Girl on Fire: Enhancing Life Skills Through Sport-Based Interventions in Schools

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A thesis submitted to

Auckland University of Technology

in fulfilment of the requirements for the degree of Master of Philosophy

(MPhil)

January 2026

School of Sport, Exercise and Health

Faculty of Health and Environmental Sciences

Abstract

Sport-based programmes have increasingly been recognised as powerful contexts for fostering positive youth development, particularly when intentionally designed to build transferable life skills. Within this framework, the Girl on Fire programme—implemented at Northcross Intermediate School in Auckland—aims to empower Year 7 and 8 girls through physical activity, mentorship, and guided reflection. Drawing on the integrated theoretical lenses of Positive Youth Development (PYD), Teaching Personal and Social Responsibility (TPSR), Social Cognitive Theory (SCT), Ecological Systems Theory (EST), and Transfer of Learning Theory (TLT), this study explores the ongoing impact of Girl on Fire on participants' confidence, life-skill development, and transfer of learning beyond the programme context.

Using a qualitative case study design, semi-structured interviews were conducted in 2025 with eight participants from the 2021 cohort, approximately three years after they completed the programme, to examine how skills and confidence acquired during the programme were applied across academic, social, and personal domains. Thematic analysis identified four key themes: immediate impact, broader transfer of life skills, enablers and barriers to transfer, and programme development and recommendations. Participants described Girl on Fire as a safe, supportive environment that nurtured confidence, leadership, communication, and resilience. These skills were often transferred into classroom, peer, and home settings, sustained through ongoing social and environmental support.

Findings highlight the potential of gender-responsive, relational sport-based programmes to promote enduring personal and social development. The study contributes new insights into the mechanisms that enable learning transfer and offers

practical implications for inclusive youth sport policy and practice in Aotearoa New Zealand.

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List of Abbreviations

Full terms are written out at first mention in each chapter; this list is provided for quick reference to abbreviations used frequently throughout the thesis.

Abbreviation	Full Term
AUT	Auckland University of Technology
AUTEC	Auckland University of Technology Ethics Committee
NZ	New Zealand
PE	Physical education
PYD	Positive Youth Development
TPSR	Teaching Personal and Social Responsibility
SCT	Social Cognitive Theory
EST	Ecological Systems Theory
TLT	Transfer of Learning Theory
ELT	Experiential Learning Theory
WHO	World Health Organization
UNESCO	United Nations Educational, Scientific and Cultural Organization

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Use of AI tools: I used Google Gemini and Microsoft Copilot only to (i) generate brief summaries of research articles to inform decisions about relevance and whether to read them in full, (ii) help organise article sections into common themes, and (iii) improve grammar, sentence structure, headings, and chapter organisation. All substantive ideas, interpretations, analyses, and wording are my own; I reviewed and approved all edits and independently accessed and cited all sources. This use complies with AUT policies (and any applicable ethics requirements).

30/11/2025

Signature Date

Acknowledgements

I am deeply grateful to my supervisors, Dr Luigi Bercades and Dr Simon Walters, for your guidance, generous feedback, and steady encouragement throughout this research journey. Your expertise, patience, and belief in the kaupapa sustained both the quality of this work and my confidence in completing it.

Ngā mihi to Northcross Intermediate School—to the leadership and administration teams who supported access and logistics. I especially acknowledge the participants who shared their time and experiences, and their whānau for their support. Your voices sit at the heart of this thesis.

Thank you to colleagues and friends who offered conversation, accountability, and moral support along the way.

I am deeply thankful for the financial support provided through the Graduate Women North Shore Charitable Trust Postgraduate Scholarship and the AUT Postgraduate Research Scholarship – Office of Pacific Advancement. I sincerely acknowledge and appreciate this investment in my postgraduate journey and in research focused on girls' wellbeing and sport in Aotearoa New Zealand.

Editorial and technical assistance: I am grateful for the numerous AUT Library postgraduate workshops run by the Postgraduate Research Student Support team; their guidance on structure and clarity was invaluable. No fee was paid for third-party editorial services or professional formatting.

Finally, to my beautiful and loving whānau: there is never a "perfect time" to do a master's, and this year proved it. It has been a tough journey for many reasons, and I am profoundly grateful—and extremely proud—that we have navigated it together.

“Mā te aroha, te whakapono, me te māia e kotahi ai te whānau, ka taea ngā āhuatanga katoa.” With love, faith, and courage, a united family can overcome anything.

Ethics Approval

Ethical approval for this study was obtained from the Auckland University of Technology Ethics Committee (AUTEC), reference 24/227: *Transfer of Life Skills in the Girl on Fire Programme at Northcross Intermediate*, on 23 September 2024. Approval was granted for three years, until 20 September 2027. A copy of the AUTEC approval letter is provided in Appendix A.

Chapter 1: Introduction

Background

Sport is widely recognised as a powerful social institution with the capacity to foster physical health, psychological growth, and social development. Beyond its physical benefits, sport can serve as a transformative context for learning, identity formation, and empowerment—particularly among young people (Bean & Forneris, 2016; Holt, 2016). Within the framework of Positive Youth Development (PYD), structured and supportive sport environments can cultivate internal assets such as confidence, connection, competence, and character, contributing to holistic wellbeing (Holt, 2016; Lerner et al., 2005). When deliberately designed, sport-based programmes can also nurture psychosocial competencies that extend beyond the field of play, promoting resilience, leadership, and agency (Holt et al., 2017; Malete et al., 2022).

However, these developmental benefits are not realised by default. Evidence shows that sport supports growth only when participation occurs in intentional, relational, and reflective environments (Hellison, 2011; Kolb, 2014). Programmes that combine physical activity with structured reflection, mentoring, and goal setting have proven especially effective in promoting transferable life skills such as teamwork, communication, and self-regulation (Bean & Forneris, 2016; Hellison, 2011; Martinek & Hellison, 2016). Such transferable skills are crucial for navigating adolescence—a period marked by rapid cognitive, emotional, and social change (Backes & Bonnie, 2019).

For adolescent girls, this developmental stage is further shaped by gendered norms that can restrict participation and self-expression in sport. Global and Aotearoa New Zealand research consistently reports lower participation rates among girls, linked to

declining confidence, lower perceived competence, and limited access to inclusive environments (Fleming et al., 2022; Sport New Zealand, 2021d). In the Aotearoa New Zealand context, national data highlight persistent gender disparities in confidence, motivation, and engagement, underlining the need for targeted interventions that address the social and cultural barriers girls face (Petrie et al., 2018; Sport New Zealand, 2021d, 2022a). Modelling also indicates that school-based physical education could meaningfully increase activity levels among children and young people (Mizdrak et al., 2021). Cultural expectations surrounding femininity, appearance, and performance can further drive disengagement, reducing opportunities for girls to develop confidence and leadership (Slater & Tiggemann, 2011; Women's Sports Foundation, 2019). Taken together, these findings reinforce the importance of gender-responsive, empowerment-based sport initiatives that foster belonging and self-efficacy for girls.

Recognising these disparities, many countries have implemented strategies to enhance equity in sport participation and leadership. In Aotearoa New Zealand, *Sport New Zealand's Women and Girls in Sport and Active Recreation Strategy* marked a major policy step toward addressing systemic barriers, fostering inclusion, and increasing leadership pathways for women and girls (Sport New Zealand, 2018, 2021c). This national strategy emphasised locally grounded, community-based programmes that use sport as a medium for wellbeing, confidence, and leadership development.

Within this wider policy context, Girl on Fire emerged in response to Sport New Zealand's evidence on low participation and high dropout rates among girls in sport and active recreation. National monitoring highlighted that girls were becoming less active and more likely to disengage during early adolescence, prompting a stronger

strategic focus on women and girls. As part of this response, Regional Sports Trust Aktive developed the Hera initiative—a targeted programme stream designed to trial new, girl-centred approaches to participation and confidence building. Auckland Council joined as a key funding and delivery partner within Hera and engaged the Centre for Social Impact to evaluate and support the development of emerging programmes, including Girl on Fire.

Girl on Fire was piloted in local schools and refined through a co-design process that centred youth voice, teacher input, and community perspectives. These early pilots helped shape the programme's focus on confidence building, life skill development, and relational learning, establishing a foundation for its later implementation at Northcross Intermediate. Designed for Year 7–8 girls (ages 11–13), the programme empowers participants through physical activity, mentorship, and reflective learning experiences. Grounded in relational pedagogy, Girl on Fire seeks to build self-confidence, teamwork, communication, and leadership—skills that extend beyond sport into broader life contexts (Centre for Social Impact & Auckland Council, 2022). The programme aligns with the theoretical principles of Teaching Personal and Social Responsibility (TPSR; Hellison, 2011) and Experiential Learning Theory (ELT; Kolb, 2014), emphasising learning through action, reflection, and interpersonal connection.

At Northcross Intermediate School in Auckland, a Year 7–8 (ages 11–13) school, Girl on Fire was implemented as a targeted intervention to address low engagement and confidence among girls in sport and physical education. According to the Girl on Fire case study report, early evaluations of the 2021 cohort demonstrated marked increases in participants' self-belief, social connection, and willingness to participate in new activities (Auckland Council, 2022). However, while these findings captured short-

term outcomes, questions remained regarding the longevity and transferability of these gains—whether the skills, confidence, and leadership developed during the programme persisted and were applied across other areas of life. Addressing this gap forms the central focus of the present study. A consolidated evidence source map for Aotearoa New Zealand participation, policy, and programme references used across Chapters 1–6 is provided in Appendix D.

Research Problem

Despite extensive evidence supporting sport as a context for positive youth development, research has increasingly shown that the transfer of life skills from sport to other domains is neither automatic nor guaranteed (Turnnidge et al., 2014). Transfer of Learning Theory posits that knowledge or skills acquired in one setting are only successfully applied to new contexts when both cognitive recognition and contextual reinforcement occur (Barnett & Ceci, 2002; Perkins & Salomon, 1992). In sport-based youth programmes, this means that participants must not only learn specific skills but also recognise their relevance, practise them across settings, and receive environmental support for continued application.

While international studies have examined these mechanisms and programme outcomes within youth sport (Jacobs & Wright, 2018; Scheadler et al., 2024; Weiss et al., 2013), limited research in Aotearoa New Zealand has explored the sustainability of transfer of life skills from gender-responsive programmes (Manderson, 2023; Petrie et al., 2018). Most national discussions remain focused on participation statistics, confidence, and engagement (Sport New Zealand, 2021d), with less emphasis on whether these outcomes endure beyond the programme context. Furthermore, studies that have investigated life skills development among youth often focus on

older adolescents, neglecting the unique transitional stage of intermediate-aged girls, for whom identity formation and peer influence play especially significant roles (Slater & Tiggemann, 2011; Sport New Zealand, 2021d).

The Girl on Fire programme represents a valuable opportunity to address this empirical and theoretical gap. Its intentional design—combining physical activity, mentoring, and guided reflection—embodies the conditions identified in the literature as essential for learning transfer: relational support, structured reflection, and ecological alignment between settings (Bronfenbrenner, 1979; Hellison, 2011; Kolb, 2014). However, the extent to which these mechanisms lead to sustained confidence, empowerment, and application of life skills beyond the immediate programme remains under-explored (Manderson, 2023; Scheadler et al., 2024).

Accordingly, this study investigates the long-term transfer of life skills developed through participation in Girl on Fire at Northcross Intermediate. By examining the experiences of participants three years post-programme, the research seeks to understand how early adolescent engagement in a supportive, girl-centred sport environment can produce enduring personal and social outcomes. This inquiry contributes to ongoing theoretical discussions in youth sport and education by illuminating the interaction between individual agency, relational processes, and ecological systems in shaping life skills transfer (Manderson, 2023; Turnnidge et al., 2014).

Research Aim and Objectives

This qualitative case study centres on Year 7–8 girls (ages 11–13) who participated in Girl on Fire, an Aotearoa New Zealand programme that integrates physical activity with deliberate life skills learning. The study aims to understand how life skills are

developed and transferred beyond the programme, and what supports or hinders this process. The research questions are:

1. **Life skills development:** How do participants describe the life skills they develop through Girl on Fire?
2. **Transfer and contexts:** Where, how, and to what extent are these skills applied beyond the programme (e.g., classroom, home, peers, other sport/activities)?
3. **Enablers and barriers:** What individual, relational, and contextual factors enable or hinder the transfer of learning?

In pursuing these questions, the research is informed by an integrated conceptual framework that combines PYD (Lerner et al., 2005), TPSR (Hellison, 2011), Social Cognitive Theory (SCT; Bandura, 1997), Ecological Systems Theory (EST; Bronfenbrenner, 1979), and Transfer of Learning Theory (TLT; Barnett & Ceci, 2002; Perkins & Salomon, 1992). Together, these frameworks emphasise the interplay between individual, social, and contextual factors in supporting lasting behavioural and cognitive change.

Significance of the Study

This study offers both theoretical and practical contributions to the fields of sport-based education, youth development, and gender equity in Aotearoa New Zealand. Theoretically, it advances understanding of how transferable life skills can be developed and sustained through relational and reflective sport-based interventions. By integrating PYD, TPSR, SCT, EST, and TLT, the research proposes a holistic conceptualisation of skill transfer as a dynamic, contextually mediated process shaped by the interdependence of personal growth, social environment, and ecological alignment. The focus on intermediate-aged girls also addresses a critical gap in the

literature, extending research on youth sport and transfer of life skills to an earlier, formative stage of development.

Practically, the study provides evidence-based insights for educators, coaches, and policymakers seeking to design programmes that foster lasting empowerment and participation among young women. It explores how relational, inclusive, and reflective environments within sport-based initiatives can enable confidence, leadership, and resilience to extend beyond physical activity settings. The research further identifies contextual conditions—such as mentorship, family and school support, and opportunities for reflection and leadership—that appear most likely to sustain these gains.

For policymakers and national bodies such as Sport New Zealand, the study underscores the importance of investing in small-group, girl-centred interventions that complement large-scale participation initiatives like It's My Move (Sport New Zealand, 2023) and This Girl Can (Sport England, 2018). By illuminating how empowerment and skill transfer unfold across time and context, this research contributes to the evidence base informing the design of sustainable, equity-focused youth sport policies in Aotearoa New Zealand.

Thesis Structure

This thesis is organised into six chapters:

1. **Chapter 1 (Introduction)** establishes the research context, outlines the problem and aims, and explains the study's theoretical significance and structure.
2. **Chapter 2 (Literature Review)** synthesises international and Aotearoa New Zealand research on life skills development, learning transfer, and gender-

responsive sport interventions, identifying key theoretical frameworks and research gaps.

3 **Chapter 3 (Methodology)** details the qualitative research design, including participant recruitment, data collection through semi-structured interviews, and the analytical approach used to interpret findings.

4 **Chapter 4 (Findings)** presents the themes derived from participants' narratives, focusing on immediate impacts, broader transfer of life skills, enablers and barriers, and recommendations for programme development.

5 **Chapter 5 (Discussion)** interprets these findings through the integrated theoretical framework, situating them within existing scholarship on youth development and learning transfer.

6 **Chapter 6 (Conclusion)** summarises key findings, theoretical contributions, and practical implications, and offers recommendations for future research and practice.

Note on terminology and abbreviations

This thesis uses several recurring theoretical frameworks, programme names, and Te Reo Māori terms. In line with APA 7, key terms are written out in full at first mention with their abbreviation in brackets (for example, Positive Youth Development [PYD]), and the abbreviation is used thereafter. A List of Abbreviations and a Glossary of Terms (including Te Reo Māori concepts) are provided in the front matter for ease of reference.

Chapter 2: Literature Review

Introduction to the Literature Review

In Aotearoa New Zealand, girls in the intermediate school years are already underrepresented in sport and physical activity. Sport New Zealand (2021d) reports that participation begins to decline from around age 12, with the dropout rate for girls accelerating more sharply than for boys by the mid-teens. Women in Sport Aotearoa (2025) similarly emphasises this stage as a critical point for intervention, highlighting the need for programmes that foster confidence, inclusion, and sustained engagement. This literature review draws on peer-reviewed research, government and non-profit reports, and theoretical frameworks to examine the development and transfer of life skills in early adolescent girls, with particular relevance to sport and physical activity in Aotearoa New Zealand.

Strategic initiatives led by Sport New Zealand, the country's government agency for sport and recreation, such as the Balance is Better philosophy and the Women and Girls in Sport and Active Recreation Action Plan, stress the importance of inclusive, developmentally appropriate programmes that promote wellbeing, leadership, and sustained participation (Sport New Zealand, 2021a, 2021c). These national goals align with international frameworks, including the Positive Youth Development (PYD) approach, which views youth as valuable assets to be nurtured and emphasises the role of sport in fostering personal and social development when implemented with intention (Holt et al., 2017; Lerner et al., 2005).

The development of life skills is now widely acknowledged as a critical outcome of both educational and sport-based interventions, particularly for adolescent girls navigating the complex transitions of early adolescence (Bean & Forneris, 2016;

UNESCO, 2015). Life skills such as confidence, communication, resilience, and emotional regulation are essential in influencing how young people engage with peers, perform academically, and navigate their broader environments (Gould & Carson, 2008; World Health Organization [WHO], n.d.). These skills are especially vital for girls in Years 7 and 8 of the Aotearoa New Zealand school system (ages 11–13), who often face increased social pressures, body image concerns, and a decline in physical activity (Slater & Tiggemann, 2010; Sport New Zealand, 2021c).

Central to these strategies is the concept of learning transfer, which suggests that life skills acquired in one context (such as a sport or physical activity programme) can be applied to other areas of life, including school, home, and social relationships (Barnett & Ceci, 2002; Perkins & Salomon, 1992). However, the transfer of learning is not guaranteed; it relies on various contextual and individual factors, such as programme structure, opportunities for reflection, developmental readiness, and support from trusted adults and peers (Bean & Forneris, 2016; Gould & Carson, 2008).

This literature review provides the foundation for a case study evaluating the Girl on Fire programme at Northcross Intermediate School in urban Aotearoa New Zealand. Girl on Fire is specifically tailored for girls in Years 7–8 and works to boost participation in sport and physical activity by addressing common deterrents such as low confidence, perceived lack of ability, and social pressure. The programme has a deliberate focus on integrating life skills development into each movement-based session. Rather than treating physical activity and psychosocial learning as separate domains, Girl on Fire is structured to foster skills such as emotional regulation, communication, and leadership through active participation in a supportive group environment. The programme seeks to equip participants with transferable

psychosocial competencies that may be drawn upon beyond the immediate programme context (Centre for Social Impact & Auckland Council, 2022).

This literature review is organised into five main sections. Life Skills Development in Adolescents first examines the developmental needs of adolescent girls and the importance of cultivating life skills during this critical stage of early adolescence. Transfer of Learning Theory then explores theoretical models explaining how skills, behaviours, and knowledge acquired in one context can be applied in others, with particular relevance to youth sport programmes. Sport and Physical Activity-Based Interventions reviews empirical evidence on how participation in organised sport and physical activity contributes to psychosocial development, including confidence, resilience, and communication. Gaps in the Literature then highlights areas where existing research remains limited, particularly concerning intermediate-aged girls in the Aotearoa New Zealand context and the transfer of skills beyond programme settings. Finally, Summary and Research Contribution synthesises these findings to position the present research and clarify its unique contribution.

Before closing this introduction, it is important to note two caveats regarding the Aotearoa New Zealand participation evidence used in this chapter.

Data and Limitations of Aotearoa New Zealand Participation Evidence

The Aotearoa New Zealand participation evidence cited in this chapter primarily draws on Active NZ 2021 findings and the Young Women Profile. Active NZ is a large, nationally representative self-report survey; year-to-year comparisons are indicative rather than causal. COVID-era disruption (2020–2022) affects trend interpretation, and some subgroup estimates (for example, by age or ethnicity) carry wider confidence intervals. Where possible, claims are triangulated across the Profile and the two 2022

Active NZ reports to prioritise consistent signals (Sport New Zealand, 2021d, 2022a, 2022b). A fuller evidence source map (by claim, source, and usage notes) is provided in Appendix D.

Table 1. Key claims and primary data sources informing Aotearoa New Zealand participation evidence

Key claim in text	**Most appropriate source(s)**
Girls' drop-off & barriers (confidence, judgement, body image)	Sport New Zealand (2021d, 2022a, 2022b)
Women and girls policy framing	Sport New Zealand (2018, 2021c, 2021e)
Youth-centred sport philosophy (Balance is Better)	Sport New Zealand (2021a, 2021b)
Māori wellbeing / *hauora* framing	Durie (1998); Te Puni Kōkiri (2016)
School-based physical activity outcomes in Aotearoa New Zealand	Mizdrak et al. (2021), Rush et al. (2014, 2016)
Adolescent health context (national)	Fleming et al. (2022), Fleming et al. (2020, Youth19 study)

Life Skills Development in Adolescents

Understanding Life Skills in Youth Development

Life skills are widely understood as a combination of psychosocial and interpersonal capabilities that enable young people to navigate everyday challenges, make informed decisions, build healthy relationships, and contribute meaningfully to their communities (WHO, n.d.). Within youth development, these skills are often distinguished between personal traits, such as confidence, emotional regulation, and resilience, and social attributes, including communication, empathy, collaboration, and leadership (Bean & Forneris, 2016; Gould & Carson, 2008). Sport and physical activity settings can provide fertile ground for the acquisition of such competencies—both through deliberate pedagogical approaches and through incidental experiences that

emerge in peer interaction, structured activity, and moments of challenge (Camiré et al., 2012; Petitpas et al., 2005; Pierce et al., 2017).

Personal traits such as self-confidence and emotional regulation are particularly significant during early adolescence, as young people encounter increasing academic and social demands (Eccles & Roeser, 2011; Patton et al., 2016). Confidence is linked with willingness to take risks, persistence after setbacks, and sustained motivation, while the capacity to regulate emotions supports positive coping under stress and contributes to psychological wellbeing (Jones & Lavallee, 2009). Resilience—developed through cycles of effort, failure, and recovery—is similarly central to how adolescents adapt to adversity and sustain engagement across multiple domains of life (Fletcher & Sarkar, 2012). These personal qualities are not only critical to individual wellbeing but also provide a foundation upon which social competencies can be built.

Equally, the development of social attributes through sport and physical activity can enable young people to function effectively within groups. Communication skills facilitate collaboration and problem-solving, while empathy underpins inclusive behaviour and fosters positive peer connections (Fraser-Thomas et al., 2005; Weiss et al., 2014). Team-based activity provides an environment in which collaboration and trust can be reinforced through shared goals, while leadership opportunities allow young people to take responsibility, motivate peers, and guide collective outcomes (Bean et al., 2018; Coakley, 2011). Together, these social attributes promote belonging and group cohesion, both of which are crucial for adolescent identity formation and wellbeing.

The importance of life skills development during adolescence is increasingly recognised as integral to preparing young people for the cognitive, emotional, and social demands

of later life (Holt et al., 2017; Lerner et al., 2005). For adolescent girls, these skills may serve a protective role, buffering against challenges such as reduced self-worth, body image concerns, and social withdrawal, which are closely associated with declining levels of physical activity during this developmental stage (Slater & Tiggemann, 2010; Sport New Zealand, 2021d). The early adolescent years (ages 11–13) represent a particularly sensitive window, as peer dynamics, identity exploration, and emotional development become increasingly complex and influential in shaping engagement and long-term outcomes (Eccles & Roeser, 2011; Patton et al., 2016; Steinberg, 2014). Aotearoa New Zealand monitoring adds local context: Youth19 initial findings complement more recent trends reported by Fleming et al. (2022), underscoring mixed progress in adolescent wellbeing (Fleming et al., 2020, 2022).

The Significance of Early Adolescence

The stage of early adolescence, typically between the ages of 11 and 13, brings rapid and multifaceted changes across physical, emotional, and cognitive domains. During this period, girls begin to construct a more defined self-identity, forge stronger peer relationships, and explore personal values and future aspirations (Eccles & Roeser, 2011; Patton et al., 2016; Steinberg, 2014). The intermediate school years (Years 7–8) in the Aotearoa New Zealand context are especially significant, representing a bridge between the structured foundation of primary school and the broader autonomy of adolescence.

At this stage, many girls experience heightened self-awareness and increased sensitivity to peer evaluation, particularly in physical activity settings where performance and appearance are publicly visible (Thorpe et al., 2020; Walters et al., 2017). These dynamics can contribute to a drop in physical activity levels, diminishing

self-confidence, and hesitancy to take on visible or leadership roles (Slater & Tiggemann, 2010). Despite these challenges, early adolescence also presents an ideal opportunity to foster attributes such as assertiveness, confidence, and emotional resilience, provided that the right conditions are in place (Fredricks & Eccles, 2006; Lerner et al., 2005; Patton et al., 2016).

Gendered Barriers to Life Skills Acquisition

Life skills development for early adolescent girls is shaped by both gender-specific and broader psychosocial factors that interact in complex ways. Evidence from Aotearoa New Zealand and Australia consistently demonstrates that girls face unique challenges in sport and physical activity contexts that can limit their opportunities to acquire confidence, resilience, and leadership skills. Sport New Zealand's Young Women Profile (2021d) reports that by ages 16–17, girls participate in nearly 30% less physical activity than boys, with this decline often beginning as early as 11–13 years. This downward trend is strongly linked to gendered barriers such as low perceived competence, body image concerns, and heightened sensitivity to peer judgment (Sport New Zealand, 2021d; VicHealth, 2019; Women in Sport Aotearoa, 2025). These patterns align with Youth19 signals of uneven wellbeing outcomes across subgroups (Fleming et al., 2020).

These gendered experiences are compounded for Māori and Pasifika girls, who frequently encounter cultural disconnects and under-representation within mainstream sport environments, making it harder to feel a sense of belonging or visibility (Te Puni Kōkiri, 2016; Thorpe et al., 2020). Such inequities not only affect participation rates but also restrict opportunities for developing transferable life skills like teamwork, assertiveness, and problem-solving, as well as undermining broader dimensions of wellbeing and participation (Durie, 1998; Thorpe et al., 2020).

While psychological challenges such as fear of failure, negative self-talk, and performance anxiety can affect many young people, research highlights that these pressures often take on a distinctly gendered form for girls, intensifying during early adolescence when peer comparison and media-driven ideals of femininity become more influential (Cooky & Messner, 2018). When left unaddressed, these influences undermine the acquisition of life skills such as confidence, decision-making, and leadership, and contribute to disengagement from both sport and its broader developmental benefits (Sport New Zealand, 2021d, 2022a, 2022b).

Recognising these gendered dynamics underscores the need for interventions that are explicitly designed with girls' experiences in mind. Programmes that foster safe, inclusive, and culturally responsive environments allow girls to take risks, build agency, and strengthen peer connections. Significantly, approaches that prioritise holistic development rather than narrow athletic outcomes are most effective in supporting sustained acquisition of life skills (Bean & Forneris, 2016; Coakley, 2011; Petitpas et al., 2005).

The Role of Sport in Fostering Life Skills

Sport and physical activity programmes have the potential to offer a unique platform for life skills development through their interactive, embodied, and social structure. Unlike traditional classroom learning, sport can provide immediate feedback, opportunities for emotional expression, and collaborative experiences with peers, all of which are conducive to developing social and emotional competencies (Fraser-Thomas et al., 2005; Holt et al., 2017; Pierce et al., 2017). However, the benefits of sport in this regard are not automatic. The extent to which sport supports life skills

growth depends heavily on how the experience is designed and delivered (Bean et al., 2018; Gould & Carson, 2008; Hellison, 2011).

The PYD framework advocates for programming that aligns with the core developmental needs of young people, emphasising autonomy, skill building, positive adult relationships, and meaningful involvement (Holt et al., 2017; Lerner et al., 2005). When these elements are embedded in programme design, sport becomes a powerful context for nurturing what Lerner terms the "Five Cs": competence, confidence, connection, character, and caring, which collectively facilitate a sixth dimension, contribution—reflecting the active engagement of youth in benefiting others and their communities (Lerner et al., 2005).

Crucially, life skills are most effectively nurtured through thoughtful programme features: structured challenges, inclusive team-based tasks, supportive mentoring, and opportunities for personal reflection (Camiré et al., 2012; Holt et al., 2017; Petitpas et al., 2005). These factors are especially important for engaging girls in early adolescence, who often require emotionally secure and culturally responsive environments to participate fully and take interpersonal risks (Sport New Zealand, 2021d; Thorpe et al., 2020; Women in Sport Aotearoa, 2025).

Evidence from Aotearoa NZ and Australia

In the last two decades, studies in Australia have reinforced the potential of sport and physical activity-based interventions to encourage life skills development in adolescent girls. For instance, a school-based health and wellbeing programme targeting Year 8 girls incorporated not only physical activities such as yoga and walking, but also mindfulness, self-compassion, leadership, and decision-making skills, demonstrating the potential for psychosocial growth when movement is intentionally paired with

emotional literacy (White et al., 2022). Similarly, the Girls in Sport project in New South Wales (2009–2010) observed positive shifts in engagement and psychosocial wellbeing when structured action plans were effectively implemented, though outcomes varied with programme delivery (Okely et al., 2012). More recently in the Aotearoa New Zealand context, Women in Sport Aotearoa's Thriving Through Sport report emphasises the importance of emotional safety, supportive coaching, and youth autonomy in promoting self-awareness and confidence among girls (Women in Sport Aotearoa, 2025). Girls were more likely to report gains in confidence and relationships when they felt their growth was prioritised over performance outcomes (Sport New Zealand, 2021b, 2021d).

Furthermore, Sport New Zealand's Women and Girls in Sport and Active Recreation: Government Strategy underscores the critical role of positive adult–youth relationships, empathy, cultural competence, and emotionally safe environments in supporting girls' participation and skill development (Sport New Zealand, 2018). Programmes with coaches trained in these practices consistently show stronger outcomes in leadership, confidence, and sustained participation. These findings echo broader literature highlighting the importance of deliberate, gender-aware facilitation for enabling transfer of life skills (Bean & Forneris, 2016; Pierce et al., 2017).

Relevance to the Girl on Fire Programme

The Girl on Fire initiative, implemented in an intermediate school setting, aims to integrate many of these best-practice principles. It specifically targets girls aged 11–13, an age group often overlooked in sport participation research, and embeds life skills learning within its structure, with a focus on developing confidence, communication, emotional expression, and leadership. The programme is designed to move beyond

skill instruction to create a relational, inclusive environment where girls feel safe to express themselves, take risks, and explore their capabilities (Auckland Council, 2022; Centre for Social Impact & Auckland Council, 2022). By incorporating small-group activities, single-gender spaces, and reflective practices, the programme aims to nurture the psychological safety and peer trust essential for meaningful engagement. Additionally, the programme aims to equip facilitators to model and reinforce both interpersonal and intrapersonal growth, drawing from established frameworks such as PYD and Teaching Personal and Social Responsibility (TPSR; Hellison, 2011; Holt et al., 2017). These elements make Girl on Fire an ideal case for investigating whether, and how, sport-based life skills are developed and—crucially—how they might transfer into other areas of life.

Section Summary

Building life skills during early adolescence is essential for supporting girls' wellbeing, social engagement, and future trajectories. However, many girls face barriers, particularly within sport settings, that limit their access to these opportunities. Local and international research points to the effectiveness of intentional, gender-sensitive programming in overcoming these challenges, especially when such programmes emphasise reflection, social support, and skilled facilitation.

Despite their importance, intermediate-aged girls in Aotearoa remain an under-researched group. Initiatives such as Girl on Fire offer a valuable lens for understanding how life skills development can be embedded within physical activity-based interventions and whether those skills can extend meaningfully into girls' broader lives. The next section explores the mechanisms by which sport-based

programmes support not only the acquisition of life skills but also the transfer of learning across contexts.

Transfer of Learning

Understanding Learning Transfer

Learning transfer refers to the process through which knowledge, behaviours, or skills acquired in one context are applied in another, often distinct, environment (Barnett & Ceci, 2002; Perkins & Salomon, 1992). This concept is particularly relevant for youth development, as many sport and physical activity-based programmes aim to cultivate psychosocial competencies that extend beyond the immediate intervention. Transfer requires more than mere skill acquisition; young people must also recognise when and how to apply what they have learned in novel or less structured settings (Barnett & Ceci, 2002; Perkins & Salomon, 1992). Barnett and Ceci (2002) further argue that transfer can vary across dimensions such as context, modality, and social setting, highlighting that skills learned in one environment may not automatically travel across different people, places, or tasks.

Two forms of transfer are commonly distinguished. Near transfer involves applying skills in closely related situations, such as using teamwork developed in a sport session during a classroom project. Far transfer, by contrast, involves applying skills in more abstract or dissimilar contexts—for instance, using emotional regulation strategies acquired in a sporting environment to navigate tension at home or among peers (Perkins & Salomon, 1992). Far transfer is generally less automatic and is influenced by programme design, developmental readiness, and reinforcement across contexts.

Recent work in education and sport highlights that deliberate reflection, guided abstraction, and social scaffolding can significantly improve the likelihood of both near

and far transfer (Bean & Forneris, 2016; Bean et al., 2018; Hellison, 2011; Pierce et al., 2017). These findings underscore that transfer is an active, co-constructed process, dependent not only on the skills themselves but also on the relational and cultural environments in which adolescents participate.

Mechanisms That Enable Transfer

Transfer is facilitated when programmes embed opportunities for reflection, deliberate practice, and guided application. Perkins and Salomon (1992) describe high-road transfer as a process requiring conscious abstraction and metacognitive awareness, enabling learners to recognise underlying principles and apply them across diverse settings. Low-road transfer occurs through repetition in varied but familiar contexts, gradually allowing skills to generalise without conscious thought. Both mechanisms remain relevant in youth development, although contemporary sport-based programmes increasingly emphasise high-road approaches, incorporating structured reflection and adult mentorship to explicitly link learning to broader life contexts (Bean & Forneris, 2016; Bean et al., 2018; Hellison, 2011; Pierce et al., 2017).

Social support is critical in enabling transfer. Adults who model targeted behaviours, provide feedback, and reinforce the relevance of skills increase the likelihood that young people will apply what they learn (Fraser-Thomas et al., 2005; Hellison, 2011). Peer interactions further strengthen transfer: collaborative problem solving, feedback, and shared challenges create a scaffolded environment where adolescents can experiment with and internalise new competencies (Bean & Forneris, 2016; Fraser-Thomas et al., 2005). Notably, these mechanisms highlight that transfer is co-constructed and culturally situated; what works in one context may need adaptation to be meaningful in another (Thorpe et al., 2020).

International and national initiatives designed to improve girls' confidence and participation signal promising immediate outcomes, yet evaluations seldom track whether gains in confidence or engagement translate into broader life domains (for example, leadership, academic persistence, or resilience) (Sport New Zealand, 2022a, 2022b; Thorpe et al., 2020). Emerging evidence suggests that sustained transfer is most likely when programmes incorporate intentional reflection, explicit teaching, and supportive ecological environments (Bean et al., 2018; Pierce et al., 2017; Scheadler et al., 2024). These insights provide a conceptual foundation for understanding the Girl on Fire model, which embeds reflective practice, leadership scaffolding, and peer reinforcement to support the persistence of life skills over time (Auckland Council, 2022; Centre for Social Impact & Auckland Council, 2022).

Challenges to Learning Transfer

Key challenges that can limit learning transfer include:

- **Lack of explicit instruction.** When life skills are not directly named or taught, young people may fail to recognise what they are learning. This is especially pertinent for younger adolescents, whose metacognitive abilities are still developing (Hellison, 2011; Slater & Tiggemann, 2010). Without intentional scaffolding, skills may remain context bound and underutilised.
- **Contextual discontinuity.** Transfer is less likely when skills are learned in environments that differ significantly from everyday settings. A supportive, structured sport programme may not translate easily to a high-pressure classroom or home environment if participants lack confidence or encouragement to apply their learning (Perkins & Salomon, 1992).

- **Inconsistent reinforcement across settings.** When key adults—teachers, family members, mentors—fail to reinforce life skills, adolescents may hesitate to apply them. Consistency across social environments is therefore crucial (Casey et al., 2014; Sport New Zealand, 2021a).
- **Developmental considerations.** Early adolescents are undergoing rapid cognitive, emotional, and social change. While beginning to think abstractly, they often require modelling, guidance, and repeated exposure to effectively integrate new skills (Eccles et al., 1993; Kolb, 2014).

Strategies to Strengthen Transfer

Effective strategies to promote transfer include:

- **Structured reflection.** Group discussion, journaling, or storytelling fosters metacognitive awareness and helps young people make sense of experiences (Bean & Forneris, 2016; Kolb, 2014).
- **Explicit instruction.** Clearly naming and defining life skills enhances recall and application (Bean et al., 2018; Gould & Carson, 2008).
- **Relevant examples.** Linking programme experiences to real-world situations encourages generalisation of skills (Bean & Forneris, 2016; Pierce et al., 2017).
- **Modelling by adults.** Coaches and facilitators who consistently demonstrate skills increase the likelihood of adolescent imitation and internalisation (Hellison, 2011; Lerner et al., 2005).
- **Cross-context reinforcement.** Collaboration with schools, families, and communities ensures that skills are encouraged across multiple settings (Casey et al., 2014; Sport New Zealand, 2021a).

Relevance to Intermediate-Aged Girls

Early adolescence is a pivotal stage for life skills development. Girls in this age range are forming identity, seeking autonomy, and navigating increasingly complex peer relationships (Eccles et al., 1993; Fredricks & Eccles, 2006). They can engage with life skills but require emotionally safe environments, trust, and encouragement. Structured reflection, guided modelling, and culturally responsive teaching are particularly effective in enabling transfer for this group. Concrete examples and discussion are often necessary to help adolescents bridge lessons from physical activity to school, home, and social settings (Bean & Forneris, 2016; Hellison, 2011; Pierce et al., 2017). These mechanisms can also be interpreted through the combined lens of Social Cognitive Theory (SCT), Ecological Systems Theory (EST), and Positive Youth Development (PYD), which together emphasise observational learning, nested environmental influences, and strengths-based programming.

Section Summary

Understanding transfer is critical to evaluating whether life skills taught through sport-based programmes last beyond the sessions themselves. Theoretical frameworks from experiential, social, and youth development psychology all highlight the role of deliberate instruction, reflective processing, and environmental support in facilitating both near and far transfer. Evidence from Aotearoa New Zealand and international studies reinforces this view: young people are more likely to apply sport-based learning in other contexts when supported by structured, intentional, and relational approaches. For intermediate-aged girls, who are at a key developmental juncture, transfer is not automatic. It demands thoughtful facilitation and sustained reinforcement across home, school, and social environments, providing a crucial

backdrop for evaluating whether and how the Girl on Fire programme supports enduring life skills development and application.

Sport and Physical Activity Based Interventions

Sport as a Developmental Context

Sport and physical activity are increasingly valued not only for their physiological benefits but also as meaningful spaces for psychosocial learning. When deliberately structured, sport-based programmes can foster essential life skills such as resilience, communication, leadership, self-awareness, and emotional regulation (Camiré et al., 2012; Gould & Carson, 2008). These contexts often support identity formation and relational learning, particularly when grounded in a PYD approach (Holt et al., 2017; Lerner et al., 2005).

While sport holds significant developmental potential, this is never guaranteed. Its impact depends on how programmes are designed, facilitated, and delivered (Coakley, 2011; Fraser-Thomas et al., 2005). When environments are overly competitive, poorly structured, or lacking support, they can undermine rather than build confidence—particularly for girls, who are more vulnerable to exclusion in such settings (Holt, 2016; Slater & Tiggemann, 2010). For physical activity-based programmes to be effective, they must be intentionally structured to foster inclusion, relational safety, and holistic development (Sport New Zealand, 2021d, 2022a, 2022b).

Frameworks for Life Skills Development Through Sport

The role of structured sport programmes in facilitating the development and transfer of life skills is well documented (Bean & Forneris, 2016; Holt et al., 2017). PYD has shaped how practitioners conceptualise sport as a context for cultivating the "Five Cs"—competence, confidence, connection, character, and caring (Lerner et al., 2005).

In sport, these outcomes emerge when environments are intentionally designed to foster supportive relationships, autonomy, and opportunities for contribution (Holt et al., 2017; Petitpas et al., 2005). PYD's strengths-based approach aligns closely with Aotearoa New Zealand's emphasis on inclusive, participant-centred practice, as reflected in Balance is Better (Sport New Zealand, 2021a, 2021b).

Alongside PYD, Hellison's TPSR model translates these developmental ideals into practice. TPSR focuses on progressively teaching responsibility through physical activity, encouraging respect, effort, self-direction, and leadership within and beyond the sport setting. Programmes grounded in TPSR principles connect physical engagement with social and emotional learning, positioning sport as a vehicle for personal growth and community contribution (Auckland Council, 2022; Centre for Social Impact & Auckland Council, 2022; Hellison, 2011).

Complementing these frameworks, Bandura's SCT provides a behavioural lens for how girls acquire and apply life skills within sport settings. SCT posits that learning occurs through the dynamic interaction of personal, behavioural, and environmental influences (reciprocal determinism). Self-efficacy, observational learning, and modelling play central roles in shaping motivation and behaviour change (Bandura, 1997). These processes are particularly relevant to girl-centred sport programmes, where participants learn by observing peers and mentors, build confidence through mastery experiences, and internalise beliefs in their capability to succeed. Integrating SCT alongside PYD and TPSR helps explain how life skills are taught, self-regulated, and reinforced across social contexts. Taken together, PYD, TPSR, and SCT align with broader theories of learning transfer that emphasise reflection, modelling, and self-

efficacy as precursors to sustained behavioural change (Gould & Carson, 2008; Pierce et al., 2017).

Key Design Features of Effective Interventions

Research from Aotearoa New Zealand and Australia highlights several characteristics common to successful sport-based programmes for girls:

- Emotionally safe and inclusive spaces. When girls feel secure, they can take the social and physical risks central to growth (Sport New Zealand, 2021a; Women in Sport Aotearoa, 2025).
- Gender-responsive structure. Girl-only groups, adaptive uniforms, culturally inclusive activities, and relational coaching support belonging and confidence (Sport New Zealand, 2021d, 2022a; Te Puni Kōkiri, 2016; Thorpe et al., 2020).
- Explicit life skills instruction. Programmes that clearly name and teach skills (for example, teamwork, emotional regulation) and build in opportunities to practise them tend to be more effective (Bean & Forneris, 2016; Pierce et al., 2017).
- Facilitated reflection. Journaling, dialogue, and debriefs help participants connect experiences to broader life contexts (Gould & Carson, 2008; Kolb, 2014).
- Supportive adult–youth relationships. Empathetic, culturally aware coaches and mentors enable growth and encourage skill application beyond the programme (Casey et al., 2014; Sport New Zealand, 2021b).

Collectively, these components establish the foundation for inclusive, meaningful development—especially among intermediate-aged girls navigating identity and social sensitivity.

Evidence from Aotearoa NZ and Australia

Local and regional studies reinforce the impact of intentionally designed gender-responsive interventions:

- Girls in Sport (New South Wales). When participating schools implemented structured action plans, moderate improvements in girls' confidence, teamwork, and activity levels were observed; inconsistent implementation limited broader impact (Casey et al., 2014; Okely et al., 2012).
- Good for Girls, Good for Life (Victoria). This programme reshaped sport and physical education to promote choice, emotional wellbeing, and social inclusion. Girls reported higher engagement, lower anxiety, and greater willingness to participate in team-based activities (VicHealth, 2019).
- Thriving Through Sport (Aotearoa New Zealand). Consultations with young women emphasise hauora (holistic wellbeing), relational coaching, peer support, and cultural safety as essential for fostering confidence and self-expression (Durie, 1998; Women in Sport Aotearoa, 2025).
- Balance is Better and the Women and Girls in Sport and Active Recreation Action Plan. Both advocate developmentally appropriate, youth-led sport experiences focused on personal growth and enjoyment rather than competition, aligning with PYD principles (Sport New Zealand, 2021a, 2021c).

Aotearoa New Zealand also has long-standing school- and regionally based initiatives. Project Energize (Waikato) delivered region-wide physical activity and nutrition programming with clear impacts on fitness and body size; however, evaluations offer limited insight into psychosocial life skills development or transfer (Rush et al., 2014). Similarly, national mechanisms such as KiwiSport and Sport New Zealand's It's My

Move campaign aim to increase participation, particularly for girls, by improving access and motivation. Public reporting and monitoring to date have focused primarily on participation, activity levels, and attitudinal shifts rather than the longitudinal application of social or emotional competencies across school, home, or community contexts (Sport New Zealand, 2021a, 2022b). This highlights a gap in the Aotearoa New Zealand evidence base: while numerous programmes encourage engagement in physical activity, few examine whether life skills persist beyond the immediate programme setting, particularly for intermediate-aged girls.

Application to Intermediate Aged Girls

Although many sport-based programmes focus on older youth, Years 7–8 represent a pivotal developmental period. Girls in this phase are especially susceptible to disengagement due to rising self-consciousness, peer pressure, and evolving self-esteem (Fredricks & Eccles, 2006; Slater & Tiggemann, 2010). At the same time, early intervention offers substantial potential to shape enduring patterns of participation and wellbeing (Biddle et al., 2011; Eime et al., 2013). Programmes that target this age group with quality facilitation and peer support are therefore particularly promising; they can establish the groundwork for lifelong engagement and resilience (Sport New Zealand, 2021d, 2022a, 2022b).

Section Summary

Sport and physical activity-based interventions hold considerable promise for fostering psychosocial development, provided they are intentionally designed and facilitated. Grounded in frameworks such as PYD, TPSR, and SCT, these programmes create inclusive, relationally safe environments where girls can develop transferable life skills including confidence, resilience, communication, and emotional regulation. Research

from Aotearoa New Zealand and Australia shows that interventions incorporating explicit skill instruction, reflection, gender-responsive design, and supportive adult–youth relationships can enhance wellbeing and participation (Sport New Zealand, 2021d, 2022a, 2022b).

For girls aged 11–13, this developmental stage presents both challenges and opportunities. While rising self-consciousness and social pressures increase the risk of disengagement, well-structured, supportive programmes can strengthen life skills and establish positive patterns of physical activity and self-belief. Despite promising approaches, important gaps remain in how interventions are evaluated—particularly regarding the persistence of life skills beyond programme settings—which the present study seeks to address.

Gaps in the Literature

Limited Attention to Intermediate-Aged Girls

Recent research underscores a significant gap in sport-based youth development literature concerning early adolescent girls aged 11–13 (Years 7–8). While studies have predominantly focused on older adolescents, this age group is navigating a critical developmental phase marked by shifts in identity, peer relationships, and emotional regulation. Intervening during this period is crucial, as it can mitigate risks such as declining self-confidence, reduced physical activity, and disengagement from educational and social opportunities.

For instance, Bergen et al. (2024) used simulated modelling to examine the potential impact of secondary school-based interventions on determinants of future physical activity participation among adolescents in Aotearoa New Zealand. The findings suggest that targeted interventions during early adolescence can positively influence

future physical activity behaviours, highlighting the importance of this developmental stage in shaping long-term health outcomes. Participation data from Sport New Zealand (2021d, 2022a, 2022b) further indicate that engagement declines sharply for girls across early and mid-adolescence, reinforcing the need for timely intervention.

Complementing this, a broad review shows that early adolescence is a pivotal window for establishing physical activity habits and that interventions during this stage are more likely to support sustained engagement (Eime et al., 2013). In Aotearoa New Zealand, Evans et al. (2023), using data from the Growing Up in New Zealand cohort, reported lower extracurricular activity participation among 12-year-old girls compared with boys, again highlighting gendered disparities. These findings, together with national monitoring data (Sport New Zealand, 2021d, 2022a, 2022b), underscore the importance of focusing on the specific needs of intermediate-aged girls to promote equitable participation and outcomes.

Addressing this gap is imperative for designing effective, developmentally appropriate interventions that foster the wellbeing and active participation of intermediate-aged girls in sport and physical activity. Such interventions can play a pivotal role in supporting holistic development during this formative stage (Sport New Zealand, 2021d, 2022a, 2022b).

Limited Evidence of Life Skills Transfer Beyond Programmes

While a growing body of research supports life skills development through sport, far less evidence examines whether and how those skills transfer into participants' broader lives. Many studies prioritise immediate or short-term outcomes (for example, pre/post programme surveys) without longitudinal follow-up in everyday contexts (Camiré et al., 2012; Gould & Carson, 2008). Moreover, some work (e.g., Gould &

Carson, 2008; Petitpas et al., 2005) assumes that participation alone leads to growth, with limited examination of mechanisms that enable or constrain generalisation. There is a need for research centring youth perspectives on how they interpret learning and perceive real-life benefits.

In Aotearoa New Zealand, few studies explicitly prioritise life skills transfer as a core outcome (Sport New Zealand, 2021a; Women in Sport Aotearoa, 2025), a gap that this study, focusing on the Girl on Fire programme, aims to address through an exploration of participants' experiences three years post-programme.

Cultural and Gendered Influences Remain Underexamined

Despite advances in youth sport research, the transfer of life skills from sport to broader life contexts remains uneven across gender and cultural lines. Aotearoa New Zealand research highlights intersecting pressures around body image, competition, and cultural expectations (Fleming et al., 2020; Thorpe et al., 2020). These influences extend beyond individual motivation and reflect systemic conditions shaping opportunities for participation and confidence (Sport New Zealand, 2021d, 2022a, 2022b).

These patterns align with Ecological Systems Theory (EST; Bronfenbrenner, 1979), which situates development within interacting systems from the microsystem (peers, family, coaches) to exosystem and macrosystem influences (school culture, gender norms, societal expectations). Applying an ecological lens helps explain why some participants thrive in supportive environments while others face structural or cultural barriers to transfer (Fleming et al., 2020; Sport New Zealand, 2022a, 2022b; Thorpe et al., 2020). Contextually grounded, relational approaches like Girl on Fire better reflect

the lived realities of girls in Aotearoa New Zealand by acknowledging both individual and systemic dimensions of development.

Methodological Limitations and Lack of Culturally Responsive Tools

Measuring life skills development and transfer is methodologically challenging. Many studies rely on self-report instruments that can miss subtle or internalised changes. Few validated tools are both developmentally appropriate for early adolescent girls and designed to capture transfer across life domains in culturally responsive ways (Bean & Forneris, 2016; Pierce et al., 2017). Quantitative designs can struggle with the nuanced, context-dependent nature of transfer—especially in informal settings such as home or peer networks where supports vary—underscoring the value of qualitative approaches that foreground young people's voices.

Inconsistent Implementation and Programme Fidelity

Programme impact is closely tied to delivery fidelity. Facilitator preparation, session structure, and adherence to core pedagogical strategies substantially influence outcomes (Fraser-Thomas et al., 2005; Holt, 2016). Evidence from Australia's Girls in Sport initiative shows that even well-designed programmes may yield muted effects if implementation is inconsistent (Okely et al., 2012). In Aotearoa New Zealand, little research investigates how contextual variables such as school leadership, facilitator training, and whānau engagement shape success. Understanding these enablers and constraints is vital for adaptation and scale, particularly in contexts where holistic wellbeing and whānau involvement are central (Durie, 1998).

Section Summary

The literature indicates a persistent gap in understanding how life skills acquired through sport and physical activity are transferred into the broader lives of

intermediate-aged girls. Existing research largely focuses on skill acquisition rather than application, often neglecting the unique developmental and social needs of this age group. Cultural and gender-specific factors, methodological limitations, and variability in programme fidelity further complicate efforts to determine lasting impact.

To address this gap, the present study focuses on Girl on Fire, a school-based, sport-centred programme for Year 7–8 girls (ages 11–13). The literature suggests that transfer is most likely when learning is intentional, relational, and embedded in real contexts. Accordingly, this study examines:

- Perceived life skills development: how participants understand the life skills they develop through Girl on Fire.
- Transfer and contexts: where, how, and to what extent these skills are applied beyond the programme (for example, classroom, home, peers, other sport or activities).
- Enablers and barriers: which individual, relational, and contextual factors enable or constrain transfer.

By centring the lived experiences of early adolescent girls within an authentic intervention, the study contributes critical insight into the long-term efficacy of sport-based youth development in Aotearoa New Zealand.

Chapter Summary and Research Contribution

This chapter synthesised evidence on life skills development among adolescent girls, the role of sport and physical activity-based interventions, and theoretical underpinnings of learning transfer. Particular focus was placed on the distinct

developmental window of ages 11–13, during which shifts in identity, peer relations, and emotional regulation shape both engagement in sport and the meaningful application of psychosocial skills across life domains.

International and Aotearoa New Zealand research supports sport as a vehicle for PYD when programmes are purposefully structured to promote life skills acquisition within safe, inclusive, relational environments. Conceptual frameworks—PYD (Lerner et al., 2005), Teaching Personal and Social Responsibility (TPSR; Hellison, 2011), and Experiential Learning Theory (Kolb, 2014)—emphasise intentional design, guided reflection, and mentoring to extend outcomes beyond fitness. Building on these, Social Cognitive Theory (SCT; Bandura, 1997) helps explain how self-efficacy, observational learning, and reciprocal determinism underpin transfer across contexts: mastery experiences and positive social modelling reinforce capability beliefs, increasing the likelihood that skills are sustained and applied beyond sessions. Learning transfer scholarship (Barnett & Ceci, 2002; Gould & Carson, 2008; Perkins & Salomon, 1992) further highlights conditions that enhance transfer—explicit teaching of transferable skills, structured reflection, consistent adult role modelling, and supportive social and ecological contexts (Durie, 1998).

Despite progress, notable gaps remain, particularly regarding the lived experiences of intermediate-aged girls, gender- and culture-responsive analyses, and longitudinal evidence of transfer beyond programme settings. The Girl on Fire programme at Northcross Intermediate is well positioned to address these gaps. As a gender-responsive, movement-based intervention aligned with national priorities (Sport New Zealand, 2021a), it is intentionally designed to build confidence, self-regulation, and leadership through physical activity, incorporating reflective practices and peer

collaboration that support life skills transfer (Auckland Council, 2022; Centre for Social Impact & Auckland Council, 2022).

This research contributes by:

- Investigating whether, and how, life skills developed through Girl on Fire transfer into other areas of participants' lives, and whether effects persist over time.
- Examining individual, relational, and contextual enablers and barriers to transfer, with attention to programme design, facilitation, and external supports (Durie, 1998).
- Centring the perspectives of intermediate-aged girls to understand how they perceive, make sense of, and apply learning.
- Offering evidence-informed guidance on effective gender-responsive programming in Aotearoa New Zealand, informing both academic literature and policy in sport, education, and youth wellbeing (Sport New Zealand, 2021d, 2022a, 2022b).

Grounded in robust theory and the lived realities of young girls in a school-based intervention, this study evaluates not only whether Girl on Fire increases participation, but also whether it nurtures longer-term personal and social change. This provides a clear rationale for the subsequent methodology chapter, which outlines the qualitative case study design used to investigate these questions.

Chapter 3: Methodology

Research Paradigm and Design

This study is grounded in a constructivist paradigm, which recognises that meaning is co-constructed through participants' experiences and the social contexts in which those experiences occur (Lincoln & Guba, 1985). Adopting an interpretive stance supports the use of qualitative methods aimed at understanding how adolescent girls internalised learning from the Girl on Fire programme (Creswell & Poth, 2018). This approach privileges participants' narratives and allows insights to be generated inductively rather than imposed through predefined categories. Such a perspective is particularly suited to exploring psychosocial development, empowerment, and learning transfer in youth sport-based interventions.

A qualitative single-case study design was adopted, focusing on a bounded cohort of Year 7–8 girls (ages 11–13) who participated in the Girl on Fire programme at Northcross Intermediate School in 2021. The programme was delivered under COVID-19 restrictions, with several sessions conducted online, adding a distinctive contextual layer to the inquiry. Case study methodology enables close investigation of processes of change within authentic settings and is widely recognised as a valuable approach in applied educational research. From an interpretive perspective, Stake (2005) conceptualises case studies as bounded systems of meaning and distinguishes between intrinsic and instrumental designs. Thomas (2021) offers a more pragmatic orientation, outlining design choices that underpin methodological rigour in case study research.

Guided by these perspectives, this study employed an instrumental case study design: the 2021 delivery of Girl on Fire at Northcross Intermediate was examined not solely

for its own sake but as a means to illuminate broader questions about life skills development and the conditions that enable or constrain transfer into other life domains. Full ethical approval was granted by the Auckland University of Technology Ethics Committee (AUTEC #24/227), and all procedures complied with institutional and national ethical standards (see Appendix A: Ethical Approval).

The study distinguished carefully between methodological and conceptual frameworks. Methodologically, an interpretive, instrumental case study design (Stake, 2005; Thomas, 2021) guided data collection and analysis, supported by reflexive practice to ensure credibility, transparency, and rigour (Berger, 2015; Finlay, 2002; Lincoln & Guba, 1985). Conceptually, the study drew on Positive Youth Development (PYD) and Teaching Personal and Social Responsibility (TPSR) (Hellison, 2011; Holt et al., 2017) to interpret participants' experiences, understand mechanisms for life skills development, and explore the potential for learning transfer beyond the programme context. PYD offers a lens for understanding how sport-based programmes can foster developmental assets such as confidence, connection, and resilience (Holt et al., 2017), while TPSR emphasises respect, responsibility, and the intentional transfer of learning beyond the sporting context (Hellison, 2011). Neither framework prescribes a specific methodology; rather, both provide an analytical orientation that highlights young people's agency, relational learning, and the construction of meaning through experience.

The broader Aotearoa New Zealand participation and policy sources that inform the study's context are catalogued in Appendix D.

Researcher Positionality

The researcher held an insider role, having both designed and facilitated the Girl on Fire programme. This dual position brought notable advantages, including existing rapport with the school community, deep familiarity with the setting, and nuanced contextual insight. At the same time, it raised potential limitations, such as perceived power imbalances, social desirability in participants' responses, and the risk that prior assumptions could influence interpretation.

In recognition of these dynamics, reflexivity was embedded throughout the study. Consistent with guidance from Berger (2015), a reflexive journal was maintained to document assumptions, emotional responses, analytic decisions, and evolving interpretations across the research process. Subjectivity was treated as a resource rather than a threat, used constructively to inform analysis while being critically examined.

Transparency in the researcher–participant relationship was prioritised, with adolescent participants framed as experts in their own lived experiences (Finlay, 2002). Interview questions were piloted and refined to minimise leading phrasing, and interviews were conducted in a conversational style designed to put participants at ease and encourage honest reflection. Regular supervisory meetings served as a further reflexive mechanism, providing a space to critically discuss positionality, data interpretation, and ethical issues as they arose.

These strategies contributed directly to the study's trustworthiness (Lincoln & Guba, 1985). Credibility was strengthened through transparent reporting of the researcher's insider role; dependability through ongoing supervisory oversight; confirmability via

systematic reflexive journaling; and transferability by foregrounding participants' own accounts of their experiences within the programme and beyond.

Participant Selection and Recruitment

Participants were drawn from the 2021 Girl on Fire cohort at an Aotearoa New Zealand intermediate school, during which the programme was partially delivered online due to COVID-19 restrictions. Approximately 50 students completed the programme and contributed to the initial evaluation report and case study. From this group, eight girls were purposively selected for follow-up interviews.

Selection criteria included full participation in the original programme, willingness to reflect on past experiences (as indicated in initial email exchanges and preliminary conversations), and availability at the time of data collection. At the time of the follow-up interviews, all participants were in Years 10 or 11 (ages 14–16). The sampling strategy sought to capture diverse perspectives while remaining closely aligned with the study's focus on understanding life skills development and transfer over time.

Purposive sampling is well suited to qualitative case study research where the aim is depth rather than breadth (Patton, 2015). Information-rich cases can illuminate central processes and variations within the phenomenon of interest. Creswell and Poth (2018) similarly emphasise that, in qualitative case studies, the goal is not statistical representation but in-depth understanding of participants' lived experiences. Given the bounded nature of this case and the specificity of the research questions, a sample of eight participants was judged sufficient to achieve analytic saturation; in comparable qualitative studies, saturation is commonly reached within approximately 6–12 interviews (Guest et al., 2006; Mason, 2010).

At recruitment, ethical approval was reconfirmed, and all procedures remained aligned with the AUTEC protocol (AUTEC #24/227). Recruitment was facilitated by the school, which distributed information sheets and consent forms to parents and caregivers (see Appendix B.1: Participant Information Sheet). Students who expressed interest returned consent forms and were then contacted directly by email to schedule interviews. This process upheld voluntary participation and minimised potential coercion linked to the researcher's prior facilitator role.

The final sample comprised participants from varied ethnic and socio-cultural backgrounds, supporting cross-case comparison and contributing to a more comprehensive understanding of the programme's impact. Formal management permission from the school was obtained through signed principal consent and an accompanying information sheet (see Appendix B.2: Principal Information Sheet; Appendix B.3: School Access Form). This sampling approach balanced depth and diversity while remaining closely aligned with the study's instrumental case focus (Creswell & Poth, 2018; Patton, 2015).

Data Collection

Data were collected through semi-structured interviews, each conducted via Zoom videoconference and lasting approximately 30–40 minutes (Zoom Video Communications, 2025). All eight interviews were both video- and audio-recorded with participants' consent and were transcribed using Zoom's automated transcription function. Participants were invited to review their transcripts and clarify or expand any points before analysis. Recordings and transcripts were stored in password-protected folders in accordance with university data-management protocols.

Semi-structured interviews were chosen to provide a balance between consistency across participants and flexibility to follow emergent lines of inquiry (Brinkmann & Kvale, 2015; Kallio et al., 2016). The interview guide (see Appendix B.7: Interview Questions) was developed in alignment with the study's three research questions and focused on domains such as life skills development, confidence, social relationships, learning transfer, and perceived enablers and barriers. Prompts were informed by commonly reported life skills areas in youth sport, including confidence, communication, teamwork, leadership, and emotional regulation (Gould & Carson, 2008).

Interviews were conducted in a conversational tone to help participants feel comfortable and to encourage detailed, narrative responses. Open-ended questions were combined with tailored follow-up prompts, allowing participants to describe specific experiences, give examples of using skills in different settings, and reflect on changes over time. This flexible structure was particularly suited to adolescent participants, accommodating the affective and dynamic nature of their accounts while ensuring key topics related to the research questions were consistently addressed (Brinkmann & Kvale, 2015).

Pilot Interview

Before the main data collection phase, a pilot interview was conducted with one Year 8 student from a different group who had previously participated in Girl on Fire as a Year 7 student. The pilot aimed to test the clarity, sequencing, and timing of the semi-structured interview guide and to check that questions were age-appropriate and elicited meaningful, reflective responses. It also allowed the recording and transcription procedures to be tested to ensure technical reliability.

Insights from the pilot informed several minor refinements, including rewording questions for greater clarity and adding prompts to support more detailed elaboration. Data from the pilot interview were not included in the final analysis.

Ethical Considerations

Ethical approval for this study was granted by the Auckland University of Technology Ethics Committee (AUTEC #24/227). The approved research title included the name of the participating school, Northcross Intermediate, which provided formal management permission for the study through signed principal consent and an accompanying information sheet (see Appendix B.2–B.3). The use of the school's name is therefore consistent with both AUTEC approval and institutional consent, while all individual participants were de-identified with pseudonyms to ensure confidentiality (see Appendix A for the approval letter).

Given that the programme originally involved minors, a dual-consent process was used for participation in the follow-up interviews. Parent or guardian consent was obtained, and each participant provided written consent and oral confirmation at the start of the Zoom interview, in line with AUTEC requirements (see Appendix B.4: Participant Consent Form; Appendix B.5: Oral Consent Form; Appendix B.6: Parent and Guardian Consent Form). Participants were informed that they could withdraw prior to final reporting, skip any questions they did not wish to answer, or pause the interview at any time.

Information sheets and consent forms were written in age-appropriate language (Appendix B.1), and confidentiality was emphasised. Identifying information was removed from transcripts and field notes, and pseudonyms are used throughout the thesis. Data were stored securely in password-protected digital folders following

university protocols. A whānau support person could be present at the interview on request, and a modest NZD $25 Westfield gift card acknowledged participants' time and contribution.

Care was taken to ensure that the interview process was non-threatening and culturally respectful. Drawing on the ethical principles outlined by Greig et al. (2012), the researcher prioritised relational respect, cultural sensitivity, and minimisation of potential distress. Interviews were conducted in a youth-friendly tone, with attention to the adult–adolescent dynamic, and participants were regularly reminded of their right to decline questions or end the interview.

Although the study was not framed as kaupapa Māori research, it incorporated culturally respectful practices informed by key Māori values. Manaakitanga (care, hospitality, respect), whakawhanaungatanga (relationship-building, connection), and tino rangatiratanga (self-determination and agency) shaped the relational ethos of the study (Smith, 2021). In practice, manaakitanga was reflected in flexible scheduling and plain-language explanations of rights and safeguards; whakawhanaungatanga in conversational openings, comfort checks, and the option of a support person; and tino rangatiratanga in voluntary participation, choice of interview time, and the opportunity for participants to review and amend their transcripts before analysis (see Appendix B.1 for rights information).

Data Analysis

Data were analysed using Framework Analysis (Ritchie & Spencer, 1994; Gale et al., 2013), a matrix-based approach well suited to applied programme evaluation and educational research. Framework Analysis supports both deductive and inductive coding, allowing initial categories to be informed by the research aims and theoretical

perspectives while still enabling participant-led themes to emerge. The matrix structure facilitates systematic comparison across cases while retaining attention to the specificity of individual accounts (Smith & Firth, 2011).

While the framework method was applied primarily inductively, the analysis was shaped by key theoretical perspectives introduced in the literature review. In particular, the PYD framework (Holt et al., 2017) and Hellison's TPSR model (Hellison, 2011) provided deductive reference points for recognising life skills, social behaviours, and indicators of responsibility within the data. The analysis therefore adopted a hybrid orientation, combining theory-driven insights with emergent, participant-led coding. This allowed the findings to reflect both established conceptual models and the unique ways in which the girls described their experiences.

The process followed the five interconnected stages of Framework Analysis: familiarisation, identifying a thematic framework, indexing, charting, and mapping and interpretation (Gale et al., 2013; Ritchie & Spencer, 1994). Evidence of code saturation across the eight interviews is presented in Appendix C.3 (saturation table and cumulative chart).

In the familiarisation stage, the researcher checked automated transcripts for accuracy and repeatedly read them to immerse herself in participants' accounts, consistent with Braun and Clarke's (2022) guidance on early analytic engagement. Each transcript was then imported into NVivo (Release 1.5; QSR International Pty Ltd., 2021) for digital coding. Initial line-by-line coding focused on broad categories aligned with the research questions—such as life skills development, confidence, learning transfer, and perceived enablers and barriers.

An accompanying Excel matrix (Microsoft Corporation, 2021a) was used to track codes across participants and support comparison and refinement over time. As analysis progressed, coding moved from predominantly deductive to a more hybrid approach, with inductive insights generated through iterative engagement with the data (Nowell et al., 2017). To deepen analysis, visual theme mapping was undertaken using PowerPoint (Microsoft Corporation, 2021b), grouping codes under four key domains: immediate impact, broader learning transfer, enablers and barriers, and recommendations for future programme development (see Figure 1).

To further interrogate thematic connections, the researcher printed coded excerpts and sorted them manually on a corkboard under the four domains (see Appendix C.1: Theme Mapping on Physical Corkboard). This tactile process prompted recognition of relational patterns and anomalies that were not immediately apparent in the digital environment. Hybrid methods combining software-based and manual mapping have been noted to enhance reflexivity and analytic rigour (Smith & Firth, 2011).

The analytic process was iterative, involving frequent returns to raw transcripts to check coding accuracy and thematic alignment. Rigour was further strengthened through regular supervisory meetings, where coding decisions and developing frameworks were reviewed and challenged. These meetings functioned as peer debriefing (Lincoln & Guba, 1985), serving as a check against researcher bias and ensuring that interpretations remained grounded in participants' accounts. A consolidated codebook is provided in Appendix C.2 (NVivo Consolidated Codebook).

Trustworthiness and Rigour

Trustworthiness was established using Lincoln and Guba's (1985) four evaluative criteria: credibility, transferability, dependability, and confirmability.

Credibility was supported by prolonged engagement with the data, iterative coding, and informal member checking. During interviews, key points were paraphrased and summarised for participants, who were invited to confirm or correct the researcher's understanding. Transcript review opportunities provided an additional layer of respondent validation.

Transferability was fostered through rich description of the school context, programme structure, and participant characteristics. These contextual details enable readers to judge the relevance of findings to their own settings, consistent with Stake's (1995) notion of naturalistic generalisability. The goal was not statistical generalisation but the generation of insights that resonate with practitioners and researchers working in similar educational and sport-based environments.

Dependability was addressed by maintaining an audit trail of methodological decisions. This included a research log documenting coding and analytic choices, a versioned codebook (Appendix C.2), Excel tracking matrices, and physical and digital theme maps (Appendix C.1 and Figure 1). Together, these provide a transparent record of how the analysis evolved over time.

Confirmability was enhanced by linking coded extracts directly to themes and by providing a concise summary of saturation (Appendix C.3). A live NVivo event log was not available for the full analysis period; audit evidence is therefore based on the research log, codebook versioning, and retained coding reports. Reflexive journaling and supervisory debriefings further supported confirmability by making the researcher's assumptions and decisions explicit and open to scrutiny.

Direct quotations from participants are used extensively in the findings chapter to retain authenticity and support analytic transparency. Anchoring the analysis in the PYD and TPSR frameworks also contributed to methodological rigour, ensuring that interpretations of life skills development and learning transfer were grounded in established models of youth development in sport (Hellison, 2011; Holt et al., 2017).

Use of Generative AI Tools

Generative AI tools (Google Gemini and Microsoft Copilot) were used in limited ways to support the research process. Specifically, they assisted with: (a) generating brief summaries of research articles to inform decisions about relevance and whether to read full texts; (b) organising article content into preliminary thematic groupings during literature mapping; and (c) suggesting improvements to grammar, sentence structure, and headings. No participant data, transcripts, or identifiable information were uploaded to these tools. All inclusion/exclusion decisions, interpretations, analyses, and final wording—including all qualitative analysis and reporting—were completed by the author, who independently accessed and cited all sources. This use of AI tools is consistent with institutional guidelines and is also described in the Attestation of Authorship.

Limitations of the Methodology

Several methodological limitations should be acknowledged.

First, while Framework Analysis offers a clear structure and is well suited to applied case study research, its partially deductive starting point may constrain the emergence of unforeseen themes. Although inductive flexibility was built into the analytic process, and participant-led categories were actively sought, a fully inductive analytic approach (such as reflexive thematic analysis) might have surfaced additional nuances.

Second, the small sample size (n = 8), although appropriate for an instrumental case study, limits the breadth of perspectives represented. The aim here was depth and rich description rather than representativeness, but the views of girls who did not volunteer or could not be contacted remain absent. In addition, the retrospective nature of the interviews—conducted several years after programme participation—introduces the possibility of recall bias, with some memories faded or reinterpreted over time.

Third, the researcher's dual role as programme facilitator and interviewer raises the potential for social desirability bias. Participants may have been inclined to emphasise positive experiences or minimise criticism. Mitigation strategies included reflexive journaling, neutral and open-ended questioning, clear assurances that honest feedback was valued, and critical reflection during supervisory meetings; nevertheless, the possibility of positive bias cannot be fully ruled out.

Fourth, the 2021 cohort experienced Girl on Fire under COVID-19 conditions, with some sessions delivered online. These circumstances may have influenced both the nature of participants' experiences and the programme's implementation. Similarly, online interviewing—while effective for accessing participants in dispersed or restricted contexts—can shape rapport, disclosure, and the depth of reflection (Archibald et al., 2019; Gray et al., 2020).

Despite these limitations, the methodological approach adopted in this study was robust, context-sensitive, and ethically sound. The combination of an interpretive, instrumental case study design; reflexive and culturally responsive practice; Framework Analysis; and multiple strategies to enhance trustworthiness supports a

nuanced exploration of participants' lived experiences and the longer-term impact of the Girl on Fire programme on life skills development and transfer.

Chapter 4: Findings

Introduction

This chapter presents findings from eight semi-structured interviews with girls who participated in the Girl on Fire programme in 2021, when they were in Years 7–8 (aged 11–13). At the time of interview, participants were aged 14–16. The analysis focuses on how they experienced the programme, what life skills they reported developing, and how these skills were subsequently applied in other areas of their lives. The aim is to provide a descriptive and interpretive account of participants' voices, highlighting shared patterns while attending to meaningful variation, illustrated with representative quotations.

Findings are presented thematically, consistent with the Framework Analysis approach (Ritchie & Spencer, 1994), in which analysis and carefully selected quotations are combined to preserve the authenticity and nuance of participants' accounts (Braun & Clarke, 2022). Themes were developed through repeated reading of interview transcripts, inductive coding of meaningful units, charting coded data into matrices organised by case and theme, and iteratively refining categories into higher-order themes and sub-themes. This approach enabled movement between individual narratives and cross-case patterns, ensuring that the final thematic structure reflected both common experiences and important differences across participants.

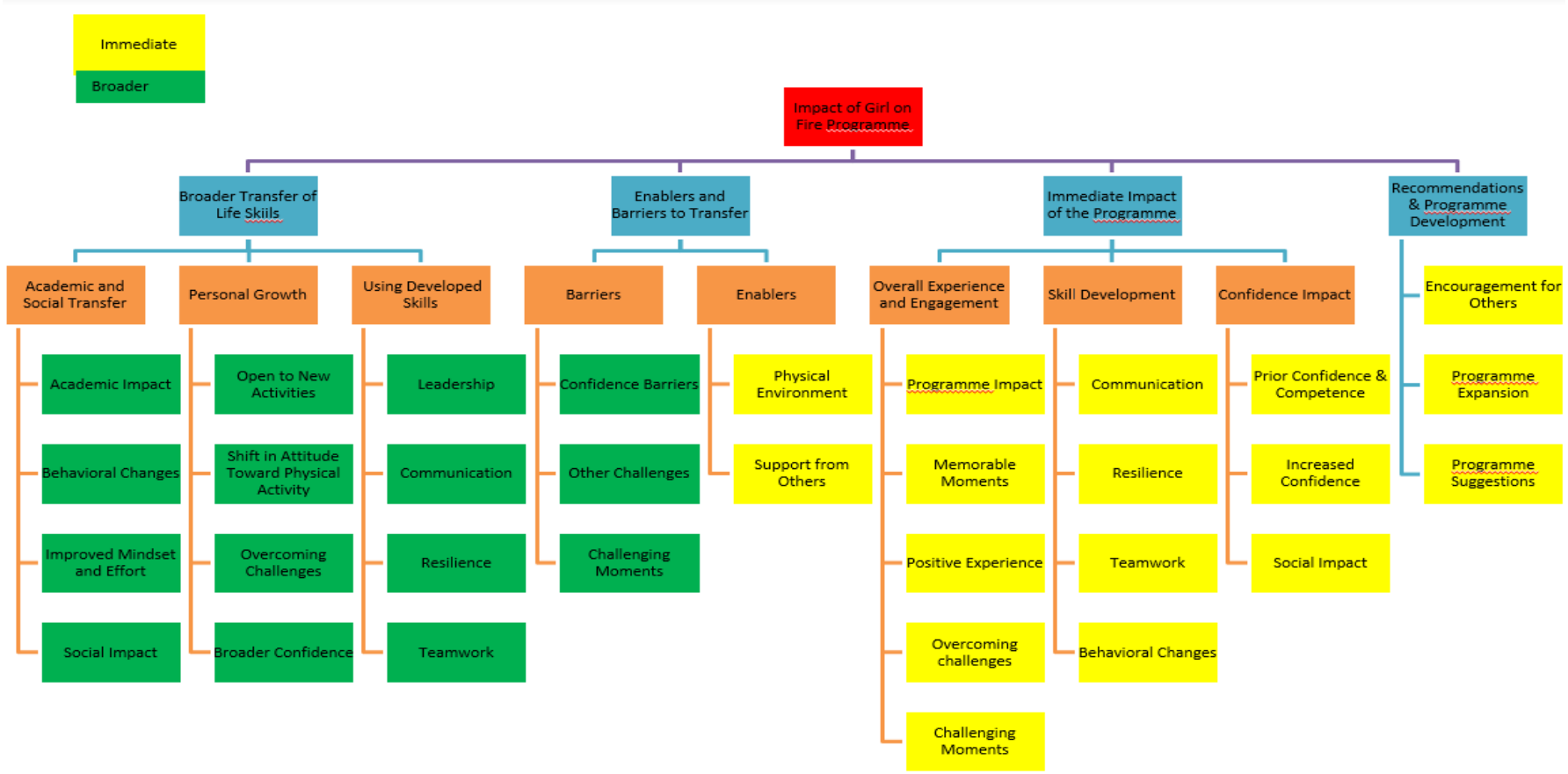
The analysis generated four overarching themes that capture the impact of the Girl on Fire programme:

- Immediate impact of the programme – the skills, attitudes, and confidence participants reported gaining during and shortly after participation.

- Broader transfer of life skills – ways in which participants described applying these skills in academic, social, and personal contexts.
- Enablers and barriers to transfer – factors that participants felt supported or hindered their ability to use what they had learned beyond the programme.
- Recommendations for future programme development – participants' ideas for improving and expanding Girl on Fire to better support girls' engagement and learning transfer.

Each theme includes several sub-themes, summarised in Figure 1 and elaborated in the sections that follow. Themes are presented through a combination of analytic commentary and illustrative quotations. To protect confidentiality, participants are referred to as Participant 1 through Participant 8. Taken together, these themes address the study's research questions by showing, first, how participation in Girl on Fire shaped girls' immediate experiences and perceived life skills development (Themes 1 and 2) and, second, how contextual factors constrained or enabled the transfer of these skills and informed participants' recommendations for strengthening the programme (Themes 3 and 4).

Figure 1. The thematic coding map that guided the analytical framework



Theme 1: Immediate Impact of the Programme

The Girl on Fire programme generated a range of immediate effects that were strong felt by participants across physical, social, and personal domains. Participant reflections highlight how the programme provided a safe, supportive, and engaging environment that encouraged young women to expand their horizons, interact with new peers, and explore activities they may not have otherwise attempted. These short-term outcomes were critical in laying the groundwork for longer-term development, as participants began to experience themselves differently—more engaged, more skilled, and more confident.

Analysis of this theme is organised into three interrelated sub-themes. The first, Overall Experience and Engagement, captures how participants perceived the programme as positive, enjoyable, and inclusive, encouraging both social connection and perseverance through challenges. The second, Skill Development, explores the specific interpersonal and intrapersonal abilities that participants reported gaining, including communication, leadership, resilience, and teamwork, as well as evidence of these skills transferring into other areas of life. Finally, the third sub-theme, Confidence Impact, highlights the programme's role in fostering self-belief and encouraging participants to become more active contributors across school, extracurricular, and social contexts.

Together, these sub-themes illustrate how the immediate impact of Girl on Fire extended beyond momentary enjoyment. Rather, the programme acted as a catalyst for growth, equipping participants with the motivation, skills, and confidence to take on new challenges and opportunities in both personal and collective spaces.

Sub-Theme 1: Overall Experience and Engagement

Participants consistently described Girl on Fire as an engaging and enjoyable programme that encouraged them to try new activities, connect with peers, and to challenge themselves. This sub-theme reflects how participants' experiences were shaped by positive emotions, meaningful social interaction, memorable activities, and moments of challenge that ultimately led to growth. The analysis is organised into five key areas: positive experience, participation and social connectedness, memorable activities, challenging moments, and overcoming challenges.

Positive Experience

Enjoyment and satisfaction were consistently described as key outcomes of participation, reinforcing engagement and willingness to try new activities. Several participants linked their enjoyment directly to the programme's welcoming tone:

> "Well, ever since I did Girls on Fire, I started involving myself in more things… I started doing more sports and enjoying them more, instead of feeling like I had to be forced." (Participant 2)

> "My overall experience with the programme was that it's pretty good, it was very supportive. It was very open, and very welcoming… a very wholesome environment." (Participant 3)

> "The programme allowed me to participate in physical sports which I did not back in intermediate… definitely going out with friends and just enjoying your time doing sports." (Participant 5)

Together, these reflections reveal a climate that was emotionally safe, inclusive, and engaging. Participants felt they could fully immerse themselves without fear of embarrassment or judgment. Their language — "wholesome," "welcoming," "supportive" — suggests that the programme created a sense of belonging that encouraged them to be active contributors rather than passive observers, indicating

that these affective experiences were central in drawing participants into more active engagement.

Programme Impact

Beyond individual enjoyment, participants described forming new friendships and feeling more comfortable interacting with peers they might not have otherwise engaged with. For some, this represented a significant social shift:

> "I didn't have any friends. But I did end up making some through a few Girls on Fire sessions." (Participant 2)

Others highlighted how the programme supported the development of teamwork and collaboration skills:

> "It was one of the best programmes… it helped me improve with my team-building skills and get along with other people… activities with new people… really fun." (Participant 7)

These responses suggest that Girl on Fire promoted not just participation but meaningful social connection, creating a bridge between individual growth and collective experience.

Memorable Moments

Participants enthusiastically recalled specific activities that stood out as highlights. These included obstacle courses, dance sessions, yoga, and cooperative games such as parachute challenges and scavenger hunts. Such activities were remembered not only for their enjoyment but for the way they encouraged creativity and teamwork.

> "Definitely the instructors… very supportive and welcoming. I tried sports that I didn't like before, and it was a very good experience." (Participant 3)

> "There was this… session to dance, like K-pop and learn them. That was really fun." (Participant 7)

The variety of activities gave participants opportunities to challenge themselves and discover new interests, while the instructors' enthusiasm created a positive emotional tone that participants carried into other settings.

Challenging Moments

While the programme was largely described as positive, participants also acknowledged moments of discomfort — particularly when asked to lead or engage with unfamiliar peers. These moments, though difficult at first, often became turning points:

> "At first, I was stuck to myself. I didn't want to socialise… It was probably making friends… a bit awkward." (Participant 3)

> "It was a bit harder at first, especially because I was new… it was like learning to fit in with everyone." (Participant 4)

Taken together, these accounts show that social unease and unfamiliar groupings initially acted as barriers but also created opportunities for participants to experiment with new roles and forms of interaction as their confidence increased. In this way, Girl on Fire gently pushed participants outside their comfort zones, turning early discomfort into social growth and increased confidence.

Overcoming Challenges

Crucially, participants did not remain in these uncomfortable states but learned to persist and adapt. Many spoke about the personal satisfaction that came from persevering through awkward or challenging moments:

> "I generally did not like PE, and I wouldn't really participate and just sit on the sidelines. But now I always participate… I feel more confident to do things." (Participant 1)

> "Yeah, definitely… I can also be more comfortable doing that by myself, instead of having my friends there." (Participant 2)

> "If I encounter a challenge or trouble, I'll think back to like those experiences and how they taught me to collaborate with different people… I can solve more problems." (Participant 5)

Here, past programme experiences operate as a psychological resource that participants actively draw on when facing new difficulties, showing that moments of challenge within Girl on Fire laid the groundwork for later problem-solving and persistence. Together, these accounts indicate that the programme nurtured perseverance and self-efficacy: participants were not just entertained by the sessions but developed strategies for coping with social and physical challenges, which gave them a stronger sense of competence and agency. These immediate outcomes, in turn, provided a basis for deeper learning, particularly in the development of transferable life skills, which will be explored in the next section.

Sub-Theme 2: Skill Development

Beyond enjoyment and participation, Girl on Fire was viewed as a springboard for developing valuable life skills that participants could apply beyond the programme. Four key areas were consistently emphasised: communication, leadership, resilience, and teamwork. Participants described becoming more confident in expressing themselves and listening to others, taking on leadership roles and initiative, persisting through challenges, and learning the value of collaboration and shared success. This section explores each of these areas in turn, highlighting both the immediate benefits within the programme and evidence of transfer into school, social, and everyday contexts.

Communication

Participants consistently described becoming more confident communicators, both in expressing themselves and in listening to others. Several reflected-on learning how to balance their own voice with the perspectives of others, showing awareness of more mature interactional skills:

> "You're asking both parties their opinions… part of being a good leader is being a good, active listener… You're not taking sides." (Participant 1)

> "I ended up in an all-boys group … it was quite hard to apply the leadership roles… towards the end I was able to take my role and participate." (Participant 1)

The supportive environment of Girl on Fire was repeatedly identified as an enabler of this growth. The openness of sessions encouraged even quieter participants to contribute:

> "It was just probably the environment that it was like just very open. And then you would just naturally… speak." (Participant 3)

> "Like, definitely talking to those people… to find out their interest… and you start talking. You become friends." (Participant 5)

These skills were not confined to the sessions. Participants explained how they carried them into academic contexts, where communication was often more daunting:

> "Engaging in class discussions most definitely… I found myself engaging in more class discussions. And I was more active." (Participant 3)

Taken together, these reflections highlight how Girl on Fire gave participants opportunities to practise voicing ideas, listening actively, and building dialogue — skills that later translated into classroom engagement and friendship building. In this sense, these experiences fostered communicative competence as both an immediate outcome of participation and a vehicle for wider academic and social involvement.

Behavioural Changes and Leadership

Leadership development was another strong theme, with participants describing how the programme helped them shift from passivity to taking initiative. Several reflected on how they now instinctively assumed responsibility in both peer and classroom contexts:

> "If issues arise in my friend group, I'm often the one who takes the role of helping fix the issue… I feel more confident and comfortable with leadership roles." (Participant 1)

> "In Year 9… I was probably the one person that had to be the leader… taking the initiative to be the leader and helping them out." (Participant 4)

These comments show that leadership was not restricted to formal positions but became part of everyday behaviour. The programme seemed to normalise taking initiative, whether in group work, friendships, or new social contexts. Participants moved from being hesitant contributors to confident organisers, positioning themselves as role models within their peer groups.

Resilience

Analysis revealed resilience as another critical skill that can be developed. For many, the first step was overcoming initial fears when entering the programme. What began as anxiety gradually transformed into a belief in their own ability to face challenges:

> "When I first joined Girls on Fire, I was really scared… But since it actually turned out to be a good place, I realised… I feel more capable to do new things." (Participant 2)

This resilience was reinforced through repeated experiences of challenge and recovery. Even in competitive contexts, participants described learning to push forward:

> "Learning like not to give up and keep pushing… If we were losing, obviously we would try to win." (Participant 8)

These reflections suggest that Girl on Fire created safe but challenging situations where participants could practice persistence. Over time, participants learned to view obstacles as manageable and developed a stronger sense of capability in the face of adversity.

Teamwork

Teamwork was consistently described as one of the most important outcomes of the programme. Many participants spoke about discovering the value of collaboration and shared success:

> "It really taught me how to collaborate with other people, so I can be more confident in myself… I can solve more problems." (Participant 5)

> "Teamwork was like a really big part of it… when we win, we'd be supporting each other, cheering each other on." (Participant 8)

The emphasis on encouragement and mutual support meant that teamwork was experienced not simply as working together but as a way to build collective confidence. Participants learned to value both their individual contributions and the group's success.

Taken together, these reflections show that Girl on Fire was more than a recreational programme. It provided a space where communication, leadership, resilience, and teamwork could be practised in real time, often under conditions that required participants to push their boundaries. The repetition of these skills across different contexts — whether learning to listen, stepping into leadership roles, persisting under pressure, or cooperating with peers — helped participants recognise them as

transferable and valuable in daily life. These skills laid the groundwork for a growing sense of confidence, which is explored in the following section.

Sub-Theme 3: Confidence Impact

A central and powerful outcome of Girl on Fire was participants' increased confidence. This sub-theme is organised into three key areas. First, prior confidence and competence, where participants reflected on feelings of shyness, hesitation, or disengagement before joining. Second, increased confidence, describing shifts in self-belief and willingness to engage in activities both inside and outside the programme. Finally, social impact, where confidence gains translated into forming friendships, encouraging others, and sharing new skills. Together, these areas illustrate how the programme supported a transformation from reluctant participation to active, engaged contribution across physical, academic, and social settings.

Prior Confidence and Competence

Before joining Girl on Fire, several participants described feeling disengaged and hesitant to participate in PE or public facing activities. These reflections paint a picture of girls who were physically present but not actively engaged, often sitting out or feeling anxious about joining in:

> "I generally did not like PE, and I wouldn't really participate and just sit on the sidelines." (Participant 1)

> "I really hated doing sports and PE… anything that involved having to go up in front of the class." (Participant 2)

For some, the challenge went beyond sport and was tied to broader social adjustment, particularly when starting at a new school or comparing themselves to more experienced peers:

> "It was a bit harder at first, especially because I was new… it was like learning to fit in with everyone." (Participant 4)

These accounts suggest that many participants entered the programme with low self-efficacy in physical activity and hesitancy to engage socially. Their confidence barriers were both internal (self-doubt, fear of judgment) and external (new school environments, peer comparison).

Increased Confidence

Following participation, many reported a marked shift in self-belief and engagement, describing a transition from avoidance to active participation. This shift was expressed not only as a willingness to join in but as a more general sense of capability across different areas of life:

> "I feel more confident to participate in non-compulsory things… I definitely participate way more." (Participant 1)

Participants described taking more initiative in academic settings, which had previously been intimidating:

> "I would put my hand up more… and get more involved in activities in class." (Participant 2)

This confidence also extended into physical activity. Girls who had once avoided PE reported actively participating and even enjoying it:

> "I did gain more comfortability doing sports… during PE for high school… I was a lot more comfortable doing it." (Participant 4)

For some, this new confidence opened doors to extracurricular opportunities, broadening their sense of identity and interests:

> "Before I joined Girls on Fire, I didn't really sign up for anything else… after doing it I signed up for choir… badminton, table tennis, and more." (Participant 7)

Together, these reflections show that confidence was not limited to one setting but acted as a catalyst for a cycle of engagement: trying new things led to positive experiences, which in turn reinforced participants' willingness to continue exploring new horizons. In this way, it functioned as both a psychological outcome of the programme and an ongoing driver of participation across multiple domains.

Social Impact

Confidence gains were reinforced through peer interaction and social connection, creating a positive cycle of belonging and participation. Many participants highlighted that the friendships formed through Girl on Fire made them more open and willing to engage in other social settings:

> "I got to make a bunch of new friends… I'm more comfortable with talking to their friends as well." (Participant 2)

Several participants took pride in encouraging others, suggesting that their own growth enabled them to act as role models:

> "I feel like I do encourage my friends to go out there and do things… with my sister, with laughing yoga, I taught her some of the stuff." (Participant 1)

These examples illustrate that confidence did not remain purely individual; it cascaded into peer networks as participants encouraged and modelled participation for others, amplifying the programme's influence beyond direct attendees. The combination of personal confidence and strengthened social bonds meant that participants were not only more willing to join activities themselves but also more likely to support and motivate others, extending this ripple effect through their peer groups.

Together, these accounts illustrate a transformation from hesitant, reluctant participation to active, confident involvement across multiple domains. Confidence gained through Girl on Fire acted as both an outcome and an enabler — allowing participants to join in, speak up, and try new activities while simultaneously reinforcing their sense of competence when those efforts were met with success. Importantly, this growth was visible not just to participants but also to parents and peers, suggesting that the impact was recognisable and sustained.

Summary of Theme 1

Taken together, the immediate impacts of Girl on Fire reveal how the programme created a foundation for deeper developmental outcomes. Participants' initial enjoyment and sense of inclusion encouraged them to participate actively, while the variety of activities and supportive facilitation ensured that they felt safe to experiment and connect with others. Within this environment, they developed core life skills—communication, teamwork, resilience, and leadership—that were not only useful within sessions but also transferable to other domains. Crucially, these experiences fostered a growing sense of confidence, enabling participants to move from hesitation to active engagement in physical, academic, and social settings.

The interplay of enjoyment, skill development, and confidence growth demonstrates that the programme's impact was not simply recreational but developmental, equipping participants with resources to navigate broader contexts. These findings suggest that immediate outcomes acted as stepping stones toward sustained change, offering both personal and social benefits that extended beyond the programme itself. The next theme, Broader Transfer of Life Skills, explores how these immediate gains

were applied within school, peer, family, and community environments, highlighting the wider significance of Girl on Fire for participants' everyday lives.

These immediate outcomes provide a robust empirical basis for the subsequent Discussion chapter, where they are interpreted through Positive Youth Development and life-skill transfer frameworks to explain how short-term experiences in Girl on Fire contributed to longer-term developmental trajectories.

Theme 2: Broader Transfer of Life Skills

Building on the immediate impacts observed during the Girl on Fire programme, the theme of Broader Transfer of Life Skills explores how participants applied the knowledge, behaviours, and attitudes cultivated during the programme across wider contexts. While the preceding theme, Immediate Impact of the Programme, highlighted short-term gains in confidence, motivation, and engagement, this next theme examines how these changes extended into participants' academic, social, and personal lives, reflecting a more sustained and integrated effect.

The transfer of skills into new contexts serves as a strong indicator of lasting programme influence, demonstrating that what participants learned was not confined to the structured programme environment but became part of their everyday toolkit. This theme is organised into three sub-themes—Academic and Social Transfer, Personal Growth, and Using Developed Skills—each capturing distinct but interconnected dimensions of skill generalisation.

Sub-Theme 1: Academic and Social Transfer

The broader transfer of life skills into academic and social contexts is a strong indicator of lasting programme impact. For Girl on Fire participants, this transfer was visible in

the ways they applied leadership, communication, problem-solving, and self-regulation beyond the programme environment. Four key areas capture this process: Academic Impact, Behavioural Changes, Improved Mindset and Effort, and Social Impact. Together, these findings illustrate that the programme's influence extended into classroom engagement, personal habits, and peer relationships.

Academic Impact

One of the clearest indicators of skill transfer was participants' increased willingness to engage academically. They consistently linked their new confidence to speaking up in class, collaborating in groups, and taking initiative. As one explained:

> "I feel like I do take leadership roles… I encourage the rest of my group to do the work and participate." (Participant 1).

Others described moving beyond familiar social circles, with Participant 2 noting,

> "I'm more comfortable with being with someone that isn't my friend now than I was before."

Together, these reflections suggest that Girl on Fire helped students shift from being cautious or hesitant to becoming proactive contributors. The repeated emphasis on "leadership," "encouragement," and "comfort" in unfamiliar settings signals not just confidence but a sense of responsibility to participate and bring others along. This academic agency was expressed in new behaviours such as volunteering in discussions or delivering solo presentations:

> "I found myself engaging in more class discussions… I was more active." (Participant 3); "I was able to do a presentation all by myself… it was a big improvement." (Participant 5).

Communication was a central thread across these accounts. Participants framed their ability to articulate ideas, ask questions, and work with classmates as key tools for success:

> "I can talk and express my ideas in front of the class now, and ask my teacher for help… I can talk to my classmates when we're doing group work." (Participant 6).

Taken together, this language reflects a shift toward confident, visible, and vocal participation. In this sense, Girl on Fire fostered more than technical skills—it created a learning identity where students positioned themselves as active leaders and collaborators rather than passive observers. These patterns of increased classroom participation and initiative point to a redefinition of how participants saw themselves as learners, a key marker of meaningful educational transfer.

Behavioural Changes

Beyond academic engagement, participants described notable shifts in their behaviour and approach to challenge. The word "fear" appeared repeatedly in their accounts, yet it was reframed as something to be faced rather than avoided:

> "It's kind of just made me get over that fear of doing it. So, it made me more confident in doing that." (Participant 1).

This indicates that the programme normalised discomfort and positioned it as part of growth.

Leadership roles, once daunting, became spaces to practise adaptability. As Participant 1 reflected:

> "It was quite hard to […] apply the leadership roles because they weren't listening. But towards the end I was […] able to take my role and participate with them."

Here, persistence replaced avoidance, showing a developing resilience to group challenges.

Equally significant were changes in everyday habits. Phrases like “adapted,” “positive sides,” and “get on time” show how participants embedded new routines that went beyond confidence into self-regulation. Participant 4 explained:

> “Eventually I kind of just adapted to it and tried to find the positive sides of it… as long as I’m helping myself and other people.”

For others, even punctuality became a sign of personal growth:

> “It really helped me to get on time… stepping out of my comfort zones did help me.” (Participant 7).

These behavioural shifts suggest that the skills practised in Girl on Fire translated into concrete self-management strategies, from timekeeping to reframing challenges positively, which supported participants’ functioning in everyday school life.

Improved Mindset and Effort

Another strong thread was a shift toward a growth-oriented mindset. Participants spoke about reframing problems and challenges as opportunities for development. Participant 8 captured this outlook:

> “It has taught me to approach problems differently… challenges are a way for me to like, learn and gain new experiences that I can use like elsewhere.”

Language like “differently,” “learn,” and “elsewhere” signals not just coping but active transfer of strategies into wider contexts.

This shift was visible in renewed effort across schoolwork and physical activity. Participant 6 explained:

> "I put a lot more effort than I did in intermediate… high school is like a lot harder than intermediate."

Similarly, Participant 2 noted:

> "I've started doing more sports and I started like enjoying doing them more… instead of feeling like I had to be forced to do it."

These reflections highlight how persistence was paired with motivation and enjoyment, suggesting that Girl on Fire fostered a mindset where effort was not a burden but an expression of resilience and self-belief. Such narratives are characteristic of a developing growth mindset, where effort and challenge are interpreted as pathways to improvement rather than signs of inadequacy.

Social Impact

The social transfer of skills was perhaps the most visible and immediate outcome. Participants consistently described expanding their friendship networks and initiating conversations with greater ease. Their language— "bond," "always go up," "new friends"—suggests that Girl on Fire gave them tools to actively create belonging rather than wait passively for it to occur. As Participant 2 explained:

> "I got to make a bunch of new friends and experience different friendships […] I like grew a really strong bond with them."

Similarly, Participant 6 reflected:

> "Since new teammates, and like new people, I would always like be closed off… but now I… always go up to them, and I get a lot of new friends."

These skills extended beyond personal benefit. Several participants described encouraging peers or siblings, showing how the programme's influence rippled outward. Participant 1 shared:

> "I do encourage my friends to go out there and do things… with my sister, with laughing yoga… she started taking on from laughing yoga."

In this way, participants became peer leaders who actively spread the programme's ethos of participation and resilience into their wider networks. This outward-facing use of skills underscores that transfer was not only intrapersonal but also relational, shaping the social environments that participants inhabited.

Sub-Theme 2: Personal Growth

Personal growth was a defining feature of life skills transfer for Girl on Fire participants, reflecting changes in attitudes, behaviours, and self-perception that extended beyond the programme. Participants' accounts point to the programme as a catalyst for resilience, confidence, and a willingness to embrace new challenges. Four interrelated key areas capture this process: Openness to New Activities, Shift in Attitude toward Physical Activity, Overcoming Challenges, and Broader Confidence.

Openness to New Activities

Participants frequently described a new willingness to explore unfamiliar activities and embrace novelty. Their language— "outside my comfort zone," "try things out," "more open"—signals that Girl on Fire encouraged them to reframe risk-taking as opportunity rather than threat. As one participant explained:

> "Going outside my comfort zone and doing new things. So, one was a winter swim… that skill of… giving things a try really helped me… I join heaps of clubs… random things… Art Club… Chess club… show quest… yoga in my room." (Participant 1).

This sense of openness was echoed by others who linked it directly to confidence:

> "I feel more capable to do new things and try things out… I can overcome what I'm scared of more… Definitely more open to it… I did end up joining a lot of sports." (Participant 5).

Importantly, participants suggested that this shift was not just situational but ongoing, with confidence becoming a habitual mindset:

> "I feel like it's a lot easier, like I get less nervous when I try new sports. I feel like I'm more confident going into them, even if I don't know a lot about them." (Participant 6).

Collectively, these reflections suggest that Girl on Fire normalised experimentation and made novelty less intimidating, embedding a disposition to try, join, and engage.

Shift in Attitude toward Physical Activity

Perhaps the most visible shift in personal growth was in participants' approach to sport and PE. Many contrasted their "before" and "after" experiences, showing a clear move from avoidance to participation. As Participant 1 recalled:

> "I generally did not like PE, and I wouldn't really participate and just sit on the sidelines. But now I always participate. And I have fun and just give things a go… I definitely participate way more and I'm more like, go out there, give it a go. Have fun."

The repeated emphasis on "fun" and "give it a go" underscores a reorientation from performance anxiety to enjoyment.

Others described being kinder to themselves and less self-critical, signalling improvements not only in physical engagement but also emotional wellbeing:

> "I'm less hard on myself… I wouldn't judge myself and be as hard on myself than I used to be… I'm more proud of myself." (Participant 2).

This sense of self-acceptance was paired with renewed motivation:

> "It just helped me like, bring back that motivation to actually like, do physical activities and find the fun in it rather than just complaining." (Participant 3).

Participants also developed more nuanced identities as sportspeople. Instead of dismissing sport wholesale, they began identifying preferred activities:

> "I'm more confident in like badminton, volleyball, tennis, and like yoga… now I know that I don't have to be like, I don't like sports and be more like oh, I like certain sports." (Participant 4).

Their language of "fun," "proud," and "motivation" suggests that Girl on Fire helped to reconstruct not only their relationship with activity but also their relationship with themselves.

Overcoming Challenges

Personal growth also emerged in participants' accounts of handling challenges, particularly in group settings. They repeatedly highlighted collaboration as a skill that Girl on Fire had strengthened. Participant 2 explained:

> "When teachers put us in random groups, I'm more… comfortable with being with someone that isn't my friend now than I was before."

This signals a shift from reliance on familiar peers toward adaptability in new social dynamics.

Others pointed to problem-solving strategies developed through the programme:

> "If I encounter a challenge… I'll think back to… those experiences and how they taught me how to collaborate with different people… it just gives me more confidence. So, I can solve more problems." (Participant 5)

The repeated pairing of "challenge" with "confidence" across accounts suggests that participants were not only enduring difficulties but reframing them as contexts in which they could draw on new skills.

Broader Confidence

Finally, participants reported a generalised increase in confidence that extended into home life, social interactions, and school engagement. Their reflections reveal how confidence spilled into everyday spaces, becoming part of their identities. As Participant 1 put it:

> "Yeah, I feel like I've improved… I do just dance on the TV. And sometimes, I'll do a bit of yoga in my room."

For others, confidence was tied to visible academic behaviours:

> "I did start… put my hand up more… get more involved in activities… just helps me gain a bit more confidence… I ended up socializing more in class." (Participant 2).

Sports also became a testing ground for self-assurance. Participant 4 reflected:

> "Sometimes you just have to step up… I did gain more comfortability doing sports… I was a lot more comfortable doing it… I feel comfortable with certain people, so try and make sure I am in their group to do sports so that way I can participate more."

Meanwhile, Participant 8 captured the broader essence of this growth:

> "It helped me become less afraid to try new things and take more risks… I think that I'm a pretty confident person when it comes to doing new things."

Together, this language of "step up," "risks," and "confident" illustrates how Girl on Fire supported participants in seeing themselves as capable, adaptable individuals. Confidence was no longer tied only to specific activities but became a transferable resource, shaping how participants engaged across multiple contexts.

Sub-Theme 3: Using Developed Skills

The final sub-theme considers how participants actively carried forward their life skills into a range of contexts beyond the programme. Participants described leadership, communication, resilience, and teamwork as part of their "toolkit" that they used in school, social, and family settings. Their language — "confident," "comfortable," "engaging," "positive" — suggests that these skills were not abstract but lived practices that reshaped how they interacted with others.

Leadership

Many participants described moving from passive involvement to actively guiding and organising peers. For some, this meant simply stepping forward:

> "I feel more confident and comfortable with leadership roles and things where it takes confidence to do stuff." (Participant 1).

Others emphasised a new consistency in their leadership:

> "But then, after the programme I was definitely a lot more like leadership… I've definitely been more engaging in it." (Participant 3).

What stands out across these accounts is that leadership was not limited to formal positions but took shape in small, everyday acts — encouraging classmates, organising group tasks, or quietly supporting peers. This reflects a shift from seeing leadership as a role to understanding it as a behaviour woven into daily interactions.

Communication

Communication was another skill that participants reported using in diverse contexts. Their reflections highlight both expressive and listening capacities. One participant explained:

> "I like have taken the issues of both sides, and then kind of like meet in the middle… You're asking both parties their opinions… being a good, active listener, and they're not taking sides." (Participant 1).

Others focused on becoming more willing to speak up and share ideas:

> "I think, taking part in the programme, you know it made me like communicate with my team, a lot more… I just like communicated my like ideas and opinions a lot more." (Participant 6).

Taken together, these reflections show how participants understood communication not only as speaking but also as creating dialogue, mediating perspectives, and ensuring all voices were heard. Their language suggests that communication had become both a confidence tool and a relationship-building practice.

Resilience and Teamwork

Resilience and teamwork were described as closely intertwined. Several participants reflected on adapting to challenges and finding positivity in difficult circumstances:

> "Eventually I kind of just adapted to it and tried to find the positive sides of it… as long as I'm helping myself and other people." (Participant 4).

For others, teamwork provided the foundation for resilience, enabling them to contribute and persist even when uncertain:

> "If I didn't have teamwork, I would have just stayed silent… now, I kind of have the leadership skill." (Participant 7).

Across these accounts, teamwork is described not simply as task-sharing but as mutual encouragement that made challenges manageable and fostered confidence to act.

Together, these reflections highlight how Girl on Fire equipped participants with transferable, actionable skills that extended into academic, social, and personal domains. Their consistent use of terms such as "confident," "communicate," and

"positive" suggests that the programme's impact was embedded in everyday behaviours. Rather than fading once the programme ended, these skills were actively mobilised in school, peer, and family settings, underscoring their practical relevance and long-term value.

Summary of Theme 2

The theme of Broader Transfer of Life Skills highlighted how the immediate gains from Girl on Fire extended well beyond its structured sessions. Participants consistently described carrying forward skills such as communication, leadership, resilience, and teamwork into academic, social, and family contexts. Their reflections — emphasising confidence, participation, and openness — suggest that these skills were not abstract but actively embedded in everyday routines, whether through classroom engagement, problem solving, or encouraging peers and siblings.

Crucially, participants framed this transfer as both practical and personal: they not only *did* more (speaking up, leading, trying new activities) but also *became* more — more confident, resilient, and positive in outlook. This dual shift, from behaviour to identity, points to Girl on Fire as a catalyst for sustained personal growth and social contribution.

Taken together, these findings show that the programme fostered not just short-term development but also the ability to generalise life skills across multiple domains of life. At the same time, participants noted that the continuation of these skills depended on certain conditions. The next theme, Enablers and Barriers to Transfer, explores the contextual supports that facilitated ongoing application, as well as the challenges that at times constrained it. These findings lay an important foundation for the Discussion chapter, where the patterns of transfer identified here are interpreted through life-skill

transfer and Social Cognitive Theory lenses to explain how and why skills were sustained or diminished across different ecological contexts.

Theme 3: Enablers and Barriers to Transfer

The previous theme highlighted the broader transfer of life skills, demonstrating that participants developed confidence, resilience, and practical strategies through the Girl on Fire programme. These skills were applied in academic, social, and personal contexts, reflecting meaningful initial impact. However, participants' reflections show that transferring these skills beyond the programme was not automatic. Instead, it was highly influenced by contextual factors, with both barriers and enablers shaping whether and how skills were applied.

Participants' experiences suggest that learning a skill is only the first step; its successful transfer relies on contextual conditions that enable its use. When those conditions were absent, skills were harder to enact, requiring participants to persist through discomfort and adapt to social and situational demands. This section explores these dynamics in two parts (sub-themes) Barriers to Transfer and Enablers to Transfer — to illustrate the conditions that shaped whether programme learning became sustained, practical action.

Sub-Theme 1: Barriers to Transfer

Participants identified several internal and external challenges that sometimes limited their ability to apply life skills. These barriers fell into three main categories: Confidence Barriers, Practical and Social Challenges, and Challenging Moments. Together, they highlight that skill transfer is highly context-dependent and that discomfort, while sometimes inhibiting, could also create opportunities for growth when participants were supported to persist.

Confidence Barriers

Confidence consistently emerged as a critical factor shaping whether skills could be transferred into new situations. For some, nervousness and fear of judgment continued to surface:

> "I still get nervous cause that kind of thing always made me a bit scared" (Participant 1).

Others explained that this discomfort was especially strong in unfamiliar environments, particularly when surrounded by strangers:

> "If I'm somewhere I'm not really familiar with… there's a lot of people that I don't know. I feel better if I'm with people I know than be by myself in that space" (Participant 2).

The contrast in participants' accounts reveals how psychological safety framed their willingness to act. In private or non-judgmental spaces, they felt freer to experiment:

> "There weren't really many people that could judge you… No one else is watching me, so I felt a lot of comfort, just being alone and doing my own thing" (Participant 4).

By comparison, entering group situations with new or older peers often reignited anxiety, with teamwork and communication faltering until familiarity was built:

> "If you're not like comfortable around the people that you're with, there will be a lot less teamwork and communication… at the start of the year, it's always a little bit hard, because you don't know anyone" (Participant 6).

Yet, participants also described confidence as a skill that strengthened with practice. As one noted,

> "It gets better eventually… the time that it takes to get better… reduced than it used to be. So, I… get involved faster now" (Participant 7).

Their language points to confidence not as a fixed trait but as something situational and adaptive, reinforced by repeated opportunities to step into new environments.

Practical and Social Challenges

Beyond individual confidence, participants described barriers rooted in group dynamics and social structures. Leadership and teamwork were most difficult when peers resisted participation:

> "It was quite hard to like, apply the leadership roles and stuff because they weren't listening. But towards the end I was sort of able to like, take my role and participate with them" (Participant 1).

Similarly,

> "Some people don't tend to listen… some people are just really easily distracted. Some people are really focused" (Participant 4).

Such accounts suggest that opportunities for leadership and collaboration were unevenly distributed — success depended not only on the skills of one individual but also on the collective willingness of peers to engage. The challenge of working with unfamiliar groups also recurred in PE contexts, where participants described feeling hesitant in new class settings:

> "So, our PE classes… we did learn like a lot of new sports, and I'd be kind of nervous at first, because it's with like all of these new people, and like I don't know them… once we become more comfortable with each other, I'll feel more comfortable asking questions" (Participant 8).

Here, the language of "nervous at first" and "more comfortable with each other" suggests that barriers were often temporary. Initial hesitation gave way to participation once trust and familiarity were established, showing that the social environment acted as both a hurdle and a scaffold for transfer.

Challenging Moments

Challenging moments, while uncomfortable, often became turning points. For example, one participant reflected on being placed in an all-boys group:

> "I ended up in an all-boys group, and it was quite hard to like, apply the leadership roles and stuff because they weren't listening" (Participant 1).

This echoes earlier reflections on group dynamics but also illustrates how gendered contexts could intensify feelings of exclusion or resistance.

For others, the difficulty was less about structure and more about personal disposition. As Participant 3 put it,

> "At first it was probably talking to everyone and getting to know them. I was very like stuck to myself. I didn't want to socialize. I was pretty introverted." Participant 5

similarly noted,

> "Not really difficult, but it is sometimes where you have to collaborate with people you don't know so well. It might be challenging."

Although described as barriers, these reflections also point to growth. Language such as "at first" and "eventually" reveals that discomfort often softened with persistence. Rather than simply blocking skill transfer, such challenges forced participants to adapt, building resilience and new strategies for engagement.

These barriers were most pronounced in unfamiliar environments, with new peer groups, or when participants experienced internal hesitation. Confidence gaps and social anxiety sometimes limited initial engagement, and group dynamics could constrain opportunities for leadership and collaboration. However, participants also highlighted that repeated practice and supportive interactions helped them gradually

overcome these challenges. Recognising how these obstacles operated sets the stage for understanding the conditions that facilitated skill transfer. The next section explores the enablers — the supportive environments, relationships, and structures that encouraged participants to apply and embed their life skills more consistently.

Sub-Theme 2: Enablers to Transfer

Alongside barriers, participants identified clear conditions that supported and encouraged the transfer of skills. These enablers fell into two key categories: Physical Environment and Support from Others. Together, they created the psychological safety and encouragement needed for participants to experiment, take risks, and embed skills into daily life.

Physical Environment

A strong theme across participants' accounts was the importance of safe, inclusive, and flexible spaces. Many highlighted that the programme's non-competitive, welcoming atmosphere reduced pressure and made participation feel natural:

> "In person it was really fun. The environment was non-competitive and friendly, and you felt comfortable doing things without it having to be competitive" (Participant 1).

Participant 3 similarly explained that openness in the environment encouraged authentic communication:

> "It was just probably the environment that it was like just very open. And then you would just naturally… just speak in a way."

The value of physical settings was also emphasised through descriptions of outdoor spaces, which were seen as freer and less restrictive:

> "When we were like in an outdoor space, it felt a lot more like freeing. I felt a lot more comfortable… you could talk to a lot of people and move around more" (Participant 6).

Here, language such as "freeing" and "comfortable" points to the connection between physical surroundings and emotional readiness to engage.

Equally significant was the all-girls setting, which reduced social pressure and encouraged risk-taking:

> "Without [boys]… it was more fun because it was just girls" (Participant 7).

Collectively, these accounts highlight that the design of the environment — whether through atmosphere, space, or composition of participants — directly shaped opportunities for confidence and skill application. Spaces that felt safe and inclusive lowered emotional barriers and created conditions for sustained engagement.

Support from Others

Interpersonal support emerged as an equally powerful enabler. Participants consistently described encouragement from peers, coaches, and teachers as motivating and confidence-building. As Participant 2 reflected,

> "Everyone was really encouraging… you didn't feel bad if you weren't that good at a certain game or sport… and the people that did the girls on fire were also really nice. They engaged you to do things."

Such encouragement reframed participation as a collective experience where effort, rather than ability, was valued.

Social connection also fostered belonging. Participant 3 explained,

> "It's a very supportive community. Definitely… you meet people who are in a similar situation… you can find a bond in that most definitely."

The language of “bond” and “supportive community” underscores how shared experience reduced isolation and created a sense of togetherness that extended beyond the programme itself.

Coaches and mentors were particularly influential in shaping positive behaviours. For example, Participant 7 noted that

> “The coaches… always got people that don’t participate as much to get involved. So that was really good,”

showing how adults actively facilitated inclusion. Others emphasised that mentors reframed failure as a natural part of learning:

> “They’ve always pushed me to be confident in myself… and taught me that it’s okay to fail as long as I’ve tried my hardest… see mistakes as a way to learn and keep pushing” (Participant 8).

These reflections suggest that interpersonal support functioned as a bridge between knowledge and action, giving participants both permission and encouragement to practise their skills.

Participants described how both the spaces they occupied and the people around them actively supported the use of their skills. Environments that felt safe, inclusive, and flexible allowed them to take risks and experiment without fear, while encouragement from peers, coaches, teachers, and mentors reinforced confidence, persistence, and a sense of belonging. These factors worked together to create conditions in which life skills could be applied more consistently across social, academic, and personal contexts, highlighting the importance of context and support in sustaining skill transfer.

Summary of Theme 3: Barriers and Enablers

Taken together, the analysis of barriers and enablers illustrates that the transfer of life skills was neither automatic nor uniform but highly dependent on context. Participants described how confidence gaps, unfamiliar environments, and unsupportive peer dynamics could inhibit their willingness to apply new skills. Nervousness and fear of judgment were recurring challenges — "I still get nervous cause that kind of thing always made me a bit scared" (Participant 1) — particularly in unfamiliar groups where "there will be a lot less teamwork and communication" (Participant 6). Such reflections highlight that confidence was situational and closely tied to familiarity and psychological safety.

At the same time, participants consistently emphasised the role of supportive environments and relationships in making transfer possible. The programme was described as "non-competitive and friendly" (Participant 1) and "just very open" (Participant 3), while peers and mentors were "really encouraging… you didn't feel bad if you weren't that good" (Participant 2). These conditions lowered emotional barriers, helping participants to persist and practise skills even when initial hesitation was strong. Coaches and mentors were particularly important in reframing mistakes as learning opportunities:

> "They've always pushed me to be confident in myself… taught me that it's okay to fail" (Participant 8).

In many cases, discomfort itself became a site of growth when met with adequate support. As one participant explained, "It gets better eventually… the time that it takes to get better… reduced than it used to be" (Participant 7). This interplay between

challenge and support suggests that barriers and enablers operated dynamically rather than in isolation.

These insights highlight that sustained skill transfer requires more than individual capacity; it depends on the creation of supportive structures and relationships that help participants navigate challenges. The following theme, Programme Development and Recommendations, builds directly on this interplay by considering how Girl on Fire can be refined and expanded to maximise enabling conditions while reducing the impact of barriers. These contextual insights are then taken up in Chapter 5, where they are interpreted through Ecological Systems Theory and Teaching Personal and Social Responsibility to explain how programme, relational, and wider environmental factors jointly shaped the opportunities girls had to enact their life skills.

Theme 4: Recommendations for Future Programme Development

Building on the insights from Enablers and Barriers to Transfer, participants offered forward-looking ideas for evolving Girl on Fire to maximise its impact. They not only reflected on their own growth but also positioned themselves as contributors to the programme's future, suggesting ways to attract more girls, deepen engagement, and refine its structure. Their ideas demonstrate a sophisticated understanding of what sustains participation, motivates confidence-building, and strengthens peer connections.

This theme is organised into three interlinked sub-theme areas: Encouraging Others, which captures strategies for supporting hesitant or shy peers to join and benefit from the programme; Programme Expansion, which explores ways to extend participation and introduce leadership opportunities; and Programme Suggestions, which focuses

on practical refinements to session design and delivery to strengthen inclusivity, cohesion, and motivation.

Sub-Theme 1: Encouraging Others

Participants consistently emphasised that more girls should have access to Girl on Fire, seeing it as a pathway to build confidence and try new things. Their descriptions — "friendly," "welcoming," "not super competitive" — suggest that the programme's ethos created a psychologically safe space that lowered barriers to participation, particularly for those who might be hesitant to join formal sports (Participant 1; Participant 5). The repetition of language emphasising friendliness and support indicates that the tone of the programme itself was a critical factor in encouraging engagement.

Building confidence was viewed as one of the programme's most valuable outcomes and a reason to promote it widely. Participant 2 highlighted that the programme supported shy participants to step out of their comfort zones:

> "It is really good for people that, especially at a young age, to be able to like grow their confidence… most shy people don't really like to join things and it's good for people to gain confidence."

Similarly, Participant 3 emphasised a broader social and cognitive benefit:

> "Definitely changes you… you definitely gain a lot more confidence… you meet new people, and it gives you an out of perspective of things."

Taken together, these reflections suggest that participants perceived Girl on Fire not just as a confidence-building space, but as a context for social learning, perspective-taking, and peer network development.

Participants also recommended peer-driven strategies to encourage participation, recognising that shy or reluctant students often need social scaffolding. The suggestion of a buddy system, for example, positions peers as both guides and motivators:

> "I would go with you… that way they can broaden their horizons in terms of lacking sports." (Participant 4)

Shared experience and recognition of commonality further reinforced participation:

> "Everyone that's doing it is kind of in the same boat as you… you might have a lot in common… then you can make a lot of friends." (Participant 6)

Motivational strategies, such as small incentives or positive reinforcement, were also suggested:

> "Prizes and engaging games really motivate… [and] I'm pretty sure they will want to join if they hear about the prizes." (Participant 7)
> "Give it their all… make some new friends, try some new things, and don't be shy because you'd be surrounded by a lot of supportive people." (Participant 8)

These ideas show that participants understood engagement as relational and motivational, and they viewed themselves as having an active role in bringing hesitant peers into a supportive environment where confidence could grow.

Sub-Theme 2: Programme Expansion

Beyond simply inviting more girls, participants proposed extending Girl on Fire to include younger cohorts and creating leadership pathways for older participants. These suggestions reflect an understanding of the programme as a community-building platform rather than solely an individual intervention.

Leadership development was a recurring theme, with older participants envisaging opportunities to mentor younger students:

> "The programme could try like, expand instead of just doing like girls participating in sports. The girls could try like help younger students like and get themselves involved in sports… they can gain leadership skills from helping younger students." (Participant 4)

Similarly, starting participation at younger ages was seen as a preventive and formative strategy to normalise physical activity and confidence-building before adolescence creates additional social pressures:

> "At a younger age children are more like interested in sports… they can like start at a young age and be like, I really like sports. I'm going to work towards it." (Participant 4)

These reflections indicate that participants perceive Girl on Fire as a multigenerational learning ecosystem, where confidence, leadership, and engagement are cultivated cumulatively and reinforced through peer mentorship.

Sub-Theme 3: Programme Suggestions

Participants also offered practical recommendations to optimise session delivery and structure, particularly around social connection and inclusion. Early bonding and facilitated introductions were highlighted as critical for supporting hesitant participants:

> "Making sure people have their friends or like friendship stuff as well, like in your programme." (Participant 1)

> "Encourage the girls to get to know each other better throughout the group so that…they have someone with a friendly face." (Participant 2)

> "People can actually socialize and meet each other." (Participant 3)

Structured activities such as team-building exercises and icebreakers were also valued for easing first-session nerves and encouraging interaction:

> "If you like, join a new sport, and you like don't know anyone…I feel like it'd be good if you had some sort of activity to prepare them…activities in the beginning to help you get to know your team member." (Participant 6)

Motivational elements, exposure to role models, and inclusivity were further identified as ways to strengthen engagement:

> "A motivational speaker…like inspirational women from New Zealand. Valerie Adams, the shot putter, Sophie Pascoe will be really nice." (Participant 8)

> "A different side to the programme just for the boys." (Participant 7)

These suggestions illustrate participants' understanding that programme design actively shapes not only participation rates but also the quality of the experience. The repeated emphasis on social cohesion, inclusivity, and inspiration indicates that participants valued programmes that foster connection and provide models for achievement.

Participants' reflections present a coherent vision for the future of Girl on Fire, highlighting strategies to make the programme more accessible, engaging, and socially supportive. They recommended peer support mechanisms, motivational incentives, and explicit promotion of the programme's welcoming ethos. Expansion strategies, including mentoring roles for older girls and early engagement of younger participants, were seen as ways to amplify both leadership development and social inclusion. Practical session-level refinements, such as structured introductions, team-building activities, and guest speakers, were viewed as critical to fostering confidence, connection, and inclusivity.

Collectively, these insights position participants as active co-creators of programme improvement, providing a roadmap to enhance Girl on Fire's capacity to reach more students, build leadership, and generate lasting, transferable impacts across social, academic, and personal domains. In Chapter 5, these youth-driven recommendations are considered alongside relevant policy and programme design literature to identify how Girl on Fire can be further aligned with best practice in positive youth development and girls' sport participation

Chapter Summary

This chapter presented findings from eight semi-structured interviews with girls who took part in the 2021 Girl on Fire programme. Analysis generated four overarching themes: **Immediate Impact of the Programme**, **Broader Transfer of Life Skills**, **Enablers and Barriers to Transfer**, and **Programme Development and Recommendations**. Together, these themes show how Girl on Fire functioned as a safe, relational, and purposeful environment that supported girls' confidence, skill development, and willingness to participate more fully in school, sport, and social life.

In **Theme 1**, participants described Girl on Fire as non-competitive, welcoming, and "wholesome," offering a rare space where they could try new activities without fear of judgment. Many entered the programme shy, disengaged from PE, or anxious about performing in front of others, yet reported becoming more willing to "give things a go," work in teams, and persist through challenges. Within this environment they developed core life skills—communication, leadership, resilience, and teamwork—which were practised repeatedly and began to feel both usable and valuable.

Theme 2 showed that these skills did not remain confined to the programme. Participants described applying communication, leadership, and problem-solving in

classroom discussions, group work, and everyday peer interactions, and several reported taking on informal leadership roles or encouraging others to participate. They also described a broader shift in mindset: challenges were increasingly framed as opportunities to learn, and physical activity was reinterpreted as “fun” and self-affirming rather than threatening or embarrassing. These patterns suggest that Girl on Fire contributed to both behavioural change and evolving learner/participant identities.

In **Theme 3**, participants highlighted that transferring skills into new contexts was not automatic. Confidence gaps, unfamiliar environments, and unsupportive or disengaged peers sometimes limited their ability to enact what they had learned. At the same time, they pointed to clear enablers: emotionally safe, girl-only spaces; flexible, outdoor settings; and encouragement from peers, teachers, coaches, and whānau. When challenge was met with support, initial discomfort often became a site of growth rather than a barrier, and the time it took to “settle in” or participate actively reduced over time.

Finally, **Theme 4** captured participants’ forward-looking recommendations. They advocated for widening access to Girl on Fire—particularly for shy or hesitant girls—and suggested peer-based strategies such as buddy systems, early relationship-building activities, and small incentives to sustain engagement. They also proposed leadership pathways for older students and earlier introduction for younger cohorts, positioning Girl on Fire as a developmental pathway rather than a one-off experience. Additional suggestions included structured icebreakers, stronger emphasis on social connection, and exposure to inspirational female role models from Aotearoa New Zealand.

Overall, the findings portray Girl on Fire as a gender-responsive, relationally rich programme that supported participants to move from hesitant, peripheral engagement to more confident, active participation across multiple domains of their lives. The chapter provides a robust empirical foundation for Chapter 5, where these youth accounts are interpreted through the study's theoretical frameworks to examine how, why, and under what conditions sport-based life skills were developed and transferred beyond the programme.

Chapter 5: Discussion

Introduction

This discussion interprets the findings of the Girl on Fire evaluation through the integrated lenses of Positive Youth Development (PYD), Teaching Personal and Social Responsibility (TPSR), Social Cognitive Theory (SCT), Ecological Systems Theory (EST), and Transfer of Learning Theory (TLT). Rather than simply restating what occurred, it explores how and why life skills learning unfolded and what contextual factors appeared to influence its transfer beyond the programme itself.

The findings show that Girl on Fire operated as a developmental ecosystem in which girls learned to participate with confidence, communicate effectively, and take responsibility for themselves and others. For one participant, gaining the courage to "actually participate instead of just watching" (Participant 1) reflected a transformative shift in self-belief—a pattern echoed across the cohort. Such change is consistent with PYD, which emphasises the cultivation of internal assets and personal growth as foundations for thriving (Holt et al., 2017).

These gains were not only behavioural but relational. The collaborative, non-competitive culture fostered empathy and collective confidence, aligning with TPSR's levels of respect, effort, and caring for others (Hellison, 2011). Within this supportive environment, small moments of success appeared to strengthen girls' sense of efficacy (Bandura, 1997) and helped them persist when the programme faced disruptions such as remote delivery. From an ecological perspective, Girl on Fire illustrates how close, everyday settings—peer groups, mentors, and the emotional tone of sessions—interacted with broader systems such as school culture and family support to influence the transfer of learning (Bronfenbrenner, 1979).

Transfer of learning was central to this process. Whether life skills carry over into new situations depends partly on the similarity between contexts and on learners' ability to recognise opportunities to use what they have learned (Barnett & Ceci, 2002; Perkins & Salomon, 1992). Through structured reflection, goal setting, and guided practice, Girl on Fire created space for participants to make these connections explicit. Many reported internalising strategies for communication, self-regulation, and teamwork that they later drew on in classrooms, at home, and in peer relationships.

The discussion is organised into four interconnected domains:

1 Life skills development and transfer

2 Contextual enablers and barriers

3 Youth voice and empowerment

4 Programme development and implications for practice

Together, these themes offer a holistic understanding of how Girl on Fire contributed to the social, emotional, and behavioural development of Year 7–8 girls, and the conditions that supported or constrained the lasting impact of that growth.

Theme 1: Life-Skill Development and Transfer

The findings indicate that Girl on Fire nurtured a range of life skills that extended well beyond sport. Confidence, communication, teamwork, leadership, and resilience were repeatedly mentioned as outcomes that the girls could carry into other areas of their lives. These developments are consistent with the principles of PYD, which emphasises building inner resources that help young people adapt and thrive (Holt et al., 2017). The programme's design—centred on inclusion, reflection, and relational learning—

seems to have provided a setting where girls could practise these skills in ways that felt real rather than contrived.

What also stands out is how the findings align with TLT. Skills are far more likely to cross over into new situations when learners can recognise their relevance and have opportunities to rehearse and reflect (Barnett & Ceci, 2002; Perkins & Salomon, 1992). In Girl on Fire, structured conversations and guided practice appeared to make that connection explicit, allowing participants to take what they learned on the field or court and apply it to schoolwork, friendships, and home life.

Sub-Theme 1: Confidence as a Catalyst for Growth

Confidence emerged as the central driver of developmental change. Participants described a transition from hesitancy to active engagement, signalling a reshaping of self-belief. This progression reflects Kolb's (2014) experiential learning model, in which concrete experience, reflective observation, abstract conceptualisation, and active experimentation create a cycle through which skills and confidence are internalised. By participating in structured activities and immediately reflecting on their experiences, girls in Girl on Fire were able to translate small successes into broader self-efficacy, reinforcing their capacity to take initiative in other settings. As one participant noted, she had "learned to speak up and try things I didn't think I could do before" (Participant 3), capturing the programme's impact on perceived competence—a construct central to SCT (Bandura, 1997).

Importantly, this growing confidence did not stay confined to sport. Several girls said they were now more comfortable speaking in class or leading group projects. This suggests that once self-efficacy took hold in one domain, it began to ripple into others. The pattern echoes findings from the Girls in Sport trial (Okely et al., 2017), where

supportive, school-embedded programming helped girls carry increased confidence into other settings.

Sub-Theme 2: Communication, Teamwork, and Relational Competence

Communication and teamwork were consistently identified as parallel outcomes that deepened participants' social learning. Cooperative activities fostered empathy, perspective-taking, and the ability to navigate differences constructively. Participant 4 reflected that she learned to "listen more instead of getting annoyed," a concise illustration of social regulation and interpersonal growth.

These relational shifts align closely with the TPSR model, which views respect and cooperation as foundations for empathy and leadership (Hellison, 2011). Within Girl on Fire, teamwork was not treated as an end goal but as a means of practising moral and emotional responsibility. The programme intentionally mixed groups and encouraged collaboration beyond friendship circles, helping to dismantle cliques and expand the girls' social networks.

From an ecological perspective, this restructuring of peer dynamics mattered. By designing activities that required inclusion and trust, the programme created conditions where empathy could flourish. Similar outcomes have been observed in North American youth sport programmes that prioritise caring coaching environments, where communication and inclusion often improve alongside teamwork (Camiré et al., 2012; Voight, 2012).

Sub-Theme 3: Leadership, Resilience, and the Transfer Process

Leadership emerged as both an outcome and a bridge for skill transfer. Several girls found themselves naturally taking on roles such as organising small groups, resolving

disagreements, or helping younger siblings try new activities. Leadership here was not about authority; it was relational and cooperative, consistent with TPSR's higher responsibility levels that link personal growth to social contribution.

Resilience was strengthened through repeated exposure to challenges followed by success. Participant 2 reflected, "Even when I didn't get something right the first time, I kept going—now I try the same at school," capturing the transfer of persistence across domains. According to SCT, these mastery experiences build a self-reinforcing loop between behaviour and belief. The girls' accounts showed that resilience extended beyond sport; they applied perseverance to schoolwork and social interactions, indicating genuine life skills transfer (Eime et al., 2013; Weiss et al., 2014). Comparable interventions, such as the Health and Well-Being for Girls (HWBG) programme in Australia, also demonstrated that structured reflection and supportive mentoring facilitated far transfer of leadership and coping skills (White et al., 2022).

Sub-Theme 4: Sustaining Transfer Beyond the Programme

While confidence and relational skills transferred effectively, the durability of these gains depended on environmental continuity. Several participants acknowledged that confidence diminished once the structured, supportive context ended. This pattern echoes findings from Gould and Carson (2008), who emphasise that reflection and reinforcement are critical to maintaining learned behaviours. The absence of ongoing opportunities to practise new skills limited sustained application—an issue consistent with EST, which highlights that developmental outcomes rely on alignment across settings (Bronfenbrenner, 1979).

Thus, Girl on Fire can be understood as a catalyst for transfer rather than a self-contained intervention. It initiated internal change that required compatible social

ecosystems—family, classroom, and peer groups—to sustain momentum. Where these systems mirrored the programme's relational values, life skills transfer flourished; where they did not, confidence and leadership waned.

Summary of Theme 1

Overall, Girl on Fire fostered a psychologically safe, socially connected, and experientially rich environment that promoted meaningful life skills development and transfer. Participants demonstrated growth in confidence, communication, leadership, and resilience—outcomes that reflected the dynamic interplay of PYD, TPSR, SCT, and TLT within a culturally responsive, girl-centred framework. Similar outcomes have been reported in comparable programmes across Australasia and North America, particularly when deliberate life skills instruction, supportive coaching, and sustained mentoring are embedded in programme delivery (Camiré et al., 2012; Okely et al., 2017; White et al., 2022).

However, sustaining these developmental gains required ecological alignment beyond the programme itself—a challenge further examined in the subsequent section, Contextual Enablers and Barriers. These findings align closely with TLT, which posits that the generalisation of skills relies on both cognitive recognition and supportive contextual opportunities (Barnett & Ceci, 2002; Perkins & Salomon, 1992). Within Girl on Fire, the intentional incorporation of reflection and real-world rehearsal provided participants with the cognitive and situational scaffolding necessary for the far transfer of confidence and communication into academic, social, and everyday settings.

Theme 2: Contextual Enablers and Barriers

Sub-theme 1: Enablers of Skill Transfer

The extent to which life skills developed through Girl on Fire were sustained and transferred was strongly influenced by the broader ecological contexts in which participants lived and learned. Building on the preceding discussion, these findings reaffirm that even when programmes effectively nurture confidence, communication, and leadership, their long-term impact ultimately depends on the ongoing presence of relational and environmental support. This emphasis aligns with Ecological Systems Theory (EST) and is consistent with international research underscoring the importance of contextual continuity for sustained life skills transfer (Bronfenbrenner, 1979; Camiré et al., 2012; Scheadler et al., 2024).

Viewed through the lens of Transfer of Learning Theory (TLT), these variations illustrate that life skills do not seamlessly migrate across settings; rather, successful transfer depends on both the learner's ability to recognise the relevance of a skill and the presence of compatible cues within new environments (Perkins & Salomon, 1992). In this sense, the surrounding ecology functioned as either a bridge or a barrier to applying the competencies developed through Girl on Fire.

While Girl on Fire created the immediate, or proximal, conditions necessary for Positive Youth Development, its wider influence was shaped by the degree to which external environments—particularly schools, peers, and families—reflected and reinforced its inclusive ethos. The findings suggest that although participants left the programme with enhanced personal and interpersonal capabilities, their ability to sustain and enact these skills beyond the sessions depended heavily on the responsiveness and supportiveness of their social worlds. This dynamic reflects

Bronfenbrenner's (1979) premise that human development is not self-contained but unfolds through continuous, reciprocal interactions between individuals and the multiple, interconnected systems that surround them.

Supportive and inclusive climate

A major enabler of transfer was the programme's inclusive and psychologically safe atmosphere. Participants described Girl on Fire as a space where they could express themselves freely without fear of judgement. One reflected, "It was non-competitive and friendly, so I felt okay trying things even if I wasn't good at them." This sense of safety is central to TPSR's notion of respect and belonging as prerequisites for meaningful personal growth (Hellison, 2011).

In contrast to traditional physical education (PE), where ability hierarchies and peer comparison can inhibit participation (Slater & Tiggemann, 2010), Girl on Fire prioritised participation over performance. This structure normalised participation and made life skills explicit conditions that Bean et al. (2018) describe as critical for effective life skills transfer. Through consistent positive reinforcement, girls were encouraged to take manageable risks, thereby strengthening self-efficacy (Bandura, 1997). As evidenced by participants' accounts, the relational tone set by the facilitators established an emotional anchor that participants associated with confidence, collaboration, and enjoyment.

Relational support and mentorship

Another crucial enabler identified by participants was the quality of interpersonal relationships within the programme. Mentors played a dual role as instructors and role models, demonstrating encouragement, empathy, and persistence. Participants often attributed their willingness to engage or lead to the approachability of the facilitators.

As one girl noted, the leaders were “really nice” and “engaged you to do things” (Participant 2).

These interactions exemplify Bandura’s (1997) concept of vicarious learning, in which observing supportive behaviour reinforces one’s belief in their own capabilities. In this sense, mentors were mediators of learning transfer—providing the scaffolding that enabled girls to convert experience into internalised competence. Peer relationships also contributed; the opportunity to work with new people expanded social confidence and challenged fixed friendship patterns. The resulting sense of collective belonging strengthened what Holt et al. (2017) term connection, one of PYD’s key developmental assets.

Physical and structural environment

The physical setting also acted as an enabler of participation and confidence. Outdoor and flexible spaces provided freedom of movement and reduced self-consciousness. Participants described these environments as “more freeing” and conducive to social interaction (Participant 6). The all-girl context further enhanced comfort and autonomy by removing gendered performance pressures, a finding consistent with research showing that girls can be more engaged and active in single-sex physical education settings (McKenzie et al., 2004).

Together, these factors created a relational and environmental synergy that amplified life skills learning. Within the microsystem of Girl on Fire, the combination of inclusive culture, positive relationships, and adaptive space formed an ecosystem of psychological safety—essential for enabling immediate growth and subsequent transfer. Comparable initiatives, such as Girls in Sport (Okely et al., 2012) and Fit for

Girls in Australia (White et al., 2022), report similar patterns: when relational trust and inclusivity converge, life skills like confidence and leadership are more likely to stick.

Sub-theme 2: Barriers to Skill Transfer

Despite these strengths, several contextual and interpersonal barriers limited the extent to which skills were sustained over time. Participants' reflections revealed that while confidence and teamwork improved significantly within the programme, the translation of these skills into less supportive environments was inconsistent.

Confidence fragility and context dependency

Some participants noted that their confidence diminished once the structured support of Girl on Fire was removed. One described feeling "more nervous" when returning to regular PE classes or unfamiliar social settings (Participant 1). This points to the contextual fragility of confidence—strong within enabling microsystems, yet vulnerable when external norms emphasise competition or evaluation.

SCT helps explain this phenomenon: self-efficacy is most robust when reinforced across multiple contexts through repeated mastery experiences (Bandura, 1997). When these experiences were absent or undermined by unsupportive environments, self-belief weakened. Thus, the persistence of confidence required ecological consistency between the values of Girl on Fire and those of subsequent settings.

Peer dynamics and participation challenges

Group dynamics sometimes limited the full expression of learned skills. Participants reported frustration when peers disengaged or failed to collaborate, reflecting the challenge of sustaining shared responsibility. One participant admitted, "It was hard to lead because others weren't listening, I then slowly learned to adapt."

This tension highlights the importance of social reciprocity in learning transfer. Leadership and teamwork cannot exist in isolation; they require mutual engagement and shared norms. When these were absent, opportunities for applying and reinforcing responsibility were constrained. From an EST perspective, misalignment between programme and peer-group mesosystems disrupted continuity of behavioural reinforcement.

Lack of post-programme reinforcement

A consistent barrier identified across interviews was the absence of follow-up once the programme concluded. Participants observed that their motivation and confidence gradually diminished without continued engagement. This echoes findings from Gould and Carson (2008), who argue that life skills maintenance requires ongoing reinforcement and opportunities for application.

From an ecological perspective, this represents a breakdown between microsystem and exosystem influences: without systemic structures—such as continued mentorship, peer networks, or school integration—to sustain learning, the transfer loop remains incomplete. While participants internalised life skills, they lacked opportunities to consolidate them within authentic contexts.

Gender norms and social pressures

Returning to mixed-gender environments posed another barrier. Several participants described how the reintroduction of boys in PE classes or extracurricular sport altered social dynamics, reigniting self-consciousness and reducing willingness to participate. One explained that in co-educational settings, “people just act different when boys are around.”

This finding reinforces longstanding research on gendered barriers to sport participation (Slater & Tiggemann, 2010), demonstrating that even well-designed interventions must contend with broader sociocultural norms that shape girls' experiences of competence and belonging. Without structural change within the wider school culture, empowerment developed through single-gender programmes may remain situational.

Sub-theme 3: Interpreting Enablers and Barriers Ecologically

When viewed collectively, these enablers and barriers illustrate that learning transfer is not a linear extension of individual skill acquisition but a reciprocal ecological process. Girl on Fire created the proximal conditions—support, safety, and relational trust—necessary for development. Yet the persistence of those gains depended on alignment between the programme and surrounding systems.

Bronfenbrenner's (1979) framework clarifies this dynamic: the microsystem of Girl on Fire provided consistent reinforcement of effort, respect, and confidence. When girls transitioned to mesosystems (school classes, social groups) that reflected similar values, skills transferred more seamlessly. However, when those systems contradicted or failed to support these principles, the transfer loop weakened.

Programmes like Girl on Fire are thus most effective when embedded within a broader network of consistent messages and opportunities. Lasting learning requires not only a strong programme but also a supportive ecology that allows those lessons to be recognised, reinforced, and lived across multiple contexts.

Summary of Theme 2

In summary, Girl on Fire effectively established the environmental and relational foundations required for meaningful learning transfer, yet challenges remained in sustaining these outcomes beyond the immediate programme context. Supportive mentorship, inclusive participation, and psychologically safe spaces served as strong enablers of confidence, responsibility, and connection. Conversely, contextual discontinuity, social pressures, and limited reinforcement across external settings constrained the long-term durability of change.

These findings reaffirm that transfer is fundamentally an ecological process, shaped by the dynamic interplay between individual capacities and the affordances of their surrounding environments. While the data clearly illustrated how contextual supports enhanced participants' confidence and application of life skills, there was comparatively less evidence on how these same conditions influenced their sustained sense of agency and leadership beyond the programme. This gap likely reflects a limitation in the available data rather than a conceptual shortcoming, suggesting that processes of empowerment may have been more implicit or shaped by contextual constraints.

Importantly, this highlights a critical direction for sport-for-development initiatives: to move beyond measuring participation and short-term outcomes towards embedding psychosocial growth within the broader ecosystems of schools, families, and communities. Viewed through the lens of TLT, the findings emphasise that far transfer—the ability to apply learning across diverse life domains—is most achievable when environmental cues and relational climates align with those experienced during

initial learning (Barnett & Ceci, 2002). Where such alignment was weak or inconsistent, even well-developed skills risked remaining context-bound and underutilised.

The next section, Youth Voice and Empowerment, explores how these contextual dynamics intersected with participants' experiences of agency and leadership, revealing how empowerment emerged, was expressed, and, at times, challenged within and beyond the programme.

Theme 3: Youth Voice and Empowerment

Following the ecological analysis of enablers and barriers, the next theme explores how those contextual conditions shaped girls' sense of agency, belonging, and empowerment. The findings show that Girl on Fire did more than build confidence; it provided a relational space where participants' voices influenced learning design and where leadership and self-efficacy were actively practised. This section situates those outcomes within broader discussions of youth voice in Aotearoa New Zealand education and international empowerment research.

Sub-theme 1: Voice, Belonging, and Psychological Safety

Empowerment first emerged through the experience of being heard and valued. Participants described the environment as one where they could "just be themselves" and speak openly without fear of judgment (Participant 3). This sense of recognition reflects what Freire (2000) described as dialogic pedagogy, in which learning occurs through mutual respect and shared communication. It also aligns with O'Sullivan and MacPhail (2010), who emphasise that authentic youth voice in physical education flourishes when educators foster emotional safety and equality of participation.

Within Girl on Fire, facilitators positioned voice as participation rather than performance. This approach resonates with current New Zealand wellbeing and curriculum policy, which emphasises partnership, participation, and protection as guiding principles of equitable education (Ministry of Education, n.d.; Ministry of Education, 2007). By legitimising self-expression, the programme cultivated a collective sense of belonging that served as a foundation for agency. This inclusive pedagogy mirrors approaches used in other Aotearoa New Zealand initiatives, such as Healthy Active Learning, which emphasises collaborative, student-centred environments as precursors to empowerment (Sport New Zealand, 2021c).

Sub-theme 2: Leadership as a Pathway to Agency

Leadership opportunities were instrumental in transforming participation into empowerment. Girls described moments where they moved from hesitant engagement to confident leadership, organising peers, resolving conflicts, or mentoring younger participants. One participant reflected, “If issues arise in my friend group, I’m often the one who takes the role of helping fix the issue,” highlighting how these experiences translated personal growth into active social contribution. These shifts mirror TPSR’s higher responsibility levels, where personal growth translates into social contribution (Hellison, 2011). They also align with Positive Youth Development models of leadership as a relational and community-oriented competency (Bean et al., 2018). Compared with broader participation-focused initiatives such as It’s My Move (Sport New Zealand, 2023) or This Girl Can (Sport England, 2018), which aim primarily to increase activity levels—Girl on Fire fostered leadership through repeated, scaffolded experiences that allowed girls to practise influence and empathy in safe contexts.

Sub-theme 3: Self-efficacy and Relational Confidence

Participants' descriptions revealed that empowerment was underpinned by self-efficacy—a growing belief in their ability to make meaningful contributions. For some, this involved taking visible initiative, such as volunteering answers in class or leading discussions; for others, it was a subtler shift toward relational confidence. One participant summarised this transition, saying she felt "more confident talking to people" after the programme (Participant 6).

These experiences illustrate Bandura's (1997) concept of reciprocal determinism: as participants' actions influenced their social environments, positive feedback reinforced self-belief. Similar dynamics are evident in youth sport research showing that supportive motivational climates created by coaches, parents, and peers strengthen self-efficacy and engagement (Keegan et al., 2010), suggesting that the combination of physical challenge and relational support is a robust pathway to self-efficacy for adolescent girls.

Sub-theme 4: The Conditional Nature of Empowerment

While empowerment was widely experienced, its sustainability was context dependent. Participants acknowledged that confidence and leadership were more easily expressed in environments that mirrored Girl on Fire's values. One reflected that she spoke freely within the programme but "went quiet again" when peers outside it were less supportive (Participant 6).

This echoes the ecological principle that empowerment, like other developmental assets, requires reinforcement across microsystems (Bronfenbrenner, 1979). Where school or peer settings contradicted the programme's norms of respect and inclusion, empowered behaviours were harder to sustain. Similar findings have emerged in

evaluations of the Australian This Girl Can campaign, which found short-term confidence improvements that waned once campaign messaging ceased (Bauman et al., 2023). Girl on Fire therefore appears to achieve deeper but still context-sensitive empowerment by embedding reflection and relational practice rather than relying solely on motivational framing.

Sub-theme 5: Youth Voice as Pedagogical Praxis

Beyond individual agency, participants' reflections illustrated how Girl on Fire embodied a participatory pedagogy, positioning youth voice as a driver of programme culture. Rather than being directed, girls co-created experiences through dialogue, reflection, and peer leadership. This approach reflects Freire's (2000) notion of education as liberation and aligns with PYD's asset-based philosophy, where youth are seen as partners in development (Lerner et al., 2005).

By enabling participants to contribute to activity design and group norms, facilitators modelled autonomy-supportive teaching (Deci & Ryan, 2000). This strengthened intrinsic motivation and nurtured a sense of ownership over learning outcomes. The girls' proposals for programme improvement, such as extending sessions or mentoring new participants, further demonstrate the emergence of critical youth agency—young people's capacity to critically analyse their contexts, imagine alternatives, and act collectively to effect change (Cammarota & Fine, 2008). Such agency transforms voice into praxis, positioning girls not just as beneficiaries but as co-designers of their learning ecosystem.

Summary of Theme 3

In summary, Girl on Fire fostered empowerment through the integration of voice, agency, and relational confidence within a psychologically safe and dialogic learning

environment. Participants' ability to lead, express opinions, and support others illustrates the intersection between personal empowerment (confidence, self-efficacy) and social empowerment (leadership, empathy, contribution).

However, empowerment was not static; it was an ecologically responsive process—thriving when external contexts reinforced the programme's relational ethos and weakening when those contexts diverged. These findings emphasise that authentic youth-voice practice depends on systemic coherence between programme philosophy, school culture, and community support. Girl on Fire thus demonstrates how empowerment can be cultivated through relational pedagogy and participatory design, offering insights for embedding sustainable youth voice within Aotearoa New Zealand's educational ecosystem.

The next theme, Programme Development and Implications for Practice, examines how participants' forward-looking reflections translated their empowerment into tangible ideas for sustaining and scaling Girl on Fire across broader school contexts.

Theme 4: Programme Development and Implications for Practice

Building on participants' reflections and the preceding discussion of empowerment, this section explores how Girl on Fire can evolve to sustain and extend life skill transfer across settings. The participants' forward-looking insights revealed not only practical suggestions but also a deepening sense of ownership and agency—evidence that empowerment had translated into critical reflection and co-design. Their recommendations—continuity, structured reflection, peer leadership, and broader inclusivity—align closely with PYD principles and with Aotearoa New Zealand's current focus on wellbeing, participation, and leadership for girls in sport (Sport New Zealand,

2023). The national evidence base informing these implications is summarised in Appendix D.

Sub-theme 1: Sustaining Empowerment: Continuity and Contextual Reinforcement

A dominant insight was the desire for continuity—an understanding that empowerment is developmental, not event-based. Several participants described how their initial confidence "wore off after it finished," highlighting the fragility of early self-belief when it is not reinforced by surrounding contexts. This mirrors Gould and Carson's (2008) conclusion that life skill gains from youth sport programmes diminish without deliberate follow-up. From a transfer of learning standpoint, sustained reinforcement ensures that the cognitive and behavioural patterns established during the programme remain accessible and applicable across contexts (Perkins & Salomon, 1992). Without continuity, these learned competencies risk remaining episodic rather than generalised.

From an ecological systems perspective, this fading effect reflects a break in ecological continuity. While Girl on Fire provided a nurturing microsystem, the wider school environment did not always replicate its affirming climate. Bronfenbrenner's (1979) theory reminds us that developmental outcomes are strongest when values and supports are consistent across microsystems. Participants' wish for "more sessions" or post-programme opportunities thus represents an intuitive call for mesosystemic alignment between Girl on Fire, school culture, and family support.

Embedding ongoing mentorship, alumni sessions, or integration into school wellbeing frameworks could help maintain this continuity. Similar models in Aotearoa New Zealand, such as Project Energize, have achieved longevity through embedded delivery

and local partnerships over more than a decade (Rush et al., 2016), suggesting feasible pathways for sustaining Girl on Fire beyond short-term cycles.

Sub-theme 2: Reflection as a Mechanism for Transfer and Self-regulation

Another insight emerging across accounts was the call for more structured reflection—a recognition that self-awareness deepens when experience is made explicit. Several participants expressed that discussing how they applied skills "in school or at home" would help the benefits "stick." This approach aligns with Kolb's (2014) experiential learning model, which emphasises that knowledge is constructed through a cycle of concrete experience, reflective observation, abstract conceptualisation, and active experimentation. By structuring Girl on Fire to allow participants to act, reflect, and then apply insights in new contexts, the programme fosters deeper integration of life skills, enhancing both transfer and retention. This pattern reflects transfer of learning theory, which emphasises that conscious reflection and explicit linking of experiences across contexts strengthen the generalisation of skills (Barnett & Ceci, 2002; Perkins & Salomon, 1992).

In many PYD-based sport programmes, reflection remains implicit, often embedded in conversation or feedback. Participants' voices here suggest the need for intentional, scaffolded reflection. Embedding structured debriefs, journaling, or peer-led discussions could enhance metacognitive engagement, helping girls articulate what they learned and how they used it. This is closely aligned with TPSR's fifth level—transfer beyond the gym—where participants consciously recognise and name the life skills being transferred (Hellison, 2011). By transforming tacit experience into articulated understanding, reflection turns momentary confidence into durable self-knowledge.

The theoretical significance of this finding lies in its connection to SCT. Bandura (1986) posits that self-regulation and efficacy are strengthened through self-reflection, feedback, and mastery experiences. Implementing these structures would consolidate confidence and align the programme with Sport New Zealand's wellbeing framework, which emphasises self-awareness and reflection as drivers of sustained participation.

Practically, integrating reflection could be achieved through short check-in circles, reflective prompts, or digital journaling that link learning to students' daily contexts. Doing so would bridge the psychological distance between programme and classroom, reinforcing the "life" in life skill learning.

Sub-theme 3: Peer Leadership and Mentorship: Sustaining a Culture of Empowerment

Participants also proposed a clear avenue for sustaining empowerment through peer mentorship and leadership pathways. One suggested, "It would be cool if the older girls could help out, like be leaders for the new ones"—a vision of continuity rooted in relational identity and shared experience. This perspective reflects PYD principles, which emphasise that youth thrive in environments where they can both learn from and contribute to others (Bean et al., 2018).

Peer-led mentoring provides a powerful avenue for responsibility transfer—a core aim within TPSR (Hellison, 2011)—by enabling participants to progress developmentally from learners to role models. This approach mirrors the structure of Active Recreation for Rangatahi pilots in Aotearoa New Zealand, where alumni returned as co-facilitators to extend programme reach and sustain its relational culture (Sport New Zealand, 2021c). Through such continuity, empowerment becomes cyclical: girls who once benefited from supportive mentorship are positioned to model, reinforce, and

transmit the programme's values to new participants, ensuring that responsibility and leadership are continually renewed within the Girl on Fire community.

Moreover, peer mentorship directly addresses one of the earlier barriers—confidence fragility. By engaging as mentors, returning participants can reaffirm their skills, solidify identity, and strengthen belonging. Such structures align with Aotearoa New Zealand's curriculum competencies of managing self, relating to others, and participating and contributing (Ministry of Education, 2007), and they advance the national agenda for student agency.

At a practical level, mentorship pathways would provide a cost-effective mechanism for programme sustainability while embedding Girl on Fire within existing school leadership systems. Theoretically, they demonstrate the recursive nature of empowerment: as participants become mentors, the programme evolves from an intervention into a self-sustaining community of practice.

Sub-theme 4: Broadening Inclusivity and Contextual Fit

While participants largely described the Girl on Fire environment as inclusive, they also recognised areas for greater differentiation and cultural responsiveness. One participant suggested offering "more chill things too, like yoga or dance," indicating a sensitivity to diverse preferences and confidence levels. This awareness reveals that empowerment was not experienced uniformly—some girls thrived in more physically demanding settings, while others preferred relational or reflective spaces.

This finding aligns with research by Petrie, Devcich, and Fitzgerald (2018), who explore how a primary school teacher in Aotearoa New Zealand worked toward more inclusive physical education practices. Their study highlights the importance of adapting

teaching methods to meet the diverse needs of students, ensuring that all learners, regardless of their abilities, feel included and valued. From an ecological standpoint, adaptability ensures that programmes remain attuned to the unique characteristics of participants' microsystems. Diversity of activity modes can attract students less drawn to traditional sport, reinforcing the programme's core message that empowerment stems from participation, not performance. Incorporating creative or culturally grounded movement—such as kapa haka (Māori performing arts) or contemporary dance—would strengthen authenticity and resonate with Te Tiriti o Waitangi, Aotearoa New Zealand's founding document, and its principles of partnership and responsiveness. Such adaptability helps ensure that life skill transfer is relevant across varied cultural and confidence profiles.

The implication for practice is that inclusivity must be dynamic, not static. Designing flexible modules, co-creating sessions with participants, or integrating cultural elements reflective of local communities could enhance both engagement and authenticity. Such responsiveness also aligns with Aotearoa New Zealand's educational values of diversity and inclusion (Ministry of Education, n.d.; Ministry of Education, 2007), strengthening the sustainability of life skill transfer by ensuring relevance to all learners.

Sub-theme 5: Inter-system Collaboration: Aligning Programme, School, and Family

Participants' reflections also underscored the influence of mesosystemic support—the interaction between family, school, and programme contexts. One girl shared that her mother "noticed I was more confident talking to people," an observation that validated her progress and reinforced motivation. This exemplifies SCT's premise that observed affirmation strengthens self-belief (Bandura, 1997).

Similarly, deeper integration between Girl on Fire and school wellbeing initiatives could ensure consistent messaging and reinforcement. Teachers and coaches who understand and model the programme's relational pedagogy can help maintain a climate of trust, inclusion, and respect long after the sessions conclude. This echoes current Aotearoa New Zealand curriculum and wellbeing policy shifts towards whole-school approaches to wellbeing (Ministry of Education, n.d.; Ministry of Education, 2007), which promote coherence between curricular, extracurricular, and pastoral structures.

By embedding Girl on Fire within such frameworks, schools can move from isolated intervention to systemic integration—transforming the programme from a discrete experience into a sustained developmental ecosystem.

Sub-theme 6: Towards Sustainable Implementation: Scaling and Systemic Alignment

Participants' insights, combined with the study's broader analyses, suggest that Girl on Fire embodies several features that lend themselves to scaling and sustainability. Three interrelated principles stand out as the foundation of its effectiveness:

1 Relational pedagogy – prioritising care, inclusion, and authentic youth voice.
2 Experiential learning – cultivating life skills through active participation and reflection.
3 Ecological connectedness – aligning programme ethos across family, school, and community systems.

These principles mirror the mechanisms identified in successful Aotearoa New Zealand programmes such as Balance is Better and It's My Move, both of which emphasise relational environments, autonomy, and cross-sector collaboration (Sport New

Zealand, 2023). To preserve these mechanisms as the programme expands, facilitator training in TPSR-informed relational pedagogy and reflective practice will be essential. Partnerships with schools, councils, and community sport organisations can help ensure continuity of values and resources while maintaining the girl-centred focus that underpins its success.

At a theoretical level, this represents a systems-level application of EST: sustained outcomes emerge when multiple systems reinforce shared norms of respect, effort, and belonging. Practically, it positions Girl on Fire as a scalable, evidence-based model for girl-centred sport education in Aotearoa New Zealand—addressing national policy goals while contributing unique evidence of psychosocial life skill transfer.

Summary of Theme 4

Participants' forward-looking reflections demonstrated both maturity and a nuanced understanding of the conditions necessary for sustained empowerment. Their emphasis on continuity, reflection, peer mentorship, and inclusivity revealed a collective awareness of what enables personal growth to extend beyond a single programme experience. These insights underscore the transformative potential of youth voice—not merely as a form of feedback, but as a mechanism for co-creating and shaping future practice.

Theoretically, these findings reaffirm that transfer is ecological rather than episodic: the endurance of life skills depends on the alignment of relational, reflective, and systemic supports across interconnected contexts. Practically, this reminds educators and practitioners that empowerment does not occur spontaneously; it must be intentionally scaffolded through structures such as mentorship, guided reflection, and consistent reinforcement across school, family, and community systems.

Viewed through the lens of TLT, these design elements—reflection, continuity, and mentorship—function as deliberate bridging strategies that promote far transfer. They enable participants not only to internalise key life skills but also to recognise their relevance, apply them effectively, and adapt them within diverse social and academic environments.

Ultimately, Girl on Fire exemplifies how relational pedagogy, experiential learning, and ecological integration can intersect to cultivate confident, reflective, and socially capable young women. Its outcomes position the programme as an innovative and scalable model for girl-centred PYD in Aotearoa New Zealand, advancing national priorities for inclusion, leadership, and sustained participation.

Positioning Girl on Fire in Context

When considered alongside national and international youth development initiatives, Girl on Fire occupies a distinct position. While large-scale campaigns such as This Girl Can (United Kingdom and Australia) or It's My Move (Aotearoa New Zealand) have improved girls' participation and confidence, their evaluations typically focus on immediate behavioural and attitudinal change rather than sustained transfer of psychosocial competencies. In contrast, Girl on Fire's small-group, relationally rich, and explicitly reflective design more closely aligns with best-practice features identified in the life skill transfer literature—namely, intentional instruction, scaffolded practice, and ecological reinforcement (Bean et al., 2018; Camiré et al., 2012).

Consequently, the present findings contribute to the limited Aotearoa New Zealand evidence base on long-term skill transfer in sport-based programmes. By evidencing participants' continued confidence, communication, and self-management years after participation, Girl on Fire demonstrates the potential for intentionally designed,

school-embedded initiatives to generate durable psychosocial outcomes that extend beyond sport.

Overall Chapter Summary

Overall, this discussion has demonstrated that Girl on Fire effectively fostered meaningful and transferable life skill development among Year 7–8 girls through a relational, inclusive, and agency-oriented approach informed by multiple theoretical frameworks: TLT, PYD, TPSR, SCT, and EST. Across the four thematic domains—life skill development and transfer, contextual enablers and barriers, youth voice and empowerment, and programme development with implications for practice—the findings reveal that participants not only developed confidence, communication, leadership, and resilience but also applied these competencies beyond the immediate programme setting. The sustainability of these outcomes, however, relied on ecological reinforcement: environments that mirrored the programme's ethos of trust, belonging, and reflection helped sustain empowerment, while unsupportive systems limited its endurance.

These findings align strongly with transfer of learning frameworks (Barnett & Ceci, 2002; Perkins & Salomon, 1992), which propose that enduring transfer occurs when learners are guided to connect experiences to broader contexts through reflection, rehearsal, and environmental continuity. The Girl on Fire model embodied these principles through its deliberate integration of experiential learning, structured reflection, and ecological alignment—creating the cognitive and social conditions for far transfer.

When compared with other Aotearoa New Zealand initiatives such as Project Energize, KiwiSport, and It's My Move (Rush et al., 2016; Sport New Zealand, 2019, 2023), Girl on

Fire offers a distinctive contribution by providing direct, participant-level evidence of psychosocial life skill transfer—a dimension that remains underrepresented in local evaluations. Likewise, while Australian and international programmes such as This Girl Can have successfully influenced participation trends, few have examined how confidence, leadership, and agency are maintained over time. This study therefore adds novel empirical insight into how intentionally designed; small-group, relational interventions can generate sustained personal and social development that extends well beyond participation itself.

Collectively, these contributions position Girl on Fire as an evidence-informed model with the potential to advance Sport New Zealand's Women and Girls Action Plan (2021c) and to inform broader school wellbeing initiatives that prioritise agency, inclusion, and long-term engagement. By integrating relational pedagogy, experiential learning, and ecological connectedness, the programme demonstrates how youth sport can function as a holistic developmental ecosystem—cultivating confident, capable, and connected young women.

The following Conclusion chapter synthesises these insights, outlining their theoretical significance, practical implications, and recommendations for the future design, delivery, and evaluation of girl-centred youth development programmes within Aotearoa New Zealand.

Chapter 6: Conclusion

Summary of Key Findings

This study examined the impact of the Girl on Fire programme at Northcross Intermediate on Year 7–8 girls, specifically exploring whether participation enhanced life skills, the extent to which these skills transferred beyond the programme, and the factors that enabled or constrained such transfer. The discussion revealed four overarching thematic domains: life skill development and transfer, contextual enablers and barriers, youth voice and empowerment, and programme development with implications for practice. Together, these themes highlight the programme's multifaceted impact on participants' growth and learning.

First, the programme facilitated a range of transferable life skills, including confidence, communication, teamwork, leadership, and resilience. Participation in structured, relationally rich activities allowed girls to experience success, reflect on performance, and apply learning in broader contexts. Confidence emerged as a central driver, enabling a shift from hesitant participation to active engagement—not only in sport but also in classroom interactions, peer relationships, and social decision-making. Communication and teamwork were enhanced through cooperative activities that fostered empathy, perspective-taking, and the capacity to navigate interpersonal challenges. Leadership and resilience developed alongside confidence, with participants reporting the application of these skills in managing schoolwork, resolving peer conflicts, and mentoring younger students. These findings illustrate how immediate skill acquisition translated into broader life applications.

Second, the durability of these skills was strongly influenced by contextual conditions. Enablers included a psychologically safe, inclusive environment; strong mentorship;

supportive peer relationships; and flexible physical spaces that encouraged participation. Barriers emerged when girls returned to unsupportive school environments, encountered conflicting peer norms, or lacked post-programme reinforcement. The findings underscore that while Girl on Fire provided a robust microsystem for life skill development, transfer depended on alignment within the broader mesosystem, consistent with Bronfenbrenner's (1979) ecological framework. Empowerment and skill application were strongest when school, family, and peer systems mirrored the programme's relational and inclusive ethos.

Third, the programme actively fostered youth voice and agency. Participants reported feeling valued, heard, and included in shaping activities, which contributed to belonging and self-efficacy. Leadership opportunities—formal and informal—enabled girls to translate personal growth into social contribution, while structured reflection helped them recognise and internalise achievements. However, the sustainability of empowerment remained context dependent; girls were less likely to exhibit leadership and confidence in environments that did not reinforce the programme's supportive values. These findings emphasise that youth voice is not merely an outcome but a pedagogical process that shapes learning, fosters agency, and reinforces the transfer of life skills.

Finally, participants' forward-looking reflections highlighted practical pathways for sustaining and scaling impact. Continuity, structured reflection, peer mentorship, and increased inclusivity emerged as key strategies for embedding empowerment beyond the immediate intervention. Suggestions such as integrating culturally responsive activities, establishing alumni mentorship roles, and aligning programme values with school-wide wellbeing initiatives indicate a sophisticated understanding among

participants of the mechanisms that support durable transfer. In short, Girl on Fire not only cultivates personal and social competencies but also creates an environment that supports critical reflection and co-creation, enabling participants to contribute to the programme's evolution.

Collectively, these findings address the research questions. Life skills developed through Girl on Fire extended into other areas of participants' lives, particularly when nurtured within relational, reflective, and ecologically supportive contexts. This pattern aligns with Transfer of Learning Theory (TLT; Barnett & Ceci, 2002; Perkins & Salomon, 1992), which emphasises that transfer depends on both cognitive recognition and contextual reinforcement. The evidence indicates that transfer is not automatic or linear, but shaped by the interaction of environmental, interpersonal, and structural conditions that can enable or constrain sustained use of these competencies.

Theoretical Contributions

The findings make several contributions to theory in youth development, sport-based education, and life skill transfer.

First, the study reinforces and extends principles of Positive Youth Development (PYD). Deliberate, relationally supportive interventions cultivated internal assets—confidence, leadership, and resilience—that promoted thriving in sport and transferred to academic, social, and familial domains. This transfer aligns with PYD's emphasis on competence, connection, and contribution (Lerner et al., 2005; Holt et al., 2017). By evidencing real-world application, the study supports PYD's premise that internal assets underpin broader developmental outcomes, situating Girl on Fire within research on sport-based developmental ecosystems.

Second, the study offers a nuanced application of Teaching Personal and Social Responsibility (TPSR). The programme's scaffolded progression through respect, effort, and caring, culminating in leadership and social contribution, demonstrates TPSR's applicability in a school-based, girl-centred sport context. Participants' movement from participation to leadership and mentoring exemplifies higher responsibility levels, validating TPSR as a practical framework for fostering transferable life skills in adolescent girls and demonstrating adaptability to culturally and gender-responsive practice in Aotearoa New Zealand (Hellison, 2011).

Third, Social Cognitive Theory (SCT) provides a valuable lens on the programme's reciprocal processes. Participants' actions influenced social environments, which in turn reinforced self-efficacy and agency (Bandura, 1997). Mastery experiences, guided observation of mentors, and structured reflection cycles exemplified SCT mechanisms, showing how behavioural change emerged through dynamic interplay of personal, cognitive, and environmental factors that mediated transfer.

Finally, the study contributes to life skill transfer literature within Ecological Systems Theory (EST) (Bronfenbrenner, 1979). Skill acquisition alone proved insufficient; transfer depended on alignment across microsystems, mesosystems, and exosystems. The interplay among programme environment, school culture, family support, and peer networks highlights the ecological nature of sustained development, offering insight into how microsystemic interventions interact with broader systems to produce durable outcomes.

Integrating PYD, TPSR, SCT, EST, and TLT, the study offers an interdisciplinary conceptual model of sport-based learning transfer. This synthesis shows that life skill acquisition and transfer are dynamic, contextually situated processes, advancing

theoretical dialogue in youth sport and educational psychology. Notably, the study extends the literature by focusing on intermediate-aged girls in Aotearoa New Zealand with a three-year follow-up, illustrating how ecological alignment sustains transfer beyond the programme.

Practical Implications

For schools, the findings highlight the importance of embedding sport-based life skill programmes within wider educational and wellbeing frameworks. Programmes like Girl on Fire are most effective when aligned with school culture, pastoral care, and classroom practices, ensuring that skills learned in a supportive microsystem are reinforced across contexts. Integrating structured reflection, mentorship, and leadership opportunities within school routines can sustain transfer beyond programme delivery.

For sport educators and facilitators, the findings emphasise relational pedagogy and inclusivity as central to empowerment and skill development. Prioritising psychological safety, collaboration over competition, and scaffolded leadership opportunities enables girls to practise and internalise skills that transfer to broader domains. Facilitator training should incorporate TPSR principles, experiential learning strategies, and techniques for fostering youth voice, ensuring that interventions both teach skills and model the social and relational norms that support their application.

At a policy level, the study provides evidence for the value of small-group, relationally rich programmes that complement broader participation-focused initiatives. While campaigns such as It's My Move (Sport New Zealand, 2023) or This Girl Can (Sport England, 2018) aim to increase girls' physical activity and engagement, Girl on Fire shows that durable psychosocial outcomes require intensive, structured interventions

with explicit mechanisms for reflection, leadership, and ecological alignment. These findings align with Sport New Zealand's Women and Girls in Sport and Active Recreation Strategy and its 2021 commitment progress report (Sport New Zealand, 2018, 2021e), which emphasise that targeted, girl-centred programmes can advance participation, leadership, and life skill development for underrepresented groups. Policymakers and Regional Sports Trusts should invest in designs that prioritise life skill transfer to maximise long-term social, educational, and health outcomes. Key Aotearoa New Zealand participation and policy sources referenced throughout the thesis are collated in Appendix D.

Limitations and Future Research

The sample was small and purposively selected (eight Year 7–8 girls at a single school), which limits generalisability. However, generalisability is not the aim of qualitative research, and the rich data provided nuanced insight into life skill development and transfer. Future studies could extend these findings using mixed methods designs, larger samples, and longitudinal tracking to quantify retention and behavioural change over time.

This study drew upon participants' self-reported experiences and reflections, recognising that these accounts represent personal meanings constructed within social and cultural contexts. The intention was to foreground authentic youth voice and capture the depth and diversity of insights.

Uniquely, the study examined longer-term transfer, exploring how outcomes were sustained and expressed nearly three years after programme completion. By focusing on this extended timeframe, the research illuminated how early adolescent experiences continue to shape confidence, social relationships, and participation

across subsequent developmental stages. Future research should investigate how similar interventions operate across diverse cultural, socioeconomic, and co-educational settings, deepening understanding of contextual mechanisms that support enduring transfer and informing scalable, inclusive models.

Finally, examining the impact of systemic supports—such as school policies, family engagement, and peer networks—on sustained skill application could provide actionable insights for embedding programmes within broader educational ecosystems.

Concluding Reflections

In conclusion, Girl on Fire shows how sport-based interventions can foster transferable life skills in adolescent girls when grounded in relational pedagogy, structured reflection, and ecological alignment. The programme enabled participants to cultivate confidence, communication, leadership, and resilience, and to translate these competencies into social, academic, and familial contexts. Yet empowerment is not self-contained; its persistence depends on environments that reinforce the values, skills, and agency cultivated within the programme.

The findings affirm that small-group, intentionally designed, youth-centred interventions provide a pathway to durable psychosocial development beyond physical activity. By positioning participants as active agents in their learning, integrating reflection, and fostering mentorship, Girl on Fire demonstrates how empowerment, transfer, and youth voice intersect to produce sustainable outcomes.

This study contributes theoretical insight and practical guidance, showing how PYD, TPSR, SCT, EST, and TLT collectively inform programme design, implementation, and

evaluation. Together, these frameworks illuminate how life skills are developed, reinforced, and transferred across contexts. For practitioners, educators, and policymakers in Aotearoa New Zealand, the research highlights the importance of embedding relational, reflective, and inclusive approaches within school and community sport initiatives. By attending to both individual skill development and the ecological conditions that support transfer, programmes can cultivate confident, capable, and connected young women who are prepared to navigate diverse life contexts.

Ultimately, Girl on Fire offers a compelling model for the transformative potential of sport-based education. When sport is intentionally designed as a vehicle for learning, reflection, and empowerment, it transcends participation to become a pedagogy of lasting transformation—one that continues to ignite confidence, connection, and capability long after the programme concludes. In doing so, the programme exemplifies TLT, showing how reflective and relational experiences equip young people to recognise, adapt, and apply learning across contexts. This enduring impact was captured poignantly by one participant: “I’m less hard on myself… I wouldn’t judge myself and be as hard on myself than I used to be… I’m more proud of myself” (Participant 2).

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Glossary of Terms

This glossary provides brief, plain-language explanations of key theoretical frameworks, methodological terms, and Te Reo Māori concepts used throughout the thesis. Definitions are offered to support readability and are not intended as exhaustive technical descriptions.

Key Theoretical and Methodological Terms

Positive Youth Development (PYD)	A strengths-based approach that views young people as resources to be developed. It emphasises building internal assets such as competence, confidence, connection, character, and caring, which support positive outcomes across life domains.
Teaching Personal and Social Responsibility (TPSR)	A model that uses physical activity and sport to teach respect, effort, self-direction, caring for others, and the transfer of responsibility beyond the programme environment.
Social Cognitive Theory (SCT)	A theory that explains behaviour as shaped by the interaction of personal factors, behaviour, and environment. Core concepts include self-efficacy, observational learning, and reciprocal determinism.
Ecological Systems Theory (EST)	A framework that situates development within multiple interacting systems, from close settings such as family, school, and peers (microsystems) to broader influences like community, culture, and policy (macrosystem).
Transfer of Learning Theory (TLT)	A set of ideas explaining how skills and knowledge acquired in one context are applied in another. It distinguishes between near transfer (similar contexts) and far transfer (different or more abstract contexts).
Experiential Learning Theory (ELT)	A theory that sees learning as a recurring cycle of doing, reflecting, conceptualising, and trying again, where experience and reflection are central to developing deeper understanding.
Constructivist paradigm	A research stance that assumes reality is co constructed through people's experiences, interpretations, and social interactions, rather than objectively "given."
Instrumental case study	A type of case study in which a particular case is examined to provide insight into a broader issue, process, or theory, rather than being studied solely for its own intrinsic interest.

Framework Analysis	A structured qualitative analysis approach that uses a thematic framework and matrices to compare data within and across cases. It is well suited to applied, policy and practice-oriented research.

Māori Concepts and Terms

Aotearoa	The Māori name for New Zealand, commonly used to acknowledge the country's Indigenous context and bicultural foundations.
Hauora	A holistic Māori concept of wellbeing that includes physical, mental and emotional, social, and spiritual dimensions.
Kapa haka	Māori performing arts involving song, movement, and haka, often used to build cultural identity, confidence, and connection.
Kaupapa Māori	An approach grounded in Māori values, knowledge, and worldviews that centres Māori aspirations and self-determination in research and practice.
Manaakitanga	The practice of care, hospitality, generosity, and respect, ensuring that others feel supported, valued, and safe
Rangatahi	Young people or youth, typically adolescents and young adults.
Te Tiriti o Waitangi	The Treaty of Waitangi, the founding document of New Zealand, which underpins principles of partnership, participation, and protection in many education and health contexts.
Tino rangatiratanga	Self-determination and authority to make decisions over one's own life, resources, and communities.
Whānau	Extended family and close relational networks that provide emotional, cultural, and practical support.
Whakawhanaungatanga	The process of building and maintaining relationships, connection, and a sense of belonging through shared experiences and conversation.

Appendices

Appendix A: Ethical Approval

Auckland University of Technology Ethics Committee (AUTEC)

23 September 2024

Luigi Bercades

Faculty of Health and Environmental Sciences

Dear Luigi

Re Ethics Application: 24/227 Transfer of Life Skills in the Girl on Fire Programme at Northcross Intermediate Thank you for your responses to AUTEC's conditions.

Your ethics application has been approved for three years until 20 September 2027. Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.

7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online http://www.aut.ac.nz/research/researchethics

For any enquiries, please contact ethics@aut.ac.nz

(This is a computer-generated letter for which no signature is required)

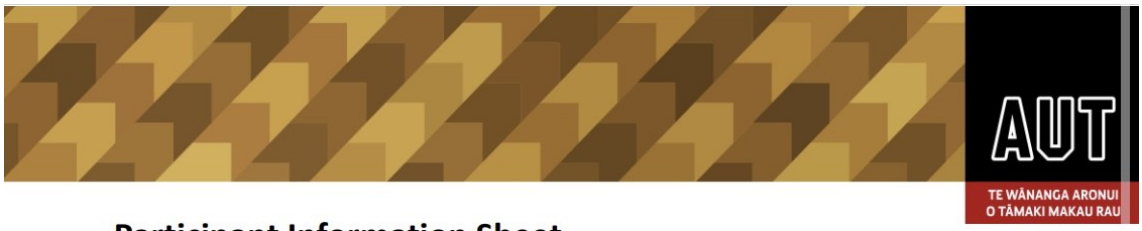
The AUTEC Secretariat

Auckland University of Technology Ethics Committee

Cc: naz.spencer@aut.ac.nz; lisa.mackay@aut.ac.nz

Appendix B: Tools

1. Participant Information Sheet



Participant Information Sheet

Date Information Sheet Produced

23 September 2024

Project Title

Transfer of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate

An Invitation

I, Naz Spencer am a Master of Philosophy student at Auckland University of Technology, and I am conducting this study as part of my research. I am carrying out this study independently, with guidance from my two supervisors.

I invite you to take part in this study to explore your experiences in the "Girl on Fire" programme at Northcross Intermediate in 2021.

As the founder of the "Girl on Fire" Programme, I understand that you may feel conflicted about providing favourable feedback. Please be assured that your participation, or choice not to participate, will neither advantage nor disadvantage you. To address potential conflicts of interest and power differences, clear boundaries have been established between my role as "programme head" and as the "researcher." Your participation in this research is entirely voluntary and independent of your involvement in the programme. Confidentiality will be strictly maintained, and no identifying information will be shared in the study's outcomes.

What is the purpose of this research?

The "Girl on Fire" programme at Northcross Intermediate aims to encourage young girls to engage in sports and physical activities, helping them overcome barriers such as lack of confidence, perceived skill gaps, and social factors.

The research seeks to explore how skills and confidence gained in the programme increase their levels of physical activity and influence their behaviour and mindset beyond of the programme.

The research aims:

1.To assess the impact of the "Girl on Fire" programme on participants' confidence levels in sports, physical activities and other areas of life.

2.To evaluate the transfer of skills learned in the programme to academic and social contexts.

3. To identify factors that enhance or hinder the transfer of learning from the programme.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research because you were part of the 2021 cohort of the "Girl on Fire" Programme. As a previous participant, your insights into the programme and its impact on your life are invaluable. Since you also contributed to the initial, surveys, case study and evaluation reports, we are particularly interested in hearing your perspectives on your experiences after completing the programme. We anticipate a response rate of 20-30%, with a maximum of 15 participants selected for interviews to ensure high-quality and manageable data collection. Once this number is reached, recruitment will be closed.

How do I agree to participate in this research?

If you agree to take part, you will need to sign the consent form, and we ask that your parent signs the consent form to confirm your participation. I will then contact you to arrange a convenient time for an interview.

Participation is voluntary. Whether or not you opt to participate will neither advantage nor disadvantage you. You can withdraw yourself from the study at any time. If you choose to withdraw, you can decide whether to have your data removed or allow it to be used. However, once the findings are produced, removal of data may not be possible.

What will happen in this research?

An interview will be conducted via video conference on paid Zoom platform, lasting approximately 45 minutes. You will be asked about your experiences with the "Girl on Fire" Programme and your experiences since. Interviews will be recorded and transcribed using Zoom's automated transcription function. You will have the opportunity to review the transcript to clarify any points. Data will be analysed manually and with NVivo qualitative data software.

The study findings will be written up and submitted to Auckland University of Technology for my master's degree. They may also be presented at conferences, published in journals, or used in case studies for Northcross Intermediate. Your name will not appear in any published results.

What are the discomforts and risks?

Discussing personal experiences, barriers, and confidence levels may cause discomfort or distress, especially when reflecting on negative experiences or challenges.

How will these discomforts and risks be alleviated?

I will ensure that the interview process is comfortable and non-intrusive. Sensitive topics will be approached with care, and you will be reminded of your right to withdraw or pause the interview at any time.

What are the benefits?

The findings of this study will provide valuable information for educators, stakeholders (Northcross Intermediate School, Women in Sport Aotearoa, Aktive Auckland, and Sport New Zealand), programme designers, and policymakers.

How will my privacy be protected?

All information collected during the study will be kept confidential. Only I will have access to your personal details. Video recordings and transcribed interviews will be stored on encrypted devices. Your name will be removed from transcripts and replaced with a pseudonym. Most information, including video recordings, will be deleted upon study completion. Transcripts will be stored for six years as per university guidelines and then destroyed. While we will take all necessary steps to anonymize the data collected from you, due to the small size of the participant group, complete confidentiality cannot be guaranteed. This means there is a possibility that you may be identifiable in the study's outcomes. However, all identifying information will be removed to the best extent possible, and no names or personal details will be included in the published results.

What are the costs of participating in this research?

There is no cost for you to participate in this research. As a token of appreciation for your time, you will receive a $25 Westfield gift card.

What opportunity do I have to consider this invitation?

You have two weeks to consider this invitation before you accept or decline to participate in this research.

Will I receive feedback on the results of this research?

If you wish to see the study results, a one-page summary can be emailed to you once it is completed.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Dr Luigi Bercades, *luigi.bercades@aut.ac.nz*, 09 921 9999 ext 28653.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz*, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Naz Spencer

Master's Candidate

School of Sport and Recreation, FHES, Auckland University of Technology

Email: feelgoodinlife@gmail.com

Project Supervisors Contact Details:

Dr Luigi Bercades

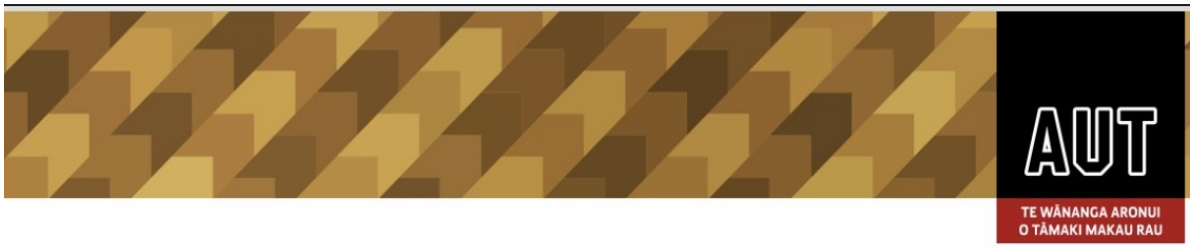
Email: *luigi.bercades@aut.ac.nz*

Dr Simon Walters

Email: simon.walters@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on *23/09/24*, AUTEC Reference number: *24/227*

2. Principal Information Sheet



Principal Information Sheet

Date Information Sheet Produced:

23 September 2024

Project Title

Transfer of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate

An Invitation

I am a Master of Philosophy student at Auckland University of Technology, and I am conducting this study as part of my research. I am carrying out this study independently, with guidance from my two supervisors.

I would like to invite Northcross Intermediate to participate in this study, which explores the experiences of past participants in the "Girl on Fire" programme that was held at your school in 2021.

What is the purpose of this research?

The "Girl on Fire" programme at Northcross Intermediate aims to encourage young girls to engage in sports and physical activities, helping them overcome barriers such as lack of confidence, perceived skill gaps, and social factors.

This research aims to explore how the skills and confidence gained in the programme have impacted participants beyond their time in the programme, specifically examining:

1. The impact on participants' confidence levels in sports, physical activities, and other areas of life.

2. The transfer of skills learned in the programme to academic and social contexts.

3. Factors that enhance or hinder the transfer of learning from the programme.

How was the school identified and why was it invited to participate in this research?

Northcross Intermediate has been identified as the school where the "Girl on Fire" programme took place in 2021. The school's cooperation will enable me to access students who were part of this programme and may provide valuable insights into its longer-term impact.

How does the school agree to participate in this research?

If the school agrees to participate, the principal will be asked to sign a permission form to allow me to access the staff and students involved in the programme.

What will happen in this research?

I will conduct interviews with past participants of the "Girl on Fire" programme, specifically focusing on their experiences during and after the programme. Interviews will be conducted

via video conference and will last approximately 45 minutes. Students' names will be anonymised, and interviews will be video-recorded and transcribed for analysis.

What are the discomforts and risks?

Discussing personal experiences could cause discomfort to participants, especially when reflecting on challenges or negative experiences.

How will these discomforts and risks be alleviated?

Interviews will be conducted supportively and respectfully. Participants will have the option to decline any questions they feel uncomfortable answering.

What are the benefits?

The study will provide valuable insights into how programmes like "Girl on Fire" influence students' physical activity, confidence, and transfer of skills into other aspects of life. The findings will benefit Northcross Intermediate, programme designers, and stakeholders such as Women in Sport Aotearoa, Aktive Auckland, and Sport New Zealand.

How will the school's privacy be protected?

All collected information will be kept confidential, and student names will be anonymised in all written reports. All recordings will be stored securely and deleted upon the study's completion.

What opportunity does the school have to consider this invitation?

The school has two weeks to consider this invitation before deciding whether to participate.

Will the school receive feedback on the results of this research?

If the school wishes to see the results, a one-page summary will be emailed to you once its completed along with any publications.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Dr Luigi Bercades, luigi.bercades@aut.ac.nz, 09 921 9999 ext 28653.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Naz Spencer

Master's Candidate

School of Sport and Recreation, FHES, Auckland University of Technology

Email: feelgoodinlife@gmail.com

Project Supervisors Contact Details:

Dr Luigi Bercades

Email: luigi.bercades@aut.ac.nz

Dr Simon Walters

Email: simon.walters@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on *23/09/24*, AUTEC Reference number *24/227*.

3. School Access Form

Permission for researchers to access organisation school staff/ students.

Project title: Transfer **of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate**

Project Supervisors: Dr Luigi Bercades and Dr Simon Walters

Researcher: Nazmeen Spencer

I, _____, Principal of Northcross Intermediate, have read and understood the information provided about this research project in the Information Sheet dated 23 September 2024.

I give permission for the researcher to undertake research within Northcross Intermediate and to access the staff and students who participated in the "Girl on Fire" programme in 2021.

Principal's signature : .....

Principal's name :.....

Principal's Contact Details (if appropriate):

.....

.....

.....

.....

Date :

Approved by the Auckland University of Technology Ethics Committee on 23 September 2024 AUTEC Reference number 24/227

Note: The head of the organisation should retain a copy of this form.

4. Participant Consent Form

Consent Form

Project title: **Transfer of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate**

Project Supervisor: Dr Luigi Bercades and Dr Simon Walters

Researcher: Nazmeen Spencer

- ○ I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2024.
- ○ I have had an opportunity to ask questions and to have them answered.
- ○ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ○ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- ○ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- ○ I understand that while we will strive to protect your confidentiality, it cannot be fully guaranteed. Your responses will remain unidentifiable in reports, and any quotes used will be de-identified to protect your privacy.
- ○ I agree to take part in this research.
- ○ I wish to receive a summary of the research findings (please tick one): Yes○ No○

Participants signature : .....

Participants name : .....

Participants Contact Details (if appropriate) :

.....

.....

.....

.....

Date :

Approved by the Auckland University of Technology Ethics Committee on 23rd September 2024 AUTEC Reference number 24/227

Note: The Participant should retain a copy of this form.

5. *Oral Consent Form*

Oral Consent Protocol

Project title: **Transfer of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate**

Project Supervisor: Dr Luigi Bercades and Dr Simon Walters

Researcher: Nazmeen Spencer

The participant joins the videoconference

○ Do you agree to my recording your consent to participate?

If you agree, then the record function will be activated, and you will be asked the following:

○ Have you read and understood the information provided about this research project in the Information Sheet dated 23 September 2024?

○ Do you have any questions about the research?

○ Do you understand that notes will be taken during the interviews and that the interview will also be audio-recorded and transcribed?

○ Do you understand that taking part in this study is voluntary (your choice) and that you may withdraw from the study at any time without being disadvantaged in any way.?

○ Do you understand that if you withdraw from the study then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used? However, once the findings have been produced, removal of your data may not be possible.

○ I understand that while we will strive to protect your confidentiality, it cannot be fully guaranteed. Your responses will remain unidentifiable in reports, and any quotes used will be de-identified to protect your privacy.

○ Do you agree to take part in this research?

○ Do you wish to receive a summary of the research findings? (please tick one): Yes○ No○

○ Do you want me to send you a copy of the audio recording for this consent? Yes○ No○

○ Please confirm you name and contact details

Participants Name : .....

Participants Contact Details (if appropriate) :

.....

.....

.....

I will now turn off the recording of the Consent and then will start a separate recording for the interview.

Approved by the Auckland University of Technology Ethics Committee on 23rd September 2024 AUTEC Reference number 24/227

Note*: The Participant should retain a copy of this form.*

6. *Parent and Guardian Consent Form*

Parent/Guardian Consent Form

Project title: **Transfer of Life Skills in the "Girl on Fire" Programme at Northcross Intermediate**

Project Supervisors: Dr Luigi Bercades and Dr Simon Walters

Researcher: Nazmeen Spencer

- ○ I have read and understood the information provided about this research project in the Information Sheet dated 23 September 2024.
- ○ I have had an opportunity to ask questions and to have them answered.
- ○ I understand that notes will be taken during the video interviews and that they will also be recorded and transcribed.
- ○ I understand that taking part in this study is voluntary (my choice) and that I may withdraw my child/children at any time without being disadvantaged in any way.
- ○ I understand that if I withdraw my child/children from the study then I will be offered the choice between having any data that is identifiable as belonging to my child/children removed or allowing it to continue to be used. However, once the findings have been produced, removal of our data may not be possible.
- ○ I understand that while the researcher will strive to protect my child's confidentiality, it cannot be fully guaranteed. Your child's responses will remain unidentifiable in reports, and any quotes used will be de-identified to protect their privacy.
- ○ I agree to my child/children taking part in this research.
- ○ I understand that my child is able to refuse to give assent to take part in this research.
- ○ I wish to receive a summary of the research findings (please tick one): Yes○ No○

Child/ Childrens Name/s : ……

……..

Parent/Guardians signature : ……

Parent/Guardians Name : ……

Parent/Guardians Contact Details (if appropriate):

……..

……..

Date:

Approved by the Auckland University of Technology Ethics Committee on 23rd September 2024 AUTEC Reference number 24/227

Note: The Participant should retain a copy of this form

7. Interview Questions

General Experience

1. Can you describe your overall experience with the “Girl on Fire” programme?

2. What parts of the programme did you enjoy the most? Were there any parts you found challenging?

Prompts: What made these parts fun or difficult?

Confidence and Skill Development

3. How did participating in the programme affect your confidence in sports or other activities?

Prompts: Can you think of a time when you noticed a difference in your confidence, or maybe when it stayed the same?

4. What specific skills do you feel you’ve learned from the programme?

Prompts: These could be skills in sport, working with others, or something completely different—whatever comes to mind.

Transfer of Learning

5. How have these new skills or confidence shown up in other areas of your life, like school or with friendships?

Prompts: Do you notice yourself using these skills in different places or situations?

6. Has being in the programme changed the way you approach schoolwork or other activities?

Prompts: Have you noticed any differences, or does it feel mostly the same as before?

Enablers and Barriers

7. What do you think has helped you use what you've learned in other areas of life?

Prompts: "Has anyone, like a coach or friend, helped with this?"

8. Were there any challenges that made it hard to use these skills in other situations?

Prompts: "For example, is it sometimes hard to use these skills in certain places?"

Personal Growth and Future Plans

9. How would you describe your attitude toward physical activity now compared with before the programme?

Prompts: "Do you feel any differences about how you feel about trying new things?

10. What advice would you give a friend who's thinking about joining "Girl on Fire"?

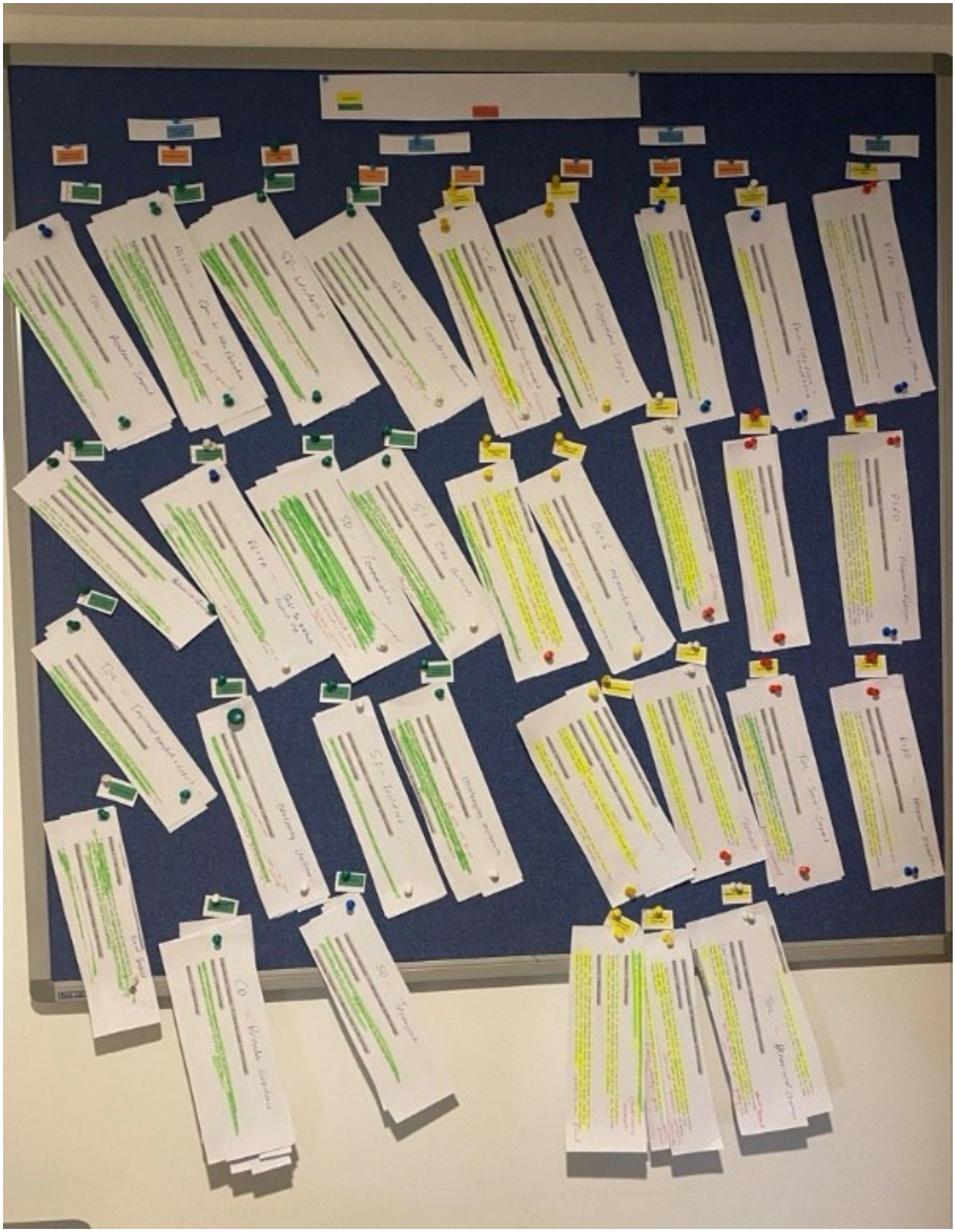
Prompts: "What would you say to make them feel excited or comfortable?"

11. If you could change or add something to the programme, what would it be?

Thank you so much for your time and feedback.

Appendix C*:* Sample of Coding and Thematic Analysis

1. Theme Mapping on Physical Corkboard



2. NVivo Consolidated Codebook

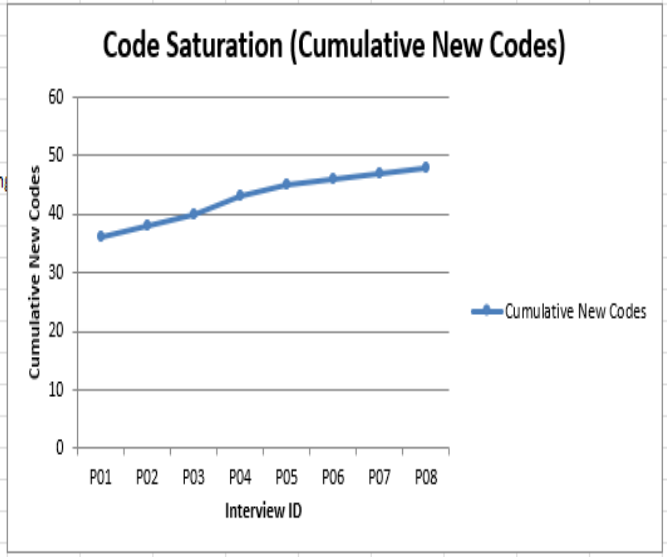
Name	Description
Amazing Quotes	
Confidence Development	Deductive: Competence & Relatedness
Broader Confidence	Generalised confidence beyond sport into school/home/social domains. Deductive
Increased Confidence	Immediate increases in self-belief and willingness to participate during sessions. Deductive
Sport-Specific Confidence	Feeling more capable or competent in physical activities during sessions. Deductive
Enablers and Barriers	Inductive: What helped or made it hard to apply skills
Confidence Barriers	Residual self-doubt or situational anxiety that limits applying skills outside the programme. Inductive
Other Challenges	Practical or contextual constraints (time, transport, competing commitments) hindering transfer. Inductive
Physical Environment	Features of setting or resources that supported using skills (space, equipment, access). Inductive
Support from Others	Encouragement or scaffolding from peers, teachers, coaches, or whanau that aided transfer. Inductive
Overall Experience and Engagement	Inductive: Grounded in Participants' Descriptions

Name	Description
Challenging moments	Difficulties encountered within programme sessions (often early, e.g., joining in, being on camera). Inductive
Memorable Moments	Standout episodes or highlights within the programme. Inductive
Overcoming challenges	Early-session difficulties that were worked through during the programme. Inductive
Positive Experience	General enjoyment, satisfaction, or feeling welcomed/safe during sessions. Inductive
Programme Impact	Immediate perceived changes and personal meaning during/just after programme sessions. Inductive
Personal Growth and Future Aspirations	Autonomy & Intrinsic Motivation
Long-Term Impact	Expressions of future goals/aspirations shaped by programme experiences. Deductive
Open to New Activities	Willing to try different things (sports, music, clubs, etc.) sparked by programme experiences. Deductive
Shift in Attitude Toward Physical Activity	Change in perceptions/motivation toward being active outside the programme. Deductive
Prior Confidence and Competence	Baseline self-beliefs/abilities before joining the programme. Deductive
Recommendations and Programme Development	Participants' Perspectives on Improvement. Inductive
Encouragement for Others	Statements encouraging other students to join; reasons for recommending the programme. Inductive
Programme Expansion	Interest in scaling/lengthening the programme or more frequent sessions. Inductive

Name	Description
Programme Suggestions	Concrete ideas for content, delivery, or resources to improve the programme. Inductive
Skill Development	Deductive: Using Developed Skills
Communication	Clear, respectful, or confident expression transferred to class/group/family contexts. Deductive
Leadership	Taking initiative, guiding peers, role-modelling learned behaviours in non-sport settings. Deductive
Resilience	Use of coping strategies and persistence in non-sport contexts (school/home/social). Deductive
Teamwork	Collaboration with others in classrooms/clubs/whanau settings derived from programme learning. Deductive
Transfer of Learning	Transfer of Learning Theory – Near & Far Transfer
Academic Impact (Near Transfer)	Evidence that programme learning influenced academic behaviours or attainment (e.g., participation, grades, classroom engagement). Inductive
Behavioural Changes	Reported changes in approach, habits, or conduct beyond sport (e.g., sticking with tasks, helping others). Inductive
Improved Mindset and Effort	Shifts in persistence, growth mindset, or willingness to try in academic/social contexts. Inductive
Social Impact	Use of skills in friendships, leadership in groups, or wider social contexts beyond sport. Deductive
Unsure	Not sure where it fits but is important

3. Saturation Evidence (saturation table and cumulative chart)

Interview ID	Date	Duration min	New Codes This Interview	Cumulative_New_Codes	Notes
P01	2024-11-21	35	36	36	
P02	2024-11-28	33	2	38	Adds nuance on communication/resilience
P03	2024-12-05	38	2	40	Emerging transfer examples
P04	2024-12-12	31	3	43	Enablers/barriers clarified
P05	2025-01-23	40	2	45	New examples but fewer new codes
P06	2025-01-30	30	1	46	Mostly confirms existing codes/tidy up wordin
P07	2025-02-06	36	1	47	Marginal novelty
P08	2025-02-13	34	1	48	No new codes (plateau)



Appendix D: Full Evidence Source Map for Sport New Zealand & Related References

Key claim in text	Most appropriate source(s)	Notes (when to use)
Girls' drop-off & barriers (confidence, judgement, body image).	Sport New Zealand (2021d); Sport New Zealand (2022a; 2022b); Fleming et al. (2022); Thorpe et al. (2020)	2021d = Young Women Profile (attitudes/barriers); 2022a/2022b = participation context; Fleming = Youth2000 national overview; Thorpe = NZ qualitative insights.
NZ policy framing for women & girls.	Sport New Zealand (2018); Sport New Zealand (2021c); Sport New Zealand (2021e)	2018 = Government Strategy; 2021c = Action Plan; 2021e = 2021 progress update.
Youth-centred sport philosophy (Balance is Better).	Sport New Zealand (2021a); Sport New Zealand (2021b)	2021a = philosophy; 2021b = evidence/impact.
Campaign exemplar (teen girls) & early outcomes.	Sport New Zealand (2023); Bauman et al. (2023)	Use Sport NZ report for *It's My Move* scope/progress; Bauman for mass-media (This Girl Can) effects.
Qualitative barriers for young women in NZ.	Thorpe et al. (2020); Petrie et al. (2018); Walters et al. (2017)	Hauora, body image, cultural safety, participation narratives in NZ settings.
Māori wellbeing / *hauora* framing.	Durie (1998); Te Puni Kōkiri (2016)	Durie for *hauora*; TPK for whānau-centred approaches.
School-based PA outcomes in NZ.	Mizdrak et al. (2021); Rush et al. (2014, 2016)	Modelled PE impact (Mizdrak); region-wide programme evaluation (Rush).
Adolescent health context (NZ).	Fleming et al. (2022); Youth19 (Fleming et al., 2020)	National trends (2001–2019) + Youth19 methods/intro.
Programme theory frames (PYD/TPSR/ELT/SCT/EST).	Lerner et al. (2005); Hellison (2011); Kolb (2014); Bandura (1997); Bronfenbrenner (1979); Deci & Ryan (2000)	Anchor theoretical claims to the specific frame(s) in each subsection.
Life-skill development & transfer models.	Pierce et al. (2017); Jacobs & Wright (2018); Turnnidge et al. (2014)	Definitions, mechanisms, explicit vs implicit transfer.
School-based girls' programme evidence (feasibility/outcomes).	White et al. (2022); Okely et al. (2011, 2017); Okely et al. (2012); Casey et al. (2014)	HWBG pilot (White); Girls in Sport baseline/RCT/summary (Okely); school–community linkage (Casey).
Measurement of transfer/life skills.	Weiss et al. (2014); Weiss et al. (2013)	LSTS validation + programme evaluation exemplars (First Tee).
Leadership development exemplars.	Voight (2012)	Case study with two elite teams (transferable leadership practices).
Local case materials for Girl on Fire.	Auckland Council (2022); Centre for Social Impact & Auckland Council (2022)	Northcross cohort materials (contextual detail).