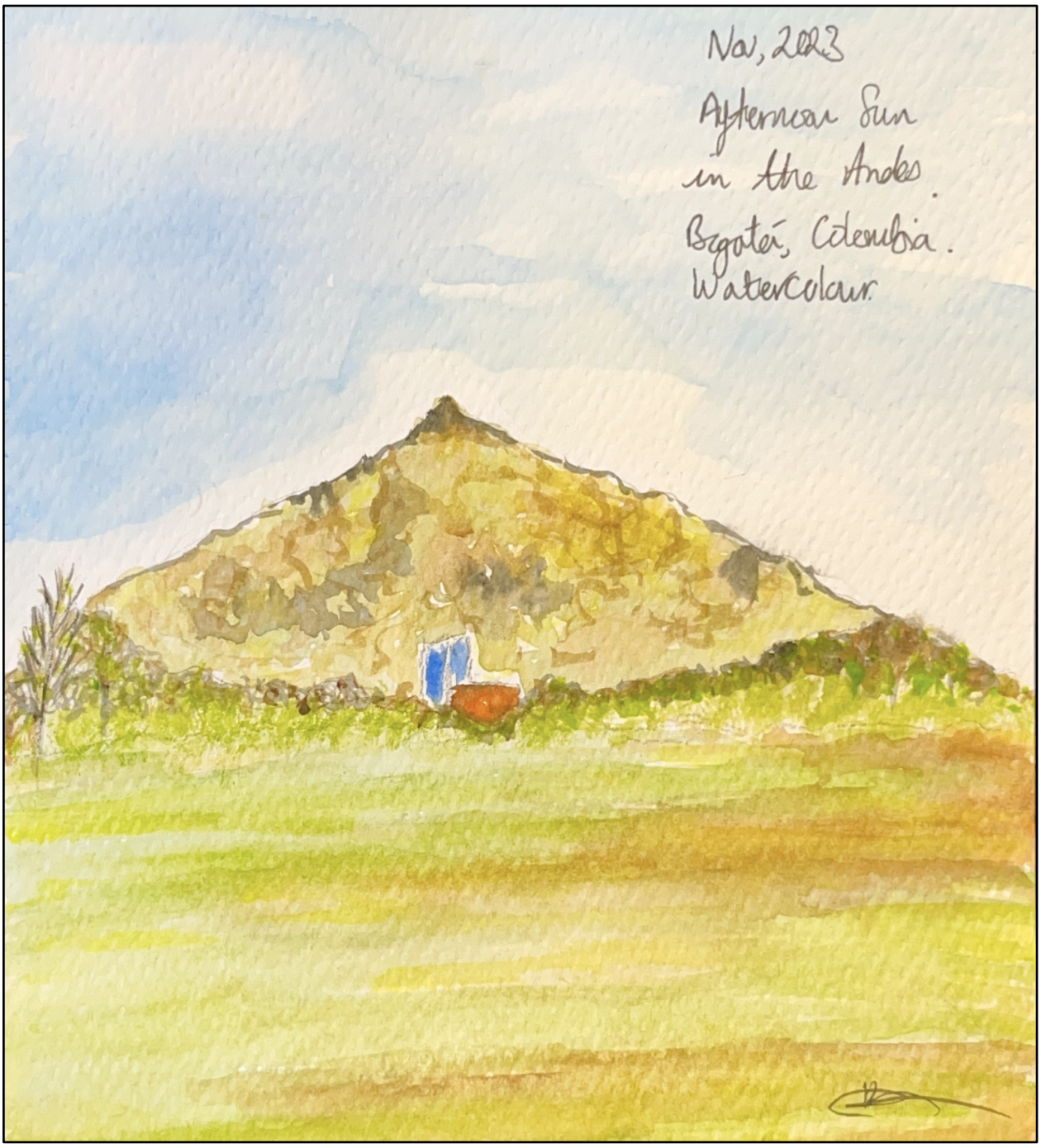
End of Transcript

Appendix M - Examples of Researcher Artistic Explorations of the Emerging Themes

Collage Created After Reading for the Literature Review



Watercolour - Placing Bogotá on Paper



Mineral Paint on Canvas - Using natural minerals to paint fauna and flora from the region