Risky Play for Children with Physical Disabilities within Atlantic Canada from the Perspective of their Caregivers

by

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Dalhousie University is located in Mi'kma'ki, the
ancestral and unceded territory of the Mi'kmaq.
We are all Treaty people.

TABLE OF CONTENTS

LIST OF FIGURES

ABSTRACT

Introduction: Play is the primary form of physical activity (PA) children engage in from a young age. Children naturally enjoy engaging in risky play as it is fun and thrilling. Risky play is associated with increased PA and has known health and well-being outcomes. Unfortunately, children with physical disabilities (CWPD) face barriers to all types of play, including risky play. **Purpose:** This research aims to understand how physical disability impacts children's risky play experiences from the perspective of their caregiver by exploring following research questions: (1) How do caregivers of CWPD perceive risky play, (2) How do caregivers of CWPD define and characterize risky play? and (3) From the perspective of the caregiver, what are factors that influence CWPD' risky play experiences? **Methods:** We used qualitative description and approached this work through a social constructivist worldview. We recruited caregivers of CWPD to participate in one-on-one virtual interviews using a pre-established semi-structured interview guide. The interview questions were open-ended and created using the International Classification of Functioning (ICF) framework and the socioecological model (SEM). Interviews were transcribed verbatim. Data were analyzed using reflexive thematic analysis and themes were generated through the lenses of the ICF and SEM frameworks. **Results:** We interviewed twelve caregivers of CWPD. Five themes were generated: (1) Disability Can Make Anything Risky!, (2) We Can't Define Risky Play Without Social Risks, (3) "Not Allowed" to Participate in Risky Play, (4), Additional Pressures Caregivers Face to Supporting Risky Play, and (5) Not just Access but Belonging. Overall, the stories of caregivers helped to identify ways to better characterize risky play to be inclusive of their children's experiences and ways to better support CWPD engagement in risky play. **Conclusion and Implications:** This thesis gave insight into how caregivers of CWPD perceive risky play, how they define risky play, and the many factors which influence their children's risky play experiences. Caregivers supported their children's participation in risky play. They suggested that categories of risky play may need to be expanded to support inclusion, and that there were unique risky play considerations for CWPD. It is of hope that this research will be the first of many to explore how children living with disabilities experience risky play and how we can support their engagement in risky play throughout their childhood. There is a need to improve supportive pathways to risky play for CWPD, such as increased accessibility to unstructured play spaces, as well as education of disability culture and risky play for people who support CWPD' play in schools and communities.

Keywords: Caregivers, children, risky play, physical activity, outdoor play, reflexive thematic analysis, qualitative description.

LIST OF ABBREVIATIONS USED

ATR – Attitudes towards risks questionnaire

CDPP – Canadian Disability Participation Project

CWD – Children with disabilities

CWPD – Children with physical disabilities

DoR – Dignity of risk

EPA – Educational program assistant

HRM – Halifax Regional Municipality

ICF – International Classification of Functioning

PA – Physical activity

PHE Canada – Physical Health Education Canada

PLaTO-Net – Play, Learn, and Teach Outdoors Network

REB – Research Ethics Board

RTA – Reflexive thematic analysis

SEM – Socioecological model

SES – Socioeconomic status

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CHAPTER 1: INTRODUCTION

1.1 Background

Play is a fundamental activity of childhood and one of the earliest activities children engage in cross-culturally (Pellegrini & Smith, 1998). Play is a complex phenomenon; it is spontaneous, pleasurable, and freely chosen by children themselves (Whitebread et al., 2012). It is important that children engage in play from a young age, as it supports their overall health and development, and their physical, social, and emotional wellbeing (Ginsburg et al., 2007; Pellegrini et al., 2007; Pellegrini & Smith, 1998). In fact, play is so critical during childhood that it has been deemed a fundamental right for children by the United Nations' (UN) Convention on the Right of the Child (United Nations, 1985). Play supports children's engagement in physical activity (PA). The Canadian 24-Hour Movement Guidelines for Children and Youth further recommends that children engage in at least 60 minutes of moderate to vigorous PA each day (Tremblay et al., 2016). Play can help children achieve sufficient PA to support their health and well-being. PA and play go hand-in-hand throughout childhood (Bundy et al., 2015). PA and play support physical and mental health; they support imagination, communication, and problem solving, and overall can lead to a healthier lifestyle for children (Brussoni et al., 2015; Tremblay et al., 2016). As such, ensuring that children have regular opportunities for PA and play in early life are critical and can contribute to lifelong health and well-being.

All forms of play are important for children, although engaging in unstructured play has unique benefits. Unstructured or free play can occur at any location, is led by children, not planned nor led by adults, and is typically a spontaneous activity (Lee et al., 2022). Unstructured play has been positively associated with social engagement and emotional well-being during childhood (Lee et al., 2020). This type of play has also been linked to creativity (Gibson et al., 2017), improved self-regulation, (Pellis & Pellis, 2007) and increased PA in children (Herrington & Brussoni, 2015). Unstructured play can be particularly valuable when children have many affordances in their environments, such as loose parts or natural play elements (Flannigan & Dietze, 2017). During unstructured play, children are often engaging in PA, and naturally engage in risky play (Bundy et al., 2015; Grady-Dominguez et al., 2021; Herrington & Brussoni, 2015).

Risky play is defined as, "a form of play that is thrilling and exciting, which involves uncertainty, unpredictability, and varying degrees of risk-taking" (Lee et al., 2022, p.12). Sandseter (2007) and Kleppe and colleagues (2017) have suggested that there are eight categories of risky play, including: (1) play with great heights, (2) play with high speed, (3) play with dangerous tools, (4) play near dangerous elements, (5) rough-and-tumble play, (6) play where children go exploring alone, (7) play with impact, and (8) vicarious play. Risk-taking has been shown to be an integral part of play in childhood (Lynch et al., 2020), providing children with unique developmental and health benefits (Brussoni et al., 2015). For example, risky play provides children with an opportunity to test their physical limits, to develop their perceptual motor capacity, and to learn to avoid and adjust to dangerous environments and activities that they may encounter throughout their lives (Brussoni et al., 2015). Risky play supports children's engagement in PA and can even provide children with opportunities to increase their PA during outdoor unstructured play (Sando et al., 2021).

In 2015, the Active Outdoor Play Position Statement was released, emphasizing the benefits of active outdoor play in nature along with its risks for healthy child development (Tremblay et al., 2015). Yet, it has been noted that many children with disabilities (CWD) experience increased barriers to play, including risky play (Moore & Phelan, 2021). We would expect that CWD have the potential to receive the same health benefits associated with risky play as children without disabilities. Opportunities for CWD to engage in risky play are limited by multiple barriers (Moore & Phelan, 2021), ultimately affecting their overall participation, health, and well-being (Brussoni et al., 2015). One of the barriers that CWD often face to participating in risky play includes parental hesitations (Jeanes & Magee, 2012). Jeanes & Magee (2012) demonstrate that caregivers of CWD were more likely to avoid risky play for their child rather than manage the risks encountered during play than caregivers of children without disabilities.

CWD face barriers to PA and play that children without disabilities may not. Many play environments are inaccessible to CWD (i.e., playgrounds), limiting their opportunity for all types of play (Caprino, 2018; Ripat & Becker, 2012). There are fewer inclusive PA and play related programs and personnel trained to offer inclusive programs for CWD (Shields, Synot, & Barr, 2012). These environmental barriers can be magnified by caregiver concern and personal barriers to PA and play. Caregivers of CWD may be more risk-averse and concerned their child may get hurt during risky play, or they may worry that their child does not have the same capacity to engage in risky play safely as children without disabilities (Giles et al., 2019). With these collective constraints, CWD are often limited to more indoor PA and play activities, where there are fewer opportunities for them to participate in risky play (Sterman et al., 2016). It is important to acknowledge, however, that all CWD' are not the same and do not experience the same barriers or enablers to play. For example, children with physical disabilities (CWPD) may face additional barriers related to their physical functioning and mobility. Inaccessible PA and play environments, may be particularly limiting for CWPD' compared with children without mobility restrictions. Soft ground surfaces like sand, grass, or woodchips, may be an added barrier for CWPD' who use wheelchairs or other mobility aids (Brown et al., 2021) and may limit their ability to fully participate. Poor, unstable ground surfaces can be the biggest barrier for children with mobility impairments to independently engage in play at playgrounds, as they often require assistance from teachers or caregivers to join in play alongside their peers (Stanton-Chapman & Schmidt, 2016).

Past literature has highlighted the importance of accessible play spaces, including considerations for CWPD', and suggest that these spaces should still promote some degree of risk-taking (Lynch et al., 2020). Beyond lack of accessibility, CWPD' may also face additional personal barriers to PA and play. For example, CWPD' often have greater amounts of fatigue and pain during daily activities compared to children without physical disabilities (Caprino, 2018). It is important that CWPD have the opportunity to engage in PA, play, and risky play. Past research has explored strategies to support CWD' in PA (Bloemen et al., 2017) and play (Crawford et al., 2014), but research has only limitedly explored strategies to support CWD' risky play. Given the established benefits of PA and play, including risk-taking in play, it is important to explore barriers for CWPD' to participate, and examine strategies which can support CWPD' risky play, as there is currently no work that focuses specifically on the needs of CWPD.

1.2 Statement of Research Problem

It is important that *ALL* children, including those with physical disabilities, have access to participate in all types of play, including risky play (Brussoni et al., 2015). Unfortunately, CWPD' have more barriers and fewer opportunities to participate in risky play. Play is a fundamental right of *ALL* children, as stated by the UN Convention on the Rights of the Child (United Nations, 1985). There are currently gaps in the literature regarding CWPD' risky play opportunities and behaviours. This study has allowed caregivers the opportunity to share their personal stories about their children's risky play experiences. This is an important perspective, as caregivers tend to serve as gatekeepers to their children's risky play opportunities (McFarland & Laird, 2020). The Socioecological model (SEM) and the International Classification of Functioning for Disability and Health (ICF) have been used to guide this research. The SEM helps us to better understand the interaction between various factors which influence a person's health behaviour on multiple levels (Bronfenbrenner, 2005). The ICF framework conceptualizes a child's disability as a dynamic interaction between their health condition and their personal and environmental factors (WHO, 2001). As such, the ICF framework may help to illustrate important environmental and personal factors that create barriers or opportunities to risky play for CWPD'. These models work together to explore the factors which influence CWPD' risky play experiences.

1.3 Gaps in the Literature

There is limited research on how CWD' experience and engage in risky play, and even less literature exploring CWPD' risky play experiences. It is unknown how caregivers of CWPD perceive risky play for their child. Furthermore, it is unknown if the current definition and categories of risky play are inclusive to CWPD, as they may have unique experiences to risky play. Finally, it is unknown what barriers and facilitators caregivers and their child living with a physical disability experience when participating in risky play.

1.4 Research Questions

Therefore, the purpose of this thesis to better understand how physical disability impact children's risky play experiences through exploring the following research questions: (1) How do caregivers of CWPD perceive risky play? (2) How do caregivers of CWPD define and characterize risky play? and (3) From the perspective of the caregiver, what are factors that influence CWPD' risky play experiences?

1.5 Researcher Positionality

To be reflexive in this work, it is important to note that my personal experiences and beliefs may have influenced the research process (Braun & Clarke, 2021). Growing up on the outside of a small town, an area with little traffic or crime, my parents felt no fear in allowing me to play outdoors. I engaged in risky play throughout my childhood, including play at great heights (i.e., climbing trees), play near dangerous elements (i.e., play near water), and play where children go exploring alone (i.e., playing throughout my neighbourhood and woods). My parents placed an importance on me being active throughout my childhood, giving me the opportunity to engage in outdoor play and sports. Once I was in university, I began volunteering with various organizations which supported children's engagement in PA and play. One of these organizations was Extra Awesome, which is an organization run by Kinesiology students at Queen's University. It pairs CWD and their siblings with university students to engage in PA within their community. For example, we would engage in various sports, such as outdoor skating, playing in the park, bowling, and many other activities. I became involved with this organization in the second year of my undergraduate degree (BSc Kin) as I was interested in expanding my experiences of working with CWD. I quickly fell in love with the program and the people and became the president of the organization in my final year at Queen's University. My engagement with Extra Awesome ultimately led me to my graduate MSc. thesis, focusing on how disability impacts children's risky play behaviours. During the first year of my graduate MSc. degree, I had the opportunity to work with students with disabilities, to support their engagement in physical education with Physical Health and Education Canada (PHE Canada). This project allowed me to speak to students directly about what they found to be barriers to PA and listen to their own ideas of how to overcome these barriers. This project showed me the importance of the child's voice in overcoming personal barriers to PA.

All of these experiences have influenced how I analyzed and interpreted the data in this thesis as I have used my reflexivity to interpret caregivers lived experiences. Further, I note that I am a relatively new qualitative researcher. I have had some experiences in conducting qualitative analyses in a handful of projects. These experiences supported my knowledge in the steps of analysis; however, I recognize that as I continue to do this work, that I will be able to expand my reflexive mindset which will be critical to building upon my skills of conducting high-quality qualitative research.

Finally, I would like to acknowledge that I do not live with a disability nor am I a caregiver of a child living with a disability. It is therefore important that I engage alongside caregivers to provide them with a safe environment where they can share their stories of their children’s risky play experiences. This was done through building a trust with caregivers. Along with my supervisor, I have been actively volunteering in programs which support CWD’ and their families. This has allowed me to gain a better understanding of their lived experience, including their priorities and preferences when it comes to research.

1.6. Thesis Overview

This thesis is comprised of six chapters. Chapter 1 is an introduction to this thesis, including an overview of the background information, the purpose of this thesis, and the researcher’s positionality in regard to the topic of this research. Chapter 2 offers a review of literature relevant to this thesis including frameworks, models, and theoretical approaches used in this thesis. Chapter 3 details the methodologies and methods used in this thesis. Chapter 4 presents the findings of this thesis. Chapter 5 includes the interpretative discussion and possible implications of the research findings. Lastly, Chapter 6 offers a reflection of the study and the study’s conclusion. Afterwards I provide additional documents presented in the appendices, found at the end of this thesis.

CHAPTER 2: LITERATURE REVIEW

2.1 Background and Context

Nearly 240 million children worldwide live with a disability (UNICEF, 2022). This means that approximately one in every ten children ages 0 to 17 years old experience at least one disability (UNICEF, 2022). The latest Canadian Survey on Disability in 2022 revealed that 27% of Canadians over the age of 15 years old are living with at least one disability (Statistics Canada, 2022). This is a 5% increase since the last survey in 2017 (Statistics Canada, 2022). Notably, approximately 800,000 children and youth are living with a disability in Canada (Statistics Canada, 2022). Nova Scotia has the highest proportion of people living with disability (30.4%) compared with all provinces and territories across Canada (Statistics Canada, 2022). Other Atlantic provinces, including New Brunswick (26.7%) and Prince Edward Island (26.0%), also have a high proportion of their citizens living with a disability (Statistic Canada, 2022). One reason why these provinces have such high disability rates may be the increased proportion of older adults living in Atlantic Canada compared to other regions of Canada (Statistic Canada, 2022).

National rates of disability seem to be steadily increasing (Statistic Canada, 2022). One of the reasons for the increase in childhood disability across Canada is the increase in mental health related disabilities over the last five years (Statistics Canada, 2022). Unfortunately, we have poor reportings on childhood disability rates in Canada. We do not have the statistics on how many children are living with a disability in Atlantic Canada, yet we do know that on average 10,000 children visit the IWK Kid's Rehab Unit annually (Moore, S., personal communication, April 17, 2024). The IWK Kid's Rehab services all Atlantic provinces. Therefore, we would expect that childhood disability is continuing to increase across Canada, which may indicate that more children are experiencing barriers to PA and play. Play is a right of all children, as stated by the Convention on the Rights of the Child (United Nations, 1985), and all types of play are important and beneficial. The importance of play and risky play is emphasized in the Active Outdoor Play Position Statement, as it states the importance of *ALL* children having access to outdoor play along with its risks to support healthy child development (Tremblay et al., 2015).

2.2. Play

2.2.1 Definitions of Play

To explore *risky* play, play must first be understood. The Play, Learn, and Teach Outdoors Network (PLaTO-Net) (2022) provides consensus on definitions for various types of play. I will draw upon these definitions for my thesis. While play can be observed and identified, it is such a complex phenomenon that definitions are typically multi-dimensional (Pellegrini & Smith, 1998). To better understand the phenomenon of play, a variety of definitions are explored below.

The earliest definition of play suggests "the very definition of play is that children initiate an activity they are interested in doing and seek ways to be inventive, creative and exploratory" (Ward, 1987, p.164, as cited in Lee et al., 2022). Similarly, the most recent definition of play describes children's play as, "generally defined by agency which is understood in terms of the child's freedom to choose play and the child's direction or control of play" (Alden & Pyle, 2019, p.240). In both definitions, play is defined as a freely chosen activity initiated by children. This is further reiterated by Whitebread et al.

(2012), as they describe play as a universal, cross-cultural attribute of childhood, which is spontaneous, pleasurable, and freely chosen by children themselves.

2.2.2 The Importance of Play

Children begin engaging in playful behaviours as early as six months old (Waldman-Levi, Bundy, & Shai, 2022). Early research on play considers it to be a hallmark of childhood (Groos 1898, 1901). Play is considered the primary form of PA that children engage in throughout their childhood (Bundy et al., 2015). According to Groos, and other play theorists including Piaget (1962) and Vygotsky (1978), play allows for children to acquire skills that translate over into adulthood which are beneficial to them throughout their life (Pellegrini & Smith, 1998). Play is associated with increased ability to build physical skills and engage in PA (Tremblay et al., 2015). PA and play have many benefits for children during childhood, and there is a potential for these benefits to translate to healthy habits into adulthood (Brussoni et al., 2015; Tremblay et al., 2016).

In addition to the physical benefits, play provides children with the conditions to learn and thrive, promoting cognitive, social, and emotional well-being (Ginsburg et al., 2007; Pellegrini et al., 2007; Pellegrini & Smith, 1998). For example, play can facilitate creativity and imagination (Milteer et al., 2012). Socially, play allows for children to learn about themselves and the world around them (Barnett, 1990). Play also provides children with the opportunity to experiment, make decisions, and solve problems (Anderson-McNamee et al., 2010). During play, children learn to cooperate and develop friendships, which are essential to their social development and well-being (Anderson-McNamee et al., 2010; Rogers, 2012). Play has also been linked to emotional benefits, such as improved emotional resilience (Hewes, 2014). Not surprisingly, most children report being happiest when at play (Csikszentmihalyi & Hunter, 2003)!

2.3 Unstructured Play

2.3.1 Definitions of Unstructured Play

While play is necessary for optimal development in early childhood, the type of play also matters. One way to organize different forms of play is to categorize it as structured or unstructured. Structured play is defined as, “play which has an outcome in mind and often is adult-led" (Houser et al., 2016, p.782). Herrington & Brussoni (2015) similarly define structured play as play that, “usually occurs at a specific place and time (the school soccer field at three o’clock, for example). Adults typically organize and monitor structured play” (p.477). In contrast, unstructured play, also known as free play, occurs at any location; it is not planned or led by adults, but by children, and typically includes spontaneous activities (Lee et al., 2022). Unstructured play places emphasis on the child’s choice in play (Lee et al., 2022). Herrington and Brussoni (2015) define free play as, “self-motivated and something in which children engage in for their own sake of enjoyment” (p.477).

2.3.2 The Importance of Unstructured Play

In general, engagement in play is beneficial for children’s overall health and well-being (Milteer et al., 2012). One common form of play during childhood is unstructured play which is linked to unique health benefits (Herrington & Brussoni, 2015; Lee et al., 2020). Outdoor free play is one of the most consistent predictors of PA during childhood (Fairclough, Ridgers, & Welk, 2012; Stone & Faulkner, 2014). The Canadian 24-Hour Movement Guidelines suggests that children and youth ages 5-17 years engage in unstructured activities (i.e., play) as one way to meet their daily movement (PA) goals (Tremblay et al., 2015). Unstructured play has also been positively associated with social engagement and emotional well-being (Lee et al., 2020). Another benefit of unstructured play includes its contribution to the development of children's self-regulation, which is a skill that supports academic learning throughout childhood (Pellis & Pellis, 2007).

Unstructured play may involve unstructured materials, such as loose parts, as they encourage child-led, unstructured play (Houser et al., 2016). Loose parts are defined as "materials that are variable, meaning they can be used in more than one way so that children can then experiment and invent through play and these materials can be natural or synthetic" (Houser et al., 2016, p.782). Loose parts play is a complex phenomenon that is difficult to define with a single definition (Gull et al., 2019), although a scoping review of 15 peer reviewed articles created universal definitions of play related terms, and characterized loose parts play as:

> "Loose parts are open-ended, interactive, natural, and manufactured materials that can be manipulated with limitless possibilities. … Through loose parts exploration participants develop imagination, creativity, and collaborative skills. The process is more important than the end product fostering overall growth and development." (Gull et al., 2019, p.48).

This definition highlights some of the benefits to children engaging in loose parts play. Others have identified additional benefits to unstructured loose parts play, including improved social interactions, reduced aggression, and greater independence among children (Gibson et al., 2017). Further, a scoping review exploring the relationship between loose parts play and physical literacy in children identified benefits to children engaging in this type of play (Houser et al., 2016). Studies included in this scoping review found that loose parts play fostered creativity in children and was shown to promote the exploration of their environments and of new movements (Oncu, 2015; Szekely, 2015). Loose parts play also helps to support children's overall growth and development (Gull et al., 2018) through the development of fundamental movement skills and fostering a supportive environment for children to take risks during play (Branje et al., 2022; Spencer et al., 2021)

We know that there has been a decline in children's outdoor play, which is where unstructured play typically occurs (Tremblay et al., 2015). Factors that influence children's unstructured play are complex. As noted in a recent review, these factors are situated across the levels of the SEM (Lee et al., 2021). One of these factors includes that caregivers are often turning to sport rather than free play to increase their children's PA levels as they believe that sport has greater physical, social, and emotional benefits for their children (Watchmen & Spencer-Cavaliere, 2017). Caregivers have acknowledged that their prioritization of sport, has resulted in decreased time for their children to engage in unstructured play (Watchmen & Spencer-Cavaliere, 2017). Although there are many benefits to children engaging in sport, it should not replace children's time for free play.

2.4 Risky Play

2.4.1 Definitions of Risky Play

It has been noted that during outdoor free play, children naturally engage in risky play, especially when provided access to loose parts (Bundy et al., 2015; Grady-Dominguez et al., 2021; Herrington & Brussoni, 2015). Risky play is defined as, "a form of play that is thrilling and exciting, which involves uncertainty, unpredictability, and varying degrees of risk-taking" (Lee et al., 2022, p.12). Risk is a perception, and it can be perceived in various ways. Brussoni and colleagues (2015) "use the word "risk" in the context of risky play to denote a situation whereby a child can recognize and evaluate a challenge and decide on a course of action" (Brussoni et al., 2015, p.6425). This thesis is explores risky play from the perspective of the caregiver and not the child themselves and therefore will use the definition of risky play as stated above by Lee and colleagues (2022) in the PLATO-Net paper. It is important to remember that as risk is a perception the personal definitions of risky play may differ from caregiver to caregiver.

Along with the definition of risky play, there are eight categories of risky play that were developed by Sandseter (2007) and Kleppe and colleagues (2017). These categories include: (1) play with great heights (i.e., climbing, jumping from surfaces), (2) play with high speed (i.e., swinging or running fast), (3) play with dangerous tools (i.e., knives, ropes), (4) play near dangerous elements (i.e., cliffs, deep water), (5) rough-and-tumble play (i.e., wrestling, play fighting), (6) play where children go exploring alone (i.e., unsupervised play), (7) play with impact (i.e., crashing into objects for fun), and (8) vicarious play (i.e., experiencing thrill by watching other children (most often older) engaging in risk). The first six categories were created in 2007 by Sandseter, who conducted an observational study, observing 38 children in two Norwegian preschools engaging in outdoor play. One preschool was an outdoor preschool located in a forest; the other was an ordinary preschool with a fixed playground. The purpose of that study was to categorize risky play by observing children (without disabilities) engaging in natural risk-taking during play (Sandseter, 2007). Later, with more observations of children (without disabilities) engaging in free play, two additional categories of risky play were added, including play with impact, and vicarious play (Kleppe et al., 2017).

2.4.2 The Importance of Risky Play

Children naturally take risks and attempt challenges during play because they enjoy how it makes them feel (Brussoni et al., 2015). There are numerous benefits for children when engaging in risks during play, as risky play is positively associated with increased PA and wellbeing during periods of unstructured play (Sando et al., 2021). Brussoni and colleagues' systematic review (2015) found multiple benefits connected to children's outdoor risky play, including improved physical health, increased PA, and socioemotional well-being. Risky play also helps children learn, as it can help them test their physical limits, develop their perceptual motor capacity, learn risk management strategies, and learn to avoid and adjust to dangerous environments and activities that they may encounter throughout their lives (Brussoni et al., 2015). Further, Sandseter (2010) remarks that risky play provides children with "lessons for life" that they unconsciously learn while engaging in this form of play, allowing them to master risk-taking skills (p.30). These lessons can help set children up for success throughout their childhood and the remainder of their lives.

Adults sometimes raise concerns around allowing children to engage in risky play (Brussoni et al., 2012), although many researchers have stated that children will only engage in risks that are manageable for their own personal abilities (Brussoni et al., 2015). Allowing children to take risks, trust their judgment, learn their limits, and understand potential consequences, can facilitate independence (Unger, 2008). By mastering risks, children must focus and be persistent, which builds their resilience, confidence, and coping skills, and aids with self-regulation (Marano, 2008). When children are successful at taking risks, there is “the possibility of discovering that one is adventurous, daring, brave, strong, confident, and successful” (Stephenson, 2003, p.42).

While engagement in risky play is associated with a wide range of benefits, opportunities for children to engage in risky play have declined over time (Brussoni et al., 2015), negatively impacting their health and development (Tremblay et al., 2015). Adults’ growing concerns and aversion to risks have been tied to these declines and negative health consequences for children (Brussoni et al., 2012, Bundy et al., 2009, Grady-Dominguez et al., 2021). For example, influential adults can limit children’s access to risk-taking opportunities, which consequently limits their PA (Brussoni et al., 2012, Bundy et al., 2009). PA is important across the lifespan, as physical inactivity is associated with the development of chronic conditions including hypertension, type 2 diabetes, and some cancers (e.g., colon and breast) (Warburton, 2006), as well as decreased mental health (Paluska & Schwenk, 2000) in adulthood.

Children who are deprived of risk are more likely to lack independence (Eager & Little, 2011). Parental risk aversion has seemingly increased; for example, children tend to have reduced independent mobility (roaming the neighborhood unsupervised), decreased active transport to and from school, and decreased leisure activities with friends (Bhosale et al., 2017; Schoeppe et al., 2016). Not only is decreased independent mobility associated with decreased PA (Oliver et al., 2016), but it affects children’s ability to navigate their neighborhood, where they learn important skills such as problem-solving and decision-making (i.e., when to cross the road) (Rissotto & Tonucci, 2002). Reduced engagement in risky play has also been linked to limited opportunities for social, emotional, physical, cognitive, and communicative development in children (Cevher-Kalburan & Ivrendi, 2016). It is therefore important that all children have access and support to engaging in risky play throughout their childhood.

2.4.3 Play through the Lens of the Socioecological Model

Previous literature has examined play through a socioecological lens. The SEM was suggested by Bronfenbrenner (1979) to consider the multiple, interacting levels that impact health-related behaviour. The levels, starting the furthest away and moving closer to the individual include the chronosystem, the macrosystem, the exosystem, the mesosystem, and the microsystem, as described in Figure 1 (Bronfenbrenner & Ceci, 1994). The chronosystem contains factors which are the furthest from the individual (Bronfenbrenner, 1986); examples include national and local regulations and laws (Mehtälä et al., 2014). Next, is the macrosystem which encompasses societal, religious, and cultural values and influences (Bronfenbrenner, 1986), for example, municipal policies and cultural norms. This can also be considered the policy level (Mehtälä et al., 2014). The exosystem may include neighbourhood, childcare, or school characteristics and is also known as the community level (Bronfenbrenner, 1986; Mehtälä et al., 2014). Moving toward the individual, the mesosystem encompasses the relationships and interactions in which the individual has direct contact (Bronfenbrenner, 1986). Interactions with peers, family, and teachers would be included in the mesosystem or interpersonal level (Mehtälä et al., 2014). Finally, the microsystem or intrapersonal level is that closest to the individual (Bronfenbrenner, 1986; Mehtälä et al., 2014), which may include the individual's age, gender, and self-efficacy.

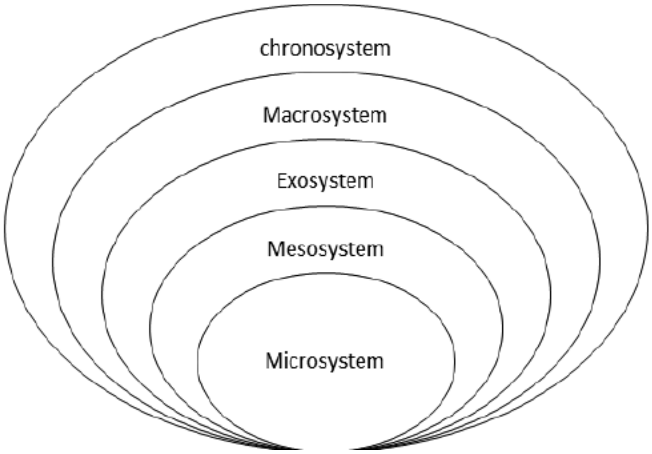

Figure 1. Bronfenbrenner's socioecological model that describes the inner most level (microsystem) to the outer most level (chronosystem) of the model (Bronfenbrenner, 2005).

Past research has used the SEM to qualitatively explore parents' perceptions of outdoor, risky play in preschoolers without disabilities (MacQuarrie et al., 2022). This study did not note any chronosystem level factors. At the macrosystem level, factors which were found to influence children's risky play included weather related factors and the overall risk aversion culture which has been adopted in Western society (MacQuarrie et al., 2022). Exosystem level factors included neighbourhood location and perceived safety of neighbourhoods where children engaged in outdoor risky play. Mesosystem level factors of influence included peer and family members who children were engaging with during play and the level of supervision which occurred during outdoor play. Finally, at the microsystem level, factors that influenced parents' perceptions of outdoor, risky play included the child's age, size, ability to self-assess, and comfort with risk (MacQuarrie et al., 2022).

The SEM is not only used to identify multi-level factors of influence, but also helps to identify the interacting factors of influence across levels (Bronfenbrenner, 2005). MacQuarrie and colleagues (2022), specifically identified an interconnection between parental and societal values in both the micro and macro level, where there has been a shift towards prioritizing children’s safety in play and eliminating risks rather than supporting manageable risk-taking. Given that this thesis focuses on CWPD, MacQuarrie et al. (2022) has provided important insights into how the SEM can be used as a framework to help explore the factors that influence CWPD’ risky play from the perspective of their caregivers.

2.5 Disability

2.5.1 Definitions and Characteristics of Disability

Disability is a diverse and complex term with various evolving definitions (Whitebread et al., 2012). The World Health Organization (WHO) defines disability as the interaction between a person’s health condition and their personal and environmental factors (World Health Organization, 2023). This definition emphasizes the role of the environment (e.g., inaccessible transport, buildings, and limited social support) rather than focusing on the individual’s health condition (World Health Organization, 2023). The Government of Canada has a similar definition of disability, where disability is “a complex phenomenon, reflecting an interaction between features of a person's body and mind and features of the society in which they live” (Government of Canada, 2022, p.2). This definition highlights societal factors which influence participation and engagement for persons living with a disability. Disability can occur at any point in an individual's life; it can be temporary, episodic, or permanent (Government of Canada, 2022). Disability can vary from mild to severe; it can also worsen or improve over time (Government of Canada, 2022). As disability is complex, there is no true definition, although the most widely accepted definition for disability comes from the WHO describing disability as an umbrella term, which covers impairments, activity limitations, and participation restrictions in daily activities (World Health Organization, 2023). The UN Convention of the Rights of Persons with Disabilities describes persons with disabilities as "those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations, 2006, p.3).

There are various types of disability. Although complex, disability can be categorized into sensory, neurodevelopmental, and physical disabilities. Persons with disabilities can be situated within one of these categories or across multiple categories. Sensory disabilities are impairments that affect one or more of an individual's senses (vision, hearing, smell, taste, or sensory awareness) (PHE Canada, 2023). Examples of sensory disabilities include blindness or vision impairment and deafness or hearing impairments. Neurodevelopmental disabilities include a group of heterogenous chronic disorders that occur as a result of a disturbance in brain development (Mullin et al., 2013). Neurodevelopmental disabilities vary in severity and are typically characterized by impairments in motor skills (gross and/or fine), communication or language skills, cognition, and behaviour (Mullin et al., 2013; Shevell, 2006). These impairments are highly individualized and are influenced by both intrinsic and extrinsic factors, which can lead to limitations in activities of daily living and participation (World Health Organization, 2001). Common examples of neurodevelopmental disabilities in childhood include intellectual disability, communication disorders, and autism (Mullin et al., 2013).

Physical disability is defined by the WHO (2001) using the ICF to:

> “include impairments of sensory functions and pain, voice and speech functions, or neuromusculoskeletal and movement-related functions; or of the structures of the nervous system, the eye, ear and related structures, the structures involved in voice and speech, or the structures related to movement” (Lebrasseur et al., 2021, p.2).

Examples of common physical disabilities among children and youth include spinal cord injuries, amputations, muscular dystrophy, spina bifida, and other musculoskeletal injuries. This thesis focuses on CWPD as they may face unique challenges to engaging in risky play.

2.5.2 Models of Disability

Throughout history the accepted models of disability have changed and shifted. They have been altered and rejected due to changes in society, perceptions, and prejudices held by researchers, physicians, policy makers and society (Haegele & Hodge, 2016). One model of disability is the medical model, which conceptualizes disability as primarily biological (Brittain, 2004). Within this model, disability is viewed, explained, and treated as a medical condition where medical interventions are employed to “fix” or “cure” symptoms of the disability to improve the life of the individual (McTigue, 2015). A criticism of the biological model is that it views people living with disabilities as weak and sick, stereotyping them as abnormal, which negatively influences societal perspectives (Haegele & Hodge, 2016). The medical model of disability emphasizes disability as a personal problem rather than considering outside factors which impact how people experience disability (McTigue, 2015). As such, the biological model has many “ableist” shortcomings, where ableism is characterized as the discrimination toward people living with disabilities and describes how certain ideals and attributes are valued (or not) by society (Wolbring, 2008). Ableism takes a physical and emotional toll on people living with disabilities as they must navigate the physical and social world created by people without disabilities (United Nations, 2006).

Sociologists Erving Goffman and Kenneth Irving Zola criticized the medical model of disability for stigmatization and encouraged a new perspective of disability as a social rather than medical issue (Hogan, 2019). Others adopted the social model of disability, emphasizing the role of society, as it imposes disability on individuals with different impairments (Bingham et al., 2013), which supported the development of disability legislation (Petatsis, 2019). The social model of disability values the role which society plays on how people experience their disability. The development of the social model has been noted to trigger legal and policy actions, such as the enactment of the Americans with Disabilities Act (Travis, 2015). This model is not without critique, as it separates impairment from disability, which remains a central part of the experience for people living with disabilities (Bingham et al., 2013).

George Engel proposed the biopsychosocial model of disability in 1980. This model of disability integrates medical and social models as it considers the interaction of biological, psychological, and social factors to influence health (Engel, 1980). The ICF is an example of a biopsychosocial model of disability. Through this model, the ICF "attempts to achieve synthesis, to provide a coherent view of different perspectives from a biological, individual, and social perspective (World Health Organization, 2001, p.20). The biopsychosocial model was proposed and adapted as a more inclusive classification system for describing disability and the various levels and contexts which impact disability (Bath et al., 2014).

2.5.3 The International Classification of Functioning, Disability and Health (ICF)

In 2001, the WHO published the ICF framework (World Health Organization, 2001). The purpose of the ICF is to provide a standard language for classifying body function and structure, activity, participation, and conditions across sectors (transportation, education, and policy), users (policy makers, health care professionals, and people with disabilities), and countries and cultures (World Health Organization, 2001). The four aims of the ICF include: (1) providing a scientific basis for understanding and studying health and health-related states, outcomes, determinants, and changes in health status and functioning; (2) establishing a common language for describing health and health-related states to improve communication between various users; (3) Allowing for comparison of data across countries, health care disciplines, services, and time; and (4) providing a systematic coding scheme for health information systems (World Health Organization, 2001). As a biopsychosocial model of disability, the ICF does not focus on individual medical status or impairment of an individual but views level of functioning as a *dynamic* interaction between health condition, environment, and personal factors, which influence the experience of disability (World Health Organization, 2001). The interaction between these factors can be viewed in Figure 2.

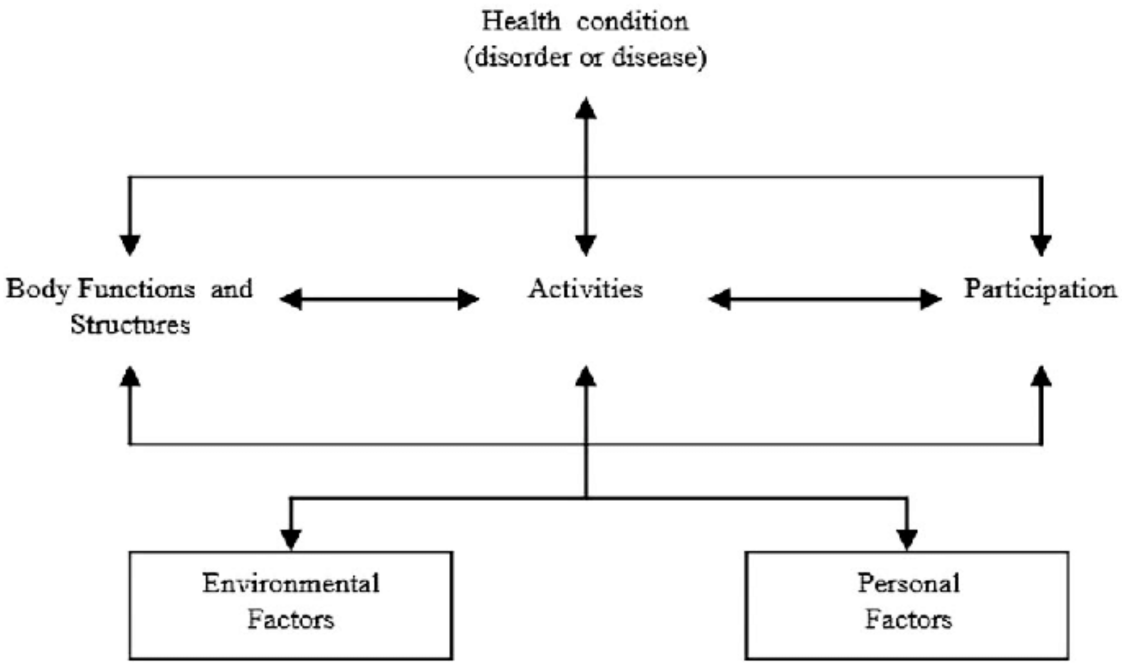

Figure 2. The interactions between the different components of the ICF model (World Health Organization 2001).

This framework represents a non-linear holistic approach, as the functional components of the ICF are represented as having a dynamic relationship through double sided arrows as seen in Figure 2 (McDougall, Wright, & Rosenbaum, 2010). This reflects that interventions can intervene at any segment to influence an individual's participation. For example, an intervention could include aspects of improving an individual's body structure and function to increase mobility and thus increase participation. Another intervention could target environmental factors, such as accessibility to community spaces, impacting an individual's participation. This strength-based approach provides multiple locations for interventions to target and increase participation among people with disabilities. This is important for healthcare providers as they must understand that it is not only an individual's impairment, as viewed in the medical model of disability which impacts their participation, but the dynamic relationship between their impairment, environmental factors, and personal factors, which work together simultaneously to impact their participation (McDougall, Wright, & Rosenbaum, 2010).

The ICF is based on four underlying principles: (1) universality; (2) parity and aetiological neutrality; (3) neutrality; and (4) environmental influence (CDC, 2006). Universality refers to the applicability of the framework to all people regardless of their health condition in physical, social, and cultural contexts (CDC 2006). Parity and aetiological neutrality emphasize the importance of not distinguishing between health conditions; it places all health conditions on an equal scale to allow comparison using a common metric (CDC, 2006). Neutrality refers to the use and importance of neutral language (CDC, 2006). Environmental influence highlights the critical role that the environment plays in a person's functioning (CDC, 2006). All factors within the ICF interact with one another and influence a person's daily function in society.

The language used in the ICF is neutral, to reflect positive and negative components. There are many terms used within the ICF, which I will now define. Functioning and disability are umbrella terms, which include aspects of functioning from a biological, individual, and social perspective and reflect the interaction between a health condition and environmental and personal factors (World Health Organization, 2001). Activities and participation, body function, and body structures sit underneath the term Functioning. Activities are the execution of a task or action by the individual, and participation refers to the involvement of an individual in a life situation (World Health Organization, 2001). Body function refers to the physiological functions of the body (e.g., mobility of joint function), whereas body structures refer to the anatomical part of the body (e.g., joints) (World Health Organization, 2001). Disability and Functioning sit on a continuum and are made up of multiple domains that can help establish overall level of functioning (World Health Organization, 2001). Domains may include work, cognition, self-care, social activities, mobility, education, and vision. Impairment refers to problems in body structures or functions including significant deviations or loss (World Health Organization, 2001). Environmental factors make up the physical, social, and attitudinal environment in which people live and conduct their lives (World Health Organization, 2001). For example, the built environment, social support and activities, insurance, and wheelchair characteristics. Finally, personal factors include features of the individual that are not associated with their health condition (World Health Organization, 2001). This could include age, sex or gender, education, and/or socioeconomic status (SES).

2.5.4 Connecting the ICF and SEM

The ICF and SEM frameworks were applied to this thesis as they work well together and interact with one another at various levels to better understand how CWPD experience risky play. For example, the ICF presents disability and participation as a dynamic interaction between an individual's body function and structure and their environmental and personal factors. The SEM can explore the environmental and personal factors which influence participation at multiple levels (microsystem, mesosystem, exosystemic, macrosystem, chronosystem) and relate to how the factors on various levels interact to influence overall participation. Furthermore, elements of the ICF can be situated in the SEM; for example, body structure and function, as well as personal factors (age, gender, fitness level), are found at the microsystem level. Environmental factors include the physical, social, and emotional environments, and therefore can sit at various levels of the SEM. For example, the social environment can include peers and their influence which would be situated at the mesosystem level, while the physical environment can include accessibility aspects, which fits within the exosystemic level. Therefore, these frameworks work together within the design of this thesis to better expand on how various factors on multiple levels interact with one another in a dynamic relationship to influence CWPD' risky play experiences.

2.5.5 The F-Words of Childhood Disability

Rosenbaum and Gorter (2012) developed six F-words of childhood disability to support practical, strength-based applications of the ICF framework. By embedding the F-words into the relevant components of the ICF framework, it supported the implementation of the ICF in practice (Rosenbaum & Gorter, 2012). The F-words of childhood disability are used in practice to present components of the ICF in lay language for families and children. This concept can be seen in Figure 3.

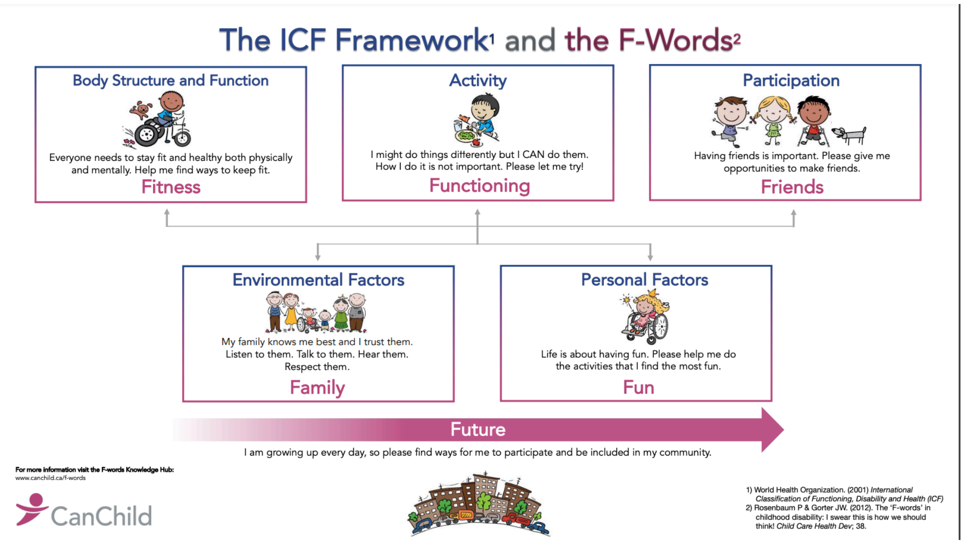

Figure 3. The ICF Framework and the F-words of childhood disability including descriptions of each F-word from CanChild (World Health Organization, 2001; Rosenbaum & Gorter, 2012).

There are six F-words of childhood disability. *Function* refers to what people do, for example, their roles, jobs, occupations, or tasks; for children, this would include play (Rosenbaum & Gorter, 2012). *Function* is situated in the *Activity* segment of the ICF model. Next, is *Family*, which represents a crucial environment for all children (Rosenbaum & Gorter, 2012). Family and more specifically parents are a central contextual factor to children’s lives, therefore *Family* is placed in the *Environmental Factors* segment of the ICF. The purpose of this is to make sure that family needs are central to childcare, as in the past the emphasis was on the child as the patient while family factors were often not considered. This helps to acknowledge families’ realities, to better understand that there are outside factors which influence parents and families, ultimately affecting their child’s participation and health (Rosenbaum & Gorter, 2012).

The next is *Fitness*, which maps onto the ICF framework in the *Body Structure and Function* segment (Rosenbaum & Gorter, 2012). Fitness and PA were neglected factors in childhood disability for a long time, as they were seen as secondary to children’s healthcare (Rosenbaum & Gorter, 2012). There is now much more research on the importance of PA for all children, including those with physical disabilities (Carbone et al., 2021; Shannon et al., 2021). It is not only important that CWD have the opportunity to engage in PA, but that they have the opportunity to engage in quality participation. One of the most common ways children can increase their PA is through play, including risky play (Bundy et al., 2015).

The following F-word of disability is *Fun*. This is found in the *Personal Factors* and also the *Participation* segment of the ICF framework. Fun translates into meaningful activities that a child wants to do or enjoys doing (Rosenbaum & Gorter, 2012).

Childhood should be all about fun, although it is well reported that CWD have lower rates of participation than children without disabilities (Bult et al., 2010). As previously stated, CWD should not only have opportunities to engage in activities, but they should have opportunities to engage in activities that they enjoy doing. Next is *Friends*; this is placed in the same space as *Fun* (Rosenbaum & Gorter, 2012). Social development and friendships are essential to children's health and well-being and are important in emphasizing the facilitation of quality friendships for CWD (Rosenbaum & Gorter, 2012). For example, programs such as parasport are an excellent source for CWD to engage in activities with their peers and develop these important relationships.

The final F-word of disability is *Future*, which is what child development is centered upon (Rosenbaum & Gorter, 2012). It is important to keep a positive outlook of what the future holds for children and their families. This is not to ignore their realities, but to make sure that we hold their expectations and dreams for the future in the front of our minds to create a space where CWD' and their families are able to engage in their healthcare decisions (Rosenbaum & Gorter, 2012).

The ICF and F-words of childhood disability are used across disciplines, showing their versatility and utility (CDC, 2006). The ICF framework has been adopted in clinical settings, for example this model is used for the development of rehabilitation programming (Martinuzzi et al., 2010). It has also been used by governments and policy makers, as it has been introduced into legislation and social policy is various UN countries. In Latin America the ICF framework is used in social security and registration systems, and as more countries ratify the UN Convention of the Rights of Persons with Disabilities it is of hope that this framework will become the standard for disability data and social policy modeling (CDC, 2006). It is also important that educators and researchers use the ICF framework within their work as it can help professionals to look beyond their own areas of research and communicate across disciplines. This is important in my research, as I am to understand from the perspective of the caregiver how CWPD' are engaging and participating in risky play, the opportunities they have for this type of play, and the factors which influence their participation. Applications of the F-words of childhood disability are important in engaging children and their families in their healthcare decisions. As the ICF framework may use language that is not easy to understand for children and their families, the F-words of childhood disability, were developed to engage the child in their own healthcare decisions and future (Rosenbaum & Gorter, 2012).

2.5.6 United Nation Convention on the Rights of Persons with Disabilities

In 2006, the UN adopted the Convention on the Rights of Persons with Disabilities (United Nations, 2006). The purpose of this convention was to "promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (United Nation, 2006, p.2). Article 7 of the Convention refers to the rights of CWD and states that all parties should take every necessary measure to ensure their full enjoyment of all human rights and freedoms on a basis equal to children without disabilities. It highlights the importance of placing the interests of the child as the primary concern of all actions involving CWD. Finally, this article reflects that CWD have the right to express their views and opinions freely on all matters affecting them

(United Nations, 2006). It is important to have legislation which supports CWD' and their rights and freedoms to allow them to fully participate within their communities.

2.5.7 Dignity of Risk

The UN Convention of the Rights of Persons with Disabilities highlights the importance of respect and dignity for people living with disabilities (United Nations, 2006). It is also important that we afford people living with disabilities the dignity to take risks, as it is their right to do so. Historically, DoR has been seen as a fundamental component within the discipline of therapeutic recreation. Traditional areas of DoR include autonomy of risk-taking for the aging population and people with neurodevelopmental disabilities (Marsh & Kelly, 2018). DoR should also be considered when looking at risky play, for CWD, including CWPD.

Children learn to make decisions through trial and error (Savage & Bowers, 2022), which often occurs during risky play. It is important that children engage in risky play from a young age as this will help them learn how to make decisions around risk-taking throughout their life (Brussoni et al., 2015). Learning these lessons in childhood is linked to independent living in adulthood (Savage & Bowers, 2022). Choices often come with risk-taking and risk assessments (Savage & Bowers, 2022) and are learned during childhood from engaging in risky play (Brussoni et al., 2021). It is important to allow CWPD' the opportunity to make choices around their play and risk-taking. DoR is rooted in the belief that regardless of a person's age or ability they have the right to self-determination (Ball et al., 2021).

To help promote risky play for CWPD, we have to allow them to experience DoR. Ibrahim & Davis (2013) state that DoR is "the principle of allowing an individual the dignity afforded by risk taking with subsequent personal growth and quality of life" (Ibrahim & Davis, 2013, p.189). CWPD' may face many barriers to obtaining DoR as they are not often given the autonomy over their own risk-taking, including during play (Ball et al., 2021). For example, Scott (2010) showed that CWD were often given less opportunity than children without disabilities to make choices, including the risks they were prepared to take during play.

Research on DoR and CWD is limited, although one study explored the relationship between DoR and self-determination within the context of physical education for CWD (Ball et al., 2021). All children have rights to a life that involve PA and access to participate in a variety of activities. Although, standing in the way are multiple barriers, one of which is explored in Ball et al. (2021). Here, authors explored how physical education teachers overprotect students with disabilities, often segregating them from children without disabilities due to fear of injury and risk. Ball and colleagues (2021) highlight that it is important for CWD' to have their own autonomy and self-determination over their risk-taking, as they should be allowed to manage their own risks during play. Benefits of giving CWD' the DoR include the development of lifelong skills that will aid in their decision-making and independence throughout their lives (Ball et al., 2021).

Another study which explored DoR for CWD examined how dignity was experienced during family leisure activities (Boyd & Goodwin, 2019). Semi-structured and conversational interviews were conducted with three generations (i.e., parents, grandmother, and great grandmother) of a CWD to examine their experiences of family leisure. The family reported experiencing a mix of both dignity-affirming and dignityremoving interactions during community family leisure (Boyd & Goodwin, 2019). The authors concluded that it is important to understand how CWD' experience dignity when participating in leisure, including free play, as it is paramount to the creation of open and welcoming environments in which families of CWD can continue to participate in play (Boyd & Goodwin, 2019).

It is important that we allow CWPD' the autonomy to make decisions over their own risk-taking so that they may enjoy and reap the benefits of engaging in risky play throughout their childhood. As described in this section, CWD are not often provided the same opportunities as children without disabilities to assert their autonomy over risk-taking during play (Ball et al., 2021). It is therefore important to explore the factors that influence CWPD' risky play to better understand what is needed to support them when engaging in risky play and how we can provide them the dignity of risk during play.

2.5.8 Engaging People with Disabilities in Research

It is important that when conducting research with persons with disabilities that a safe and welcoming environment is created and authentic trust is built between the researcher and participant. Historically, research has been conducted *on* people with disabilities rather than *with* them (Koontz et al., 2022). Over decades, disability rights movements have used the powerful slogan "nothing about us without us" (Charlton, 1998). This slogan represents how we cannot conduct research without authentically engaging with people with disabilities to work alongside them to achieve a common goal.

The purpose of this thesis was to explore caregivers' experiences of their child's risky play. The idea for this thesis came about from my supervisor's engagement with people with disabilities over the last two decades. My thesis supervisor had established this as a priority area for research approximately five years ago when working with CWD in risky play and with the formation of the Canadian Disability Participation Project (CDPP). It is important to engage people with lived experiences (CWD' and their caregivers) from the beginning when establishing research priorities, as per the slogan, "Nothing about us without us". By engaging alongside people with lived experience during research it creates a sense of trust between the research team and the participants. Examples of how researchers can work alongside CWD, and their caregivers include engaging within their community to support them in activities that are important to them, for example children's access to risky play or parasport. One way this can be done is by volunteering your time to develop personal connections with people you wish to work alongside, as I have done over the last several years. This will help to establish a trusting relationship over time, to allows participants to feel safe and supported throughout the research process.

2.6 Disability as a Determinant of Children's Risky Play

There are many determinants of children's risky play, as described above using the SEM. These determinants influence how children experience play. Determinants of play can include SES (Sterman et al., 2020), neighbourhood characteristics (Parent et al., 2021), age (Pellegrini, 1985), gender (Homes & Romeo, 2013), and ability (King et al., 2013). CWD face additional factors that influence their play due to their impairment and environmental and personal factors. Few studies have attempted to identify the barriers CWD face to participating in risky play from the perspective of the child and their families.

One study by Sterman and colleagues (2020) explored barriers CWD' faced to participating in outdoor play. They found that families of CWD reported difficulty participating in outdoor play due to the challenges of everyday life associated with caring for a child living with a disability while living in a low SES community (Sterman et al., 2020). Although living in a low SES community may be a barrier to engaging in play for many children, CWD face increased barriers to engaging in outdoor play due to additional factors associated with caring for CWD (Sterman et al., 2020) such as medical costs and appointments (Bourke-Taylor, Howie, & Law, 2010). Others described accessibility as a barrier (Morales et al., 2018; Sterman et al., 2019; Woolley, 2012). Woolley (2012) classified accessibility not only as a physical barrier to play, but as a social barrier; they describe that in Canada, physical barriers to school playgrounds were associated with policy omissions. Further, they highlighted the importance of inclusion of CWD and their families when designing play spaces (Woolley, 2012).

One of the most frequent barriers that CWD' face when attempting to engage in risky play includes increased parental concern (Carbone et al., 2021). The increase in parental concern surrounding engagement in risky play may be due to factors which are dependent on the child's impairment and function and the parent's comfort with risk. These factors may include false beliefs of their children's abilities (Carbone et al., 2021), the safety of certain play activities, (Stillianesis et al., 2022) and the fear of elopement (e.g., wandering) (Shannon et al., 2021). The increase in risk aversion culture exerted by parents and caregivers is limiting for CWD' and their risky play (Caprino 2018; Grady-Dominguez et al., 2021; Carbone et al., 2021). These attitudes and fears about risk-taking during play can lead to discrimination of disability and decreased confidence in play behaviours (Caprino, 2018). Due to these barriers, CWD' have less opportunities to participate in risky play and therefore are less likely to gain the associated health benefits (Bundy et al., 2015; Caprino, 2018; Grady-Dominguez et al., 2021).

2.6.1 Physical Disability as a Determinant of Children's Risky Play

Multiple factors determine how children experience play. For example, neighborhood characteristics can influence children's ability to play outdoors (Parent et al., 2021). As seen in Figure 2 (the ICF model), health conditions and impairments of body structure and function play a role in an individual's participation. Play is a fundamental right for all children (United Nations, 1985), although it is predicted that CWPD' face increased disparities in their play behaviors. CWPD' also face increased barriers to participating in risky play, as caregivers of CWPD' are more likely to be risk-averse and fearful compared to caregivers of children without disabilities (Grady-Dominguez et al., 2020). CWPD' face a wide range of barriers that influence their engagement in risky play including systemic (e.g., inaccessible facilities), environmental (e.g., terrain and ground surfaces), sociocultural (e.g., stigma), and/or individual (e.g., fear) barriers (Moore & Phelan, 2021). It is important to understand how CWPD experience risky play and how their experiences may differ from children without disabilities and children with other disabilities. Through exploring factors that influence CWPD, we can learn how to better support them in their risky play.

CWPD' may have unique barriers to risky play. Morales and colleagues (2018) found that weather was a barrier to CWPD' participation in outdoor play. When sidewalks, ramps, and playgrounds are poorly plowed or salted, CWPD' may have difficulties accessing facilities and outdoor play spaces (Morales et al., 2018). It is also important to remember that CWPD' typically experience greater fatigue than children without disabilities when participating in play (Caprino, 2018). Through qualitative interviews, Pollock and colleagues (1997) compared the perceptions of CWPD' play experiences to children without disability. When asked about barriers to engaging in play, CWPD' described a lack of education of their peers regarding their disability, resulted in discomfort toward them and their disability (Pollock et al., 1997).

Another barrier CWPD face to participating in risky play includes inaccessible play spaces (i.e., playgrounds) (Caprino, 2018; Ripat & Becker, 2012). Ripat & Becker (2012) interviewed parents and CWD, including those with physical disabilities, to understand their experiences of accessing and using playgrounds. The results indicated that it is important for playgrounds to contain an appropriate amount of challenge for CWD, while promoting imaginative play (Ripat & Becker, 2012). They also found barriers to accessing playgrounds for CWPD. One parent of a child with a physical disability explained that ground surfaces can act as a barrier to accessing playgrounds; they stated, "sand is just our enemy" (Ripat & Becker, 2012, p.148). It is important for play spaces to be accessible and promote risky play for children with and without disabilities. Caprino (2018) suggests that playgrounds adapt surfaces that are accessible to wheelchair users, such as concrete, by having it placed on an angle to promote adrenaline when descending, creating a risky environment. Overall, it is important that CWPD and their families be included in the design of playgrounds and parks to understand their needs (Woolley et al., 2013, Lynch et al., 2020).

CWPD face increased barriers to PA and play compared to children without disabilities. Past research, including scoping reviews, have explored strategies to support

CWPD' PA (Bloemen at al., 2017) and play (Crawford et al., 2014). There is limited work exploring CWD' risky play experiences and how we can support their participation in risky play. By exploring ways to support risky play for CWPD' this can further benefit their engagement in outdoor unstructured play as this is where risks naturally emerge during play (Bundy et al., 2015; Grady-Dominguez et al., 2021; Herrington & Brussoni, 2015) and are associated with increased PA (Brussoni et al., 2012; Sando et al., 2021).

2.6.2 The Sydney Playground Project

Given the limited literature exploring risky play for CWD, I want to take the time to explore one project in more detail. The Sydney Playground Project (Bundy et al., 2015) aimed to demonstrate the effectiveness of a program that would (1) change the way parents and teachers viewed manageable risk-taking for CWD' and (2) increase the level of responsibility that CWD' take for their own actions on the playground (Bundy et al., 2015). Bundy and colleagues (2015) described the intervention as consisting first of a risk-reframing program which included parents and teachers participating in sessions focusing on the benefits of risky play. Following this, CWD' were introduced to loose parts in their outdoor play space at school (Bundy et al., 2015).

Following the intervention, Grady-Dominguez and colleagues (2021) examined why the intervention had more success in some schools rather than others. It was hypothesized that staff cultures would be related to intervention outcomes (Grady-Dominguez et al., 2021). The findings indicated that staff in School A emphasized how disability made CWD' different from children without disability, creating an inequity in what they believed CWD' could and could not do. Due to these ableist beliefs held by school staff, children were paired with an adult at recess as they recognized the need for

CWD' to experience risks and challenges, but felt they should be taught how to play and monitored by adults (Grady-Dominguez et al., 2021). These beliefs resulted in children being hesitant to approach the loose parts due to fear, reducing their participation in risky play (Grady-Dominguez et al., 2021). In contrast, the staff at School B emphasized that CWD' were not different, but required more opportunities to participate in play (Grady-Dominguez et al., 2021). The staff at School B had higher expectations for their students, which translated into enthusiasm in the children approaching and using the new playground materials, increasing their risky play (Grady-Dominguez et al., 2021). Overall, this study showed that the beliefs held by adults regarding CWD' and risky play can impact their participation in risky play (Grady-Dominguez et al., 2021).

Stillianesis and colleagues (2022) explored the Sydney Playground Project (Bundy et al., 2015), interviewing 17 parents of CWD to examine how they navigated and enabled risks for their children during play (Stillianesis et al., 2022). Parents described how they were not only concerned about their children engaging in physical risk-taking during play, but also had concerns about the more social aspects of their children engaging in play with others (Stillianesis et al., 2022). These concerns emerged from worry that their children would be excluded during play due to their disability (Stillianesis et al., 2022). Overall, these parents viewed risk as negative for their children, which reflects Western cultural constructions of risk (Stillianesis et al., 2022). As seen in the Sydney Playground Project, when caregivers and school staff are risk-averse this can negatively impact children's risky play opportunities (Grady-Dominguez et al., 2021; Stillianesis et al., 2022). Aversion to risk can be created from values which may be influenced by ableism or the stigmatization of disability, which likely acts as a barrier to risky play for CWD. It is important to further understand the perspectives of caregivers of CWPD regarding their children's risky play behaviours, as their perspectives on risk influence their children's risky play opportunities.

2.7 Caregivers' Perspectives of Play

This study will explore caregivers' perspectives of CWPD' risky play behaviours. Caregivers are commonly parents or guardians of children. I use the term caregiver in this thesis to be inclusive of those who may not be a parent to a child but is there primary caregiver who lives with and takes care of them. It is important to allow caregivers the opportunity to voice their opinions and experiences of their children's risky play behaviours, as they often serve as gatekeepers to their children's play opportunities (Brussoni et al., 2018; McFarland & Laird, 2020). Past literature has explored caregivers' perspectives of risky play in children without a disabilities (Harper, 2017; McFarland & Laird, 2018). Harper (2017) examined risk-averse culture in Canada and how it has impacted children's development. Harper suggests that in Western culture it is important for parents to be perceived as "good" and this may result in fear of risky play due to potential societal judgement (Harper, 2017). Parents have been criticized by community members and threatened by authorities for allowing their children to walk home unsupervised from school, even when living in what could be considered a safe community (Thomas, Stanford, & Sarnecka, 2016).

Caregivers' fears can prompt a range of risk-averse behaviours, including increased supervision and management during play (Christensen & Mikkelsen, 2008). MacFarland and Laird (2017) surveyed 121 parents of children under the age of six about their perspectives on risky play. They found most parents recognized it was important for their children to have risk-taking experiences, but their concern for protecting their children often outweighed this (MacFarland & Laird, 2017). These findings align with the work of Waddington and Pearson (2022) who interviewed caregivers of preschool children regarding their perspectives on risky play (Waddington & Pearson, 2022). They found that a barrier children faced to risky play included their caregiver's aversion to risk caused by fear (Waddington & Pearson, 2022). Little (2010) examined parenting style as a determinant to children's risky play and found "parents' beliefs about risk-taking are reflected in their responses to their child's risk-taking behaviours during outdoor play" (Little, 2010 p.325). They found through questionnaires and interviews with parents, that those who perceived risky behaviours as less of a threat are more tolerant of their children's risk-taking (Little, 2010). Although these children did not have disabilities, it was found that parents played an important role in how their children engaged in risky play.

Caregivers can provide a support system for their children's engagement in play. Their opinions on risk-taking can influence the way their child engages in risky play. In addition, CWPD' face multiple barriers across SEM levels to participating in risky play. Caregivers often must overcome these barriers by finding unique strategies to help maximize their child's participation. Caregivers may have insights about their child's experiences in risky play and the barriers and enablers to support risky play across the levels of the SEM. It is therefore important to understand from the perspective of the caregiver how they view their child's risky play experiences and how they believe their child's physical disability impacts these experiences.

2.8 Gaps in the Literature

There are gaps in the literature that relate to CWD' engagement in risky play. Very few studies examine risky play for CWD, particularly CWPD. The literature that explores CWPD' and their risky play experiences does not explore the perspective of the caregiver. This is important as caregivers serve as gatekeepers to their children's play experiences (McFarland & Laird, 2020). Therefore, the aim of this thesis was to explore from the perspective of the caregivers, how physical disabilities' impact children's risky play. This thesis fills in the gaps in the literature around CWPD and their risky play experiences, including: (1) how caregivers of CWPD' perceive risky play, (2) how caregivers of CWPD' define and characterize risky play, and (3) factors that influence CWPD' risky play from the perspective of their caregivers.

2.9 Summary

There is limited literature exploring risky play for CWPD. It is important that *ALL* children have access to play, including risky play, as it is associated with health benefits that children take with them throughout their lives (Brussoni et al., 2015). It is therefore important to understand the lived experiences of CWPD and their caregivers regarding risky play. The perspective of the caregiver is important, as they serve as gatekeepers to children's risky play (McFarland & Laird, 2020) and are often present when children are engaging in risky play.

I aimed to understand how caregivers perceive their children's risky play experiences. From the perspective of the caregiver, I wanted to understand how they define and characterize risky play. From what I gathered from the limited available literature as well as my supervisor and personal experiences, I believed that CWPD' may be experiencing risky play differently than children without disabilities, and their risky play may not fit within the current definition or categories of risky play (Kleppe et al., 2017; Lee et al., 2022; Sandseter, 2007). I believe it is important for the definition of risky play be inclusive of all children, including CWPD, and therefore my thesis aimed to understand how CWPD are engaging in risky play and how it is perceived by their caregivers.

To ensure that CWPD have access to risky play experiences, it is important to understand the factors that influence their engagement. CWPD face unique barriers to play compared to children without disabilities and children with other types of disabilities (van Engelen et al., 2021). CWPD are quicker to fatigue (Maher et al., 2015) and often face barriers to engaging in play due to the built environment (playground accessibility) (Brown et al., 2021). I have applied the ICF framework to this work to better understand how a child's impairment, combined with their environmental and personal factors, work to together to influence their participation in risky play. By understanding these factors and how they can both positively and negatively influence children's risky play experiences, future research can dive deeper into interventions to overcome some of these factors and to support CWPD' to have autonomy over their own risky play opportunities.

CHAPTER 3: METHODS

3.1 Introduction

There is limited literature exploring CWPD' risky play experiences. The current definition and categories of risky play used in the literature are based on observations of children without disabilities engaging in risky play (Sandseter, 2007, Kleppe et al., 2017). Furthermore, we know little about what factors impact CWPD' risky play behaviours. Therefore, the purpose of this thesis is to understand how physical disability impacts children's risky play experiences. More specifically, this thesis aims to understand how caregivers of CWPD perceive risky play, how they define and characterize their child's risky play behaviours, and the factors they believe influence their child's risky play experiences. This section describes the qualitative approach of this research and goes into depth on the theoretical frameworks and models used to guide this research. This section reviews the recruitment strategies, participant inclusion criteria, details on ethics and ethical considerations, data collection, data analysis, and strategies I used to conduct quality research throughout my thesis.

3.2 Qualitative Approach

Qualitative research is a situated activity that locates the observer in the world (Denzin & Lincoln, 2005). Qualitative research is an important tool in understanding participants' lived experiences (O'Day & Kileen, 2002). A qualitative approach to research aims to tell the story of participants from their own point of view (O'Day & Kileen, 2002). It does not aim to measure characteristics or factors, but it values that there are various views of reality, depending on the individual's context as it views the world as subjective (Creswell & Poth, 2017). This approach is appropriate in disability research as it helps us to understand the interactions among complex phenomenon and realities including disability, SES, gender, and health status (O'Day & Kileen, 2002). This research uses a qualitative approach to understand the unique and individual perspectives of caregivers of CWPD and how their children experience risky play throughout their childhood.

3.2.1 Research Design

The purpose of qualitative description is to explore novel topics, gain understanding of participants' perspectives, and describe the lived experiences of the participants (Sandelowski, 2000). Qualitative description seeks to discover and understand phenomenon, processes, and perspectives of the people directly involved within them (Bradshaw et al., 2017) in their natural environments (Sandelowski, 2000, 2010). There are several features of qualitative description, which this thesis has implemented throughout the entirety of the study (Kim et al., 2017).

Qualitative description allows researchers to draw from a naturalistic perspective to examine a phenomenon in its natural state (Sandelowski, 2000). As caregivers of CWPD' have busy schedules with work, health appointments, and programs for their children in which their presence is often required, data were collected through remote interviews to facilitate scheduling convenience.

Qualitative description is less theoretical than other qualitative designs (Neergaard et al., 2009) allowing researchers to be flexible when committing to a theory during the design process and conducting a study (Sandelowski, 2000, 2010). When using qualitative description, the focus of the researcher is to describe the lived experiences of the participants using similar language (Neergaard et al., 2009). It is important to note here that while the focus of this thesis is to be descriptive, theoretical frameworks including the SEM and ICF were considered throughout the design and analysis process which lends to a more interpretative understanding of the findings. This thesis chose to be descriptive while working with frameworks, such as the SEM as past research in parallel fields have applied the SEM to understand risky play in children without disabilities (MacQuarrie et al., 2022; McFarland et al., 2020). This framework helps to understand the multiple factors which influence an individual's health on various levels and how these levels are interconnected (Bronfenbrenner, 2005). It is also important to think through an ICF lens when considering CWPD' and their experiences, as it emphasizes the impact of the environment and other outside factors on their participation, rather than focusing on the individual and their disability.

Qualitative description data collection strategies involve individual or focus group interviews with semi-structured interview guides (Neergaard et al., 2009, Sandelowski, 2000). Data collection in this thesis was conducted through individual, virtual interviews, using a semi-structured interview guide which was developed using the SEM and ICF frameworks. Qualitative description uses purposeful sampling recruitment strategies to obtain broad insights and rich information (Neergaard et al., 2009, Sandelowski, 2000). This thesis used purposeful sampling to allow for our sample of participants to include a variety of physical disabilities and ages. Data are analyzed typically using content analysis, although thematic analysis may also be used in qualitative description with care (Vaismoradi et al., 2013). In this thesis, data were analyzed using reflexive thematic analysis (RTA) adapted by Braun and Clarke (2006, 2019, 2021, 2022). RTA allows for the researcher to stay close to the data and therefore interpretation of the data is of low inference (Neergaard et al., 2009). An important part of RTA is for the researcher to be reflexive throughout the data analysis, which contributes to a more interpretative approach as one cannot be completely descriptive while applying reflexivity (Braun & Clarke, 2022). Finally, Kim and Colleagues (2017) suggest that when a study uses qualitative description, it is represented in published reports and is expected to be straight forward, including comprehensive descriptive summaries and details of data collection and analysis, which is presented clearly to readers (Neergaard et al., 2009, Sandelowski, 2000). In my thesis, I have aimed to describe all methodologies in a clear and comprehensive manner for both those who are familiar with the research and those who may not be experts in this field.

3.3 Conceptual Framework

A worldview is the philosophical orientation about the world and the nature of research (Creswell & Creswell, 2018). It may also be referred to as a paradigm (Lincoln, Lynham, & Guba, 2011), ontology and epistemology (Crotty, 1998), or a broadly conceived research methodology (Neuman, 2000). The researcher's philosophical worldview helps guide the researcher's actions (Creswell & Creswell, 2018).

This thesis utilized a constructivist worldview. Social constructivists, such as Lincoln and colleagues (2011), Mertens (2010), and Crotty (1998), believe that "individuals seek understanding of the world in which they live and work." (Creswell & Creswell, 2018, p.8). Individuals assign meaning of their experiences to certain objects or things and these meanings are varied and multiple, leading researchers to look for the complexity of their participants' views rather than a narrow meaning of a phenomenon (Creswell & Creswell, 2018). Creswell and Creswell (2018) describe how "the goal of the [constructivist] researcher is to rely as much as possible on the participants' views of the situation being studied" (p.8). This worldview is supported with broad research questions and open-ended interview questions to allow for participants to tell their own stories (Crotty, 1998; Creswell & Creswell, 2018).

Constructivism is based on the notion that everything is socially constructed (Mertens, 2010). Through this worldview is the belief that there are multiple realities, each arising from the construction of meaning and understanding of an individual's context, previous experience, knowledge, attitudes, and beliefs (Mann &MacLeod, 2015). Participants' experiences are influenced through interactions with others and historical and cultural norms (Crotty, 1998). It is important that when using a constructivist worldview, researchers acknowledge that their own backgrounds shape their interpretation of participants' stories, and they position themselves in the research to recognize how their views shape the story of their research through reflexivity (Creswell & Creswell, 2018). I have taken on a constructivist worldview as I aimed to understand my participants' lived experiences to discover their perceptions of their child's risky play behaviours. Using this worldview, I was able to acknowledge that all participants will have unique experiences, views, and positions towards their children's risky play.

3.4 Participants

Participants in this study included caregivers of a child with a physical disability. Caregivers are not exclusively parents and include any individual who is responsible and takes care of the child. Caregivers of CWPD were chosen as participants as they often serve as gatekeepers to their children's risky play experiences and opportunities (McFarland & Laird, 2020). Physical disability in this study is defined as any disability with physical characteristics or that manifests in a physical manner. Children with multiple disabilities were also included, if they had a manifesting physical disability and identified it as their primary disability. Caregivers of children with a primary disability that was sensory or neurodevelopmental in nature were excluded. Caregivers of children between the ages of 7 to 13 years were included. Finally, to be included, caregivers and their child currently reside in Atlantic Canada (Nova Scotia, New Brunswick, Prince Edward Island, or Newfoundland and Labrador).

The age range of 7 to 13 years was determined as during pre-pubertal and pubertal years, children without disabilities begin to engage in more risky play (Jelleyman et al., 2019). For example, Jelleyman and colleagues (2019) found that most children in their study were allowed to climb trees (67.4%), engage in rough and tumble play (60.9%), and ride non-motorized vehicles (54.1%) at age five, and use adult tools (61.9%) at home by age nine. They also found that most children were not allowed to roam the neighborhood unsupervised by adults but with friends (67.6%) until age 13, or alone (64.9%) until age 15 (Jelleyman et al., 2019). Another study found independent mobility was associated with age, where children were less independently mobile at age 8 than 13 (Riazi et al., 2019). It is of interest to this study to determine whether CWPD have a similar timeline for risky play experiences as children without disabilities.

Physical disabilities, including amputations, muscular dystrophy, congenital conditions, and any other disability which manifests in a physical manner (e.g., cerebral palsy), were selected as CWPD face unique barriers to engaging in risky play compared with children without physical disabilities. These barriers include traveling with adaptive equipment in challenging weather (Morales et al., 2018; Sterman et al., 2020), navigating the built environment (e.g., stairs and other physical obstacles) (Sterman, 2018; Williams, 2004), and parental concerns about risky play (Carbone et al., 2021). This study aims to explore how physical disability impacts children’s risky play experiences from the perspective of their caregiver. Future studies are planned to extend this study to include caregivers of neurodevelopmental and sensory disabilities.

3.4.1 Recruitment

Using purposeful sampling, caregivers of CWPD were recruited to participate in this study. Qualitative research typically uses small and purposeful sampling strategies (Miles and Huberman, 1994). Purposive sampling is “used to select respondents that are most likely to yield appropriate and useful information” (Kelly et al., 2010, p. 317). The reason for adopting a purposive sampling strategy is based on the assumption that, given the objectives of this study, people in a specific group may hold important views about the phenomenon of interest and therefore need to be included (Mason, 2002; Robinson, 2014; Trost, 1986). For example, caregivers of children with a severe physical disability or children who are manual wheelchair users may experience risky play differently than children who are not manual wheelchair users or have a less severe physical disability.

Participants were recruited from disability advocacy organizations in the Atlantic provinces and IWK Health in Halifax, Nova Scotia. IWK Health serves children and youth with various health conditions, impairments, and disabilities from across Atlantic Canada. A recruitment poster was placed in the IWK Kids Rehab Clinic waiting room and an information letter was sent to all IWK Kids Rehab Clinic patients via email as most of their patients identify as living with a physical disability. The recruitment poster can be found in Appendix A. Recruitment also took place through disability-serving organizations (e.g., Easter Seals) in the Atlantic provinces. Emails were sent to organization leads and caregivers of CWPD who fit within the inclusion criteria of this study. When caregivers expressed interest in participating, they contacted the primary researcher via email and were screened using the inclusion criteria.

3.5 Ethics and Ethical Considerations

When conducting research involving human participants, the approval for procedural ethics from the relevant ethics committee is required (Guillemin & Gillam, 2004). This study involved interviews with caregivers of CWPD, and although there were no anticipated risks for participants in this study, this does not mean that there was no possibility of risks. An ethical consideration application was completed and submitted to the IWK Research Ethics Boards (REB). This application was approved by the IWK REB prior to the recruitment of participants. The IWK REB letter of approval (Project #1028715) can be found in Appendix B of this document.

3.5.1 Informed Consent and Withdrawal

Prior to participating in this study, informed consent was obtained from each participant by providing them with a consent form via email and obtaining their electronic signature. The consent form provided participants with a detailed description of the purpose of the research, what they should expect, their rights to withdraw from the study, potential harms, costs and reimbursement, conflicts of interest, and how their privacy will be protected. Participants were informed that they could withdraw from the study if they changed their mind after providing consent until the time of the interview. In addition, after their interview they were provided with two weeks in which they could decide to withdraw their information from the study. This could be done by contacting the primary researcher. Withdrawal from this study did not impact participants' care at IWK Health. The consent form can be found in Appendix C of this document.

3.5.2 Privacy and Confidentiality

To protect the identities of the participants' and ensure their privacy within this study, participants were asked at the end of their interview to assign their child a pseudonym for their file to maintain confidentiality. If participants did not want to provide a pseudonym, the primary researcher provided one for them. Direct quotes from participants were used to answer the research questions, which are presented in Chapter 4. Any personal identifiers were removed from participant quotes and interview pseudonyms, or interview numbers, were used to identify the quote. The primary form of contact between the primary researcher and the participants was via email. Participants were also asked to provide family demographic information that was stored on a password-protected computer. There was minimal risk that personal information files would be compromised (e.g., accessed by non-members of research team). However, these risks were mitigated by immediately assigning each file a pseudonym and separating personal information from interviews. After the transcription of the interviews, the audio recordings were immediately deleted.

3.6 Contents of Interview Guide

Caregivers participated in one-on-one interviews conducted through open-ended questioning using a semi-structured interview guide. The interview guide, which can be found in Appendix D, was developed using the SEM and ICF frameworks and qualitative description to allow for participants to share their experiences. This guide was built using previous interview guides from literature focusing on CWD and their play behaviours

(Mactavish & Schleien, 2004; Sterman et al., 2019). This interview guide first focused on exploring what CWPD' play typically looked like on a day-to-day basis, followed by what their risky play looked like, how caregivers defined and characterized risky play, caregivers' feelings towards risky play, and the factors that they believe influence their child's risky play experiences. The interviews finished with family demographic questions to better understand the participant, their child, and their child's disability. Participants were informed that they could skip any question they did feel comfortable answering and may end the interview at any time by informing the researcher.

3.7 Data Collection

All interviews were conducted by the primary researcher and took place virtually over a secure online platform (Microsoft Teams, Zoom). The interviews were recorded using a Dalhousie University recording device to be transcribed verbatim and analyzed. Caregivers also provided alternative names for their child to protect their identity and personal information. Caregivers were asked to assign their own names to be respectful of their cultural identity. After each interview the participant was provided a $50 e-gift card as a token of appreciation via email.

3.7.1 Data Storage

During the interviews, participants were asked to provide personal information about themselves and their child, including age, gender expression, cultural identity, and information about their child's disability and risky play experiences. All documentation including those containing identifying information (e.g., consent form, transcripts) were kept on a password-protected computer behind a Dalhousie University firewall.

3.8 Data Analysis

Following data collection, each interview was transcribed verbatim using Microsoft Word and any identifying information was removed from the transcripts. Data were analyzed using RTA, which was adapted by Braun and Clarke (2016, 2019, 2021, 2022). RTA allows for the researcher to describe the data without over-interpretation, and while using the words of the participants (Braun & Clarke, 2019). Braun and Clarke (2006) explain the importance of researchers keeping a reflexive journal throughout the entirety of the research and the data analysis process, as the researcher's knowledge and views will influence how the data are coded. Therefore, I kept a reflexive journal which was used to reflect upon my opinions and views of relevant topics such as disability, children's development, unstructured play, and risky play, as they related to the research and how they may have changed throughout the research project. For example, prior to the interviews I used my reflexive journal to note down my views on risky play, how I defined risky play, and the reasons behind these views. Following each interview, my views on how I defined risky play began to shift as I heard the unique stories of each child's risky play experience told by their caregiver. During data analysis I returned to my reflexive journal to better understand how participants' lived experiences shifted my views and how I perceived their stories to better understand what risky play looks like for CWPD'. Being reflexive allowed me to be critical and interpretative with caregivers' stories during the analysis, while still remaining descriptive as I focused on analyzing data through the lens of the SEM and ICF frameworks. This is important RTA falls within the spectrum of interpretation and description when analyzing data and presenting the findings.

3.8.1 Reflexive Thematic Analysis

Caregiver data were analyzed using RTA informed by Braun and Clarke (2006, 2019, 2021, 2022). RTA consists of six phases: familiarization, coding, generation of themes, developing themes, refining, and defining themes, and writing. It is important to note that these are referred to as phases rather than steps as Braun and Clarke (2006) emphasize that this process may not always be linear. The following section will dive into the process I followed using RTA to analyze the data set.

1. Familiarization with the data: First it is important to familiarize yourself with the data set. During this phase I transcribed each interview verbatim using Microsoft Word. To promote accuracy, I verified each recording with the transcript. Prior to coding the transcripts, I made sure to read each transcript one more time. During this time, I took notes on sections of the transcribed data which related back to my research questions and documented my thoughts and insights that may have been relevant to the analysis of the data for each interview and for the dataset as a whole. As stated by Braun and Clarke (2022), it is important that during familiarization, researchers dive deep into the content of the data, taking notes, and reflexively engaging with the dataset.

2. Coding: The next phase of RTA is coding. The dataset was analyzed through inductive coding, a ground-up approach, which is a common form of analysis for understudied topics (Braun & Clarke, 2006). According to Braun and Clarke (2022), codes are considered the building blocks for the development of themes in RTA. Coding involves labelling segments of data that are relevant to the research purpose (Braun & Clarke, 2022). This was completed using the NVivo software (Release 1.7.1., QSR International). To begin coding, I read through each transcript and the notes taken during the familiarization phase, to develop codes which I believed to be relevant to the research questions. Looking at the codes I developed after analyzing all 12 transcripts, I then went back into the transcripts to re-code the data in a different order. This allowed for additional codes to be developed from the dataset and other codes to be refined.

3. Generating initial themes: Once I completed my initial coding, I began to create code clusters. My code clusters included codes which had similar ideas and related to each other in regard to the research questions and theoretical frameworks. Once I felt satisfied that my code clusters captured the voices and experiences of caregivers and their children’s risky play behaviours, I began to develop initial themes. Themes are patterns of shared meaning across the data set which are represented by multiple codes (Braun & Clarke, 2022). They are major qualitative findings that show multiple perspectives from the participants that are developed by intersecting codes or code clusters (Creswell, 2014). Looking at codes can be overwhelming. To initially develop themes, I physically mapped my codes onto my research questions using sticky notes. Following, I did the same process by mapping my codes onto the SEM and ICF frameworks, which are frameworks that have helped to guide this research. These visual maps can be seen in Appendix E. Thematic mapping allowed me to visually understand how codes were related to my research questions and theoretical frameworks, as well as how I understood the codes to be interconnected between questions and frameworks. I was then able to develop four themes which reflected the main findings from caregivers and answered the research questions.

4. Developing and reviewing themes: After developing the four initial themes, I went back into the dataset to ensure that the themes represented the most important findings from the data as a whole and of the individual participants. Themes changed and developed as I re-familiarized myself with the data set and developed new codes. At this stage I met with Dr. Feicht (committee member) to talk through my theme development process. By talking through my analysis process with someone who is familiar with RTA, it allowed me to increase my confidence with the dataset which helped me to further develop my themes. For example, by presenting initial themes to my committee members I was able to talk through and further develop their central concepts. We were able to expand the four initial themes which were more bucket themes into five developed themes which are all mutually exclusive and hold one central concept.

5. Refining, defining, and naming themes: The following phase of RTA involves the refinement and defining of themes. After discussing my themes with Dr. Feicht and my other committee members, I finalized my five themes. It is important that each theme consist of one concept (Braun & Clarke, 2022). To assist with the naming of the themes, I described each theme's overarching concept in one to two sentences. By understanding the perimeters of each theme, I was able to better understand the themes and provide them with appropriate names. Following, I went back into the dataset to highlight which codes would fit within each theme. At this time, I also took quotes from participants to help deliver the message of each theme and answer the research questions.

6. Writing: The sixth phase of RTA includes writing up and integrating the findings of the analysis into the thesis. During this phase, I thought about how I should present the themes in the findings and the interpretive discussion. I reflected upon the themes as well as the purpose of the study, the research questions, and the frameworks used to help guide the research. I carefully selected each quote within each theme presented in Chapter 4, which reflects the voices and experiences of the participants. All themes are presented in Chapter 4.

3.9 Quality Considerations

It is important to follow the steps to ensure that quality RTA has been conducted. Data analysis was performed using RTA adapted by Braun and Clarke (2006, 2019, 2022). Braun and Clarke (2022) have their own 15-point checklist to warrant that quality thematic analysis has been performed. This checklist can be found in Appendix F. As described by Braun and Clarke this checklist can be a useful tool to ensure that good quality thematic analysis has been carried out but only if it has been accompanied by thoughtful engagement and understanding of the researcher (Braun & Clarke, 2022). RTA is more of an adventure than a recipe (Braun & Clarke 2021), therefore, components of this checklist are recommended yet the focus of the researcher should be on fostering depth of engagement, reflexivity, and theoretical knowingness (Braun & Clarke, 2022). Theoretical knowingness is a concept Braun and Clarke (2022), speak on in their textbook to ensuring quality RTA. They define theoretical knowingness as "having an understanding of the philosophical and theoretical assumptions that might be embedded in particular approaches or technique and striving to use such approaches and techniques with an awareness of those assumptions" (Braun & Clarke, 2022, p.296). I employed the concept of theoretical knowingness throughout my research process. For example, I used the SEM and ICF frameworks in the development of my interview guide, as well as when analyzing the data, while still remaining reflexive and acknowledging my own interpretations of the data. This allowed me to use participants' own words and voices while interpreting them through these theoretical frameworks to understand the factors which influence CWPD' risky play and how they are interconnected to one another.

As described by Braun and Clarke (2022), RTA is flexible and therefore it is important for the researcher to be an active participant. As this thesis used qualitative description, the goal was to present a description of the participants' lived experiences. Yet, it is important to note that when using RTA, you cannot be completely descriptive in analyzing and presenting the data but lie somewhere on a spectrum between descriptive and interpretive (Braun & Clarke, 2022). This thesis lies closer to the descriptive end of the spectrum, as I approached the data using qualitative description, yet still includes some interpretation of the data, as I applied theory and frameworks and my own reflexivity as a researcher to analyze and interpret the findings.

The 15-point checklist to ensure good thematic analysis (Braun & Clarke, 2022) goes through each phase of RTA as described in section 3.8.3 above. For example, they recommend that all data be transcribed to a level of appropriate detail and that each transcript be checked against the original recording for accuracy (Braun & Clarke, 2022). I thoroughly transcribed each recording verbatim and took notes during the interview and transcription process. I also ensured for accuracy by double checking the transcripts against the original recording. Items two to six of the checklist describe recommendations for coding and theme development. I have followed all the recommendations from this section of the checklist, as I coded each transcript multiple times prior to developing my themes. The coding process was thorough, inclusive, and comprehensive to ensure that themes did not only reflect a few participants but the dataset as a whole (Braun & Clarke, 2022). During theme development, each theme was checked against the coded data and original dataset. Finally, I ensured that all themes were distinctive of one another by giving each theme a well-defined central organizing concept (Braun & Clarke, 2022).

Items seven to ten on the checklist provide recommendations for the analysis, interpretation, and writing phase of RTA. To ensure that the data were interpreted during analysis rather than summarized, I discussed my analysis process and theme generation with others who were familiar with RTA, as advised by Braun & Clarke (2022). This helped to strengthen my themes, to tell the stories of the participants' lived experiences and respond to the research questions. I also ensured that I included direct quotes in the findings to allow for the voices of participants to tell the story.

The remaining points on the checklist touch on the overall process and the written report. RTA is not a short process. Braun and Clarke (2022) recommend that you think not of time as hours of analysis but also include time for broader reflection of ideas and conceptualization. During my analysis process, I made sure to take time between analyzing the data and creating the themes to read my notes and think about the underlying messages from participants. When you step away from the data for a moment and think critically about the purpose, it allows you to come back to the data with a fresh perspective. This also helps to alleviate burnout during this time.

As touched on before, I have used a reflexive journal throughout the process of this thesis, from data collection, analysis, and the writing of this report to reflect upon my past and current assumptions and knowledge as it has shaped my interpretation of the data. Braun and Clarke (2022) advise keeping a reflexive journal to avoid 'positivism creep'. Positivism creep is another term defined by Braun and Clarke as, "the unacknowledged and unreflexively adherence to (post)positivist assumptions, values, and norms in qualitative research, treating (post)positivist assumptions and values as reflecting universal good practice for all research in an unknowing way" (Braun & Clarke, 2022, p.292). Here, it is important to push yourself to think about not only your thoughts but the emotional responses to the data based on your assumptions and knowledge. The checklist recommends that the described methods and what was conducted are adjacent. This has been accomplished, as I describe the process which I followed to conduct RTA in depth throughout Chapter 3. It is important that the language used in this report is coherent with frameworks used to drive the analysis (Braun & Clarke, 2022), which in this case is the SEM and ICF frameworks. The final checkpoint to good quality thematic analysis is that the researcher positions themselves as being active in the research (Braun & Clarke, 2022). To accomplish this, I have used first-person language to convey to the reader that I drove and lead this research, from recruitment and data collection to the analysis writing. I created the themes presented in Chapter 4, based on my interpretation of the participants' lived experiences.

CHAPTER 4: RESULTS

In this chapter, I outline the findings of my thesis. I present a summary of who participated in the study and some information about their children. I then describe the five themes I generated using RTA. I have aimed to capture caregivers' stories of their children's risky play experiences while remaining reflexive of my own interpretations and, in this chapter, highlight my findings using key quotes from caregivers.

4.1. Participant and Child Demographics

Here I will present a narrative description of the demographic data collected in this study, without identifying information to ensure confidentiality remains intact. A total of 12 caregivers participated in this study. Interviews were 52 minutes, on average. All caregivers identified as being parents of a child living with a physical disability. Of the 12 participants, nine identified as mothers and three identified as fathers. Caregivers' ages ranged from 34 to 47 years, with a mean age of 42 years. Most participants identified their and their child's race as white. Other caregiver and child ethnicities included Acadian, Metis, and South Asian. When asked about where they resided, eight caregivers stated that they lived in an urban dwelling, while four lived in a rural dwelling, although all lived within or near a major city centre.

Caregivers also provided information about their child, included were six boys, five girls, and one child who identified as non-binary. Children ranged from 7 to 13 years of age, with the mean age being 10 years. Disabilities and impairments varied among children and included cerebral palsy (group of disorders which affect an individual's movement, including their gait, balance and posture), Rett Syndrome (a neurological and developmental disorder, affecting the development of the brain, resulting in progressive loss of motor skills and language), ataxia telangiectasia (a neurological disorder, affecting the part of the brain which controls motor movement and speech), transfemoral amputation (where there is a loss or removal of the leg above the knee), and right club foot (a birth defect, affecting the muscles and bones of the feet). One child did not yet have a formal diagnosis but was awaiting formal assessment at IWK Health. Many children had multiple disabilities, and the severity of each disability varied depending on the participant. Caregivers described that most children used some form of assistive device or mobility aid on a daily basis. Seven children used a manual wheelchair, one child used a power wheelchair, and four children did not regularly use a manual or power wheelchair unless engaging in parasport.

4.2 Summary of Themes

Five themes were developed using RTA, adapted by Braun and Clarke (2006, 2019, 2021, 2022). The themes represent the findings from the perspectives of 12 caregivers of CWPD regarding their children's risky play experiences. I organized these themes to tell a story which I believe represent the lived experiences of these caregivers and their children living with a physical disability. The first theme explores the definition of risky play and how it may lack an element of risk to be inclusive, as any activity can be risky for CWPD during play. The second theme illustrates how caregivers do not exclusively define risky play as involving physical risks but highlight that play also involves social risk-taking for CWPD. The next theme describes some of the barriers that CWPD face to engaging in risky play at school as they are often not allowed to participate in risky play alongside their peers. The fourth theme looks at the additional pressures placed on caregivers to support their child living with a disability to engage in risky play. The final theme emphasizes that it is not only important that CWPD have access to play spaces, but that they feel a sense of belonging within these spaces as it supports their risky play.

4.3 Theme 1: Disability Can Make Anything Risky!

Caregivers of CWPD described their children engaging in a wide variety of activities that they considered to be risky. Many of these activities can be organized into the current eight categories of risky play previously described (Sandseter 2007; Kleppe et al., 2017). For example, many caregivers described that their child was engaging in play at high speeds. One caregiver expressed that his child, "*loves when he is moving fast"* (Interview 9), while another said, *"definitely the fast one, he loves going fast*" (Interview 7). Other caregivers described that their child enjoyed playing at great heights. For example, one caregiver said, *"some of the stuff that would be considered risky like climbing like on a playground, just climbing up"* (Interview 1). Another caregiver expressed that their child engages in play that could fit within the categories of risky play, especially rough and tumble play, as they stated, *"he is definitely doing within those categories, like the rough and tumble"* (Interview 1).

Despite CWPD' engaging in risky play that is similar to that of children without disabilities, there is a missing element to the current definition and categories of risky play for it to capture the full picture of what risky play looks like for CWPD. Multiple caregivers expressed the idea that many activities that would not be considered risky for children without disabilities are risky for their children due to their impairment. One caregiver expressed that some activities just; "*Wouldn't be risky for kids that don't have a disability but for him they are. Because of his disability and what his body allows him to* *do"* (Interview 1). Another father expressed this same idea by saying that, *"he [child] could be doing anything; any activity could be risky"* (Interview 12).

Caregivers discussed how there are various elements of play that make it risky. CWPD can engage in risky play but due to their impairment, activities that may not be risky for children without disabilities are for CWPD. For example, across interviews, caregivers expressed that walking was risky for their child, as many children experienced a mobility or balance impairment. One father told me that, "*I worry more about him walking down the hall than at powerchair soccer"* (Interview 12), while another caregiver expressed, she has, *"observed her [child] doing like her typical walking which some people would say her typical walking looks risky"* (Interview 5).

Another element currently missing from the definition or categories of risky play is the increased risk of injury for CWPD. Caregivers expressed anxieties about risky play as there were increased consequences of being injured for CWPD compared to children without disabilities. CWPD are often at higher risk of injury compared to children without disabilities and caregivers expressed their concerns about their children's safety when engaging in play. For example, one mother said, *"he is also at higher risk than most children for head injuries, so he is a climber, you know when he is climbing and not being careful there is a risk there"* (Interview 2). Another caregiver expressed that they consider risky play to be,*"more so when he is at risk"*, describing that, *"he could be doing anything, any activity could be risky"* (Interview 12). Inaccessible play spaces and other environments can increase the risk of injury for CWPD' as they are more likely to fall or hurt themselves, creating a scenario where they are at risk of injury during play.

Other caregivers spoke about the idea that all play can be considered risky for CWPD. One caregiver expressed that, "*in every play there is risks"* (Interview 11), while another said, *"just running around playing with other kids, that that to me is risky*" (Interview 6). Caregivers believed that playing with other kids, including those without disabilities, was risky as their child may not be able to keep up. Many CWPD have decreased balance and therefore are more likely to tumble, increasing their risk of injury during play. Other impairments associated with children's disability may increase risk during play. For example, one caregiver of a child who is nonverbal described that, *"due to his [child] communication barrier he won't be able to describe what he wants or what he is comfortable with so that can make something risky"* (Interview 9).

This theme explores the way in which caregivers define risky play for CWPD based on their child's functioning and their lived experiences. Caregivers provided examples of risky play activities including; *"climbing on a playground"* (Interview 1); *"downhill skiing"* (Interview 12),;*"dangling from monkey bars"* (Interview 2); and *"going down water slides*" (Interview 7). These activities include established elements of risk, for example, play at high speeds and great heights. Caregivers also perceived activities such as walking to be risky for their children, as many have impairments related to balance, necessitating the use of assistive devices and increasing the risk of falling. Many caregivers expressed how they associated risky play with risk of injury or danger for their children. Overall, how risky play was defined was unique for each family as their child's function and mobility differed, as well as their environmental and personal factors which influence their play. It is clear from caregivers of CWPD that disability impacts how children experience risky play. It is important that CWPD' be considered in the definition and description of risky play as their experiences of risky play may differ from children without disabilities.

4.4 Theme 2: We Can't Define Risky Play Without Considering Social Risks

Historically, risky play has been defined as physical risk-taking. However, many caregivers in this study expressed that there are social risks to their child engaging in play. For example, "*I would say risky play is social. Taking social risks, putting himself in situations where others would judge him"* (Interview 10) is how one caregiver defined risky play for their child. Similarly, another caregiver described their child taking social risks during play as they said that, "*sometimes even just showing up is a risk"* (Interview 3). The social component of risky play was primarily brought up by caregivers when talking about joining play with peers. One caregiver said, *"I mean she takes social and emotional risks just by joining in to typical play"* (Interview 5). These social risks caregivers are describing may stem from a lack of knowledge or education about disability from their peers. One mother expressed concern of her child engaging in play with children without disabilities as she felt that even; *"to approach them and say hey do you want to play with me is taking a risk"* (Interview 2).

These social risks can be barriers to CWPD' participation in play, as their play may look different from others due to their disability. One caregiver described their child as, *"pretty risk adverse to social risks"* (Interview 10). Another caregiver described their child as wanting to fit in with others during play as they described that, *"you know you want to play with your peers to be part of the group, but there is also a pressure that goes along with that to be doing the same thing as everybody else"* (Interview 2). They described that their child uses an assistive device to help him engage in play, although sometimes this made him feel uncomfortable around his peers as, *"it just draws attention to something he would rather not draw attention to"* (Interview 2). To engage in play and risky play, sometimes CWPD' must rely on assistive devices or on others for support. CWPD' must therefore trust others, whether it be their peers, caregivers, siblings, or support staff to help them engage in play. Many caregivers spoke about how they considered trusting others to help their child engage in play to be risky. For example, one mother said, *"she is trusting other kids not to push her too hard or too fast"* (Interview 8). Similarly, she shared with me that, *"Risky play is trusting others that she will be supported regardless of the outcome. And being comfortable with not knowing"* (Interview 8). Another caregiver spoke about how risk could be trusting others you are not familiar with, *"I mean she is interacting with people who she may not normally interact with, so she is taking risks by making new friends, she is getting out there"* (Interview 11).

Caregivers were for the most part supportive of their children engaging in risky play, whether that be physical or social risk-taking. Caregivers expressed that they wanted their children, *"to engage in as much as any other kids"* (Interview 1). Many describe the importance of their children engaging in risky play as it is beneficial for them. For example, one caregiver said to me that risky play, *"gives him [child] more confidence for sure, he can do things on his own"* (Interview 12). Another caregiver said when asked about risky play that her child, *"Loves it and she is very very proud of herself. No, it is only benefits"* (Interview 8).

Play, and risky play, may look different for CWPD. One caregiver described this as they said, *"so he might not take a risk to do stuff, it might not be a physical risk, but it* *is a social risk"* (Interview 10). Some CWPD may also experience social barriers to engaging in play; for example, one caregiver described not being able to play at community playgrounds because, *"sometimes there's a bit of a social barrier for her [child] if a playground is very busy"* (Interview 5). All participants in this project had a child whose primary disability was physical in nature, where gait, motor control, and even speech may be affected. As such, there may also be social barriers to engaging in play. Children without disabilities may not understand why a child is using a mobility aid, has gait or motor control differences, or cannot communicate in the same way. CWPD may not feel accepted or included by peers without disabilities. For example, one mom expressed to me that, "*at school some of her peers are better than others at interacting with her"* (Interview 5). This was often found to be the result of children not understanding their peer's impairment. One caregiver expressed that the school did a presentation about their child's impairment so their peers could better understand; she told me that, *"she loved that, that school was talking about her and her condition so her peers could better understand her"* (Interview 8).

Despite the social risks and barriers, caregivers try to remain supportive of their children engaging in risky play. They believe that risky play is important and beneficial for their children, as it helps them learn lessons about their body. Despite the benefits of risky play, caregivers also expressed anxieties about the inherent social risks that come along with play for their children. To summarize this, one caregiver explained that, *"There is risk in anything but if it's worth it you might as well risk it. But there is definitely a social aspect of it as well"* (Interview 12).

This theme explores the way in which caregivers of CWPD define and characterize risky play. In the current literature, risky play is primarily classified as physical risk-taking. Caregivers from this study emphasize the social risks their children encounter during play. Sometimes children are hesitant to engage in play with peers, especially those without a mobility impairment, as the way they participate in risky play may look different from their own. It is important that CWPD' can trust their peers to help support them in play, to create inclusive play environments where they can freely take risks.

4.5. Theme 3: "Not Allowed" to Participate in Risky Play

When engaging in play at school, CWPD are under the supervision of school staff, including teachers and educational program assistants (EPAs). Caregivers spoke in their interviews about this notion of their children not being allowed to participate in the same activities as children without disabilities at school due to the opinions and beliefs of school staff. One caregiver expressed that they believed their child was not allowed to participate in certain activities due to increased safety concerns due to their child's impairment. They said, *"I think another barrier you know I know I'm sure we do it to but especially at school because of safety reasons there is some stuff he wouldn't be allowed to do"* (Interview 1). They explained, *"That is something we have come across is that he isn't allowed to necessarily do certain things or to participate in certain activities. Umm due to the risk that is there because of the disability"* (Interview 1). Another caregiver also expressed their child did not have the same opportunities to engage in independent play at school as children without disabilities, as they said, *"so at school I think they are a little bit more hesitant to just let him play on his own and crawl around"* (Interview 7).

Caregivers expressed the need to advocate for their children to have the same access to risky play at school as their peers. One caregiver expressed that their child's school yard, *"Has a component of a wooded area too so we have advocated for her to be allowed to go in there. And sometimes met resistance on that but all the other children are playing in there too so I think she should play in there"* (Interview 5). Another described having to advocate for their son by having conversations with school staff, as *"they would just be like oh we don't want him to play on that, it's the same as any kid playing, that kind of thing, so we just try and talk about having those conversations with the school"* (Interview 1). Many caregivers supported their children's risky play at school through advocacy. This not only included conversations with school staff, but one mother expressed that it sometimes included sending, "*videos of [her child] doing things that are you know, riskier"* (Interview 5) to prove to the school that her child should be allowed to engage in these activities with her peers. Further, they expressed having to go, "*to school and support her at recess just to encourage a variety of activities for her"* (Interview 5).

When at school, children sometimes rely on an EPA and their peers to help facilitate their engagement in play. For example, when asked about their child's play at school, one caregiver talked about support systems as she said that her daughter, "*has an EPA and she has a little girl that helps her"* (Interview 11). Another caregiver said, *"at school some of her peers are better than others at interacting with her, and it also depends on the level of facilitation that is happening with her EPA"* (Interview 5). Many caregivers encountered barriers to support for their children to engage in play at school on the playground as they have, "*encountered caregivers or aids who are not as confident"* (Interview 5) in allowing their children to engage in risky play. Another caregiver expressed that there is, *“nobody there trying to go the extra mile to make sure he can get up there and that’s something we are addressing but it is a huge problem with understaffing”* (Interview 2). Due to understaffing, another caregiver told me that their daughter is, *“just made to do things she's not given any options”* (Interview 11).

This theme explores the barriers CWPD’ face to engaging in risky play at school created by ableist ideation of CWPD. Through speaking to caregivers, it was evident that they supported their children’s risky play, yet when at school children faced barriers to engaging in risky play as they were often not allowed to participate. Caregivers believed this to be due to ableist opinions and values of school staff surrounding disability as well as lack of education and resources. Caregivers had to go the extra mile to support their children’s risky play not only at home but at school. They confided multiple strategies which they implemented to help advocate for their children to be allowed to engage in more risky play at school. It is important that we have support systems in place at schools to help CWPD engage in more risky play alongside their peers.

4.6 Theme 4: Additional Pressures Caregivers Face to Supporting Risky Play

Caregivers shared that risky play was both beneficial and important for their children and that they would go above and beyond to support their children’s risky play. One caregiver expressed that they wanted their child to participate in risky play, *“because it is good for his development physically, emotionally and socially*” (Interview 2). Other caregivers shared benefits to risky play, including that it helped their children learn about their bodies and abilities. For example, *“getting hurt is teaching them where those limits are”* (Interview 1), *“oh it gives him more confidence for sure, he can do* *things on his own"* (Interview 12), and "*that autonomy that comes from an independence that comes from trying new things and feeling successful at it"* (Interview 3).

As caregivers are supportive of risky play, many children were engaging in risky play at home or in their communities with their families. One caregiver expressed that when their child is, *"out with his family the types of risks are bigger"* (Interview 2), compared to when they engage in risky play at school under the supervision of other adults. Although risky play often occurs at home under the supervision of caregivers, school was described as the primary environment where children were provided the most time to engage in play as caregivers often had busy schedules. For example, one caregiver expressed this by saying, *"so play typically happens at school most of the time."* (Interview 10), while another said, "*With our work schedules we don't get home until 6 o'clock. There is never really a whole lot of play at our house"* (Interview 10).

Caregivers' busy schedules were expressed as barriers to supporting their child's risky play. Caregivers also expressed that their busy schedules, on top of being a full-time caregiver of a child with a disability, contributed to caregiver fatigue, which acted as a barrier to their children's risky play. One caregiver told me that, *"we are older, and we are tired, I mean I have been a full-time caregiver for ten years, I am tired"* (Interview 8). Caregivers must not only provide emotional support for their children but physical support during play. One explained that, *"some of the biggest barriers, well it is definitely just doing the transfers like getting her on and off of the sledge"* (Interview 11). Similarly, another explained the importance of accessible environments, describing how, *"having ramps and elevators in place to get to the thing is helpful because us as caregivers are not carrying her or taking the physical exhaustion of getting to the thing"*

(Interview 5). When the environment is not accessible for CWPD caregivers must often go the extra mile to support their child's participation. For example, arriving early, carrying their child up the stairs, and supporting them throughout an activity. These are extra pieces which are not always considered when thinking about children's access to risky play.

Caregiver fatigue was described as both physical and emotional. One contributor to emotional fatigue was the financial stress associated with providing their children opportunities to engage in risky play. For example, many CWPD' rely on assistive devices to engage in play, including wheelchairs, Action Track chairs, hippocamps, and walkers. These devices are often required to support CWPD' to engage in both structured play (parasport) and unstructured play (hiking, accessing playgrounds). Caregivers expressed that the cost of this equipment was a barrier for their children to engage in risky play; *"they make everything really expensive"* (Interview 11) or *"equipment can be a little bit of a barrier because it is expensive"* (Interview 5) were common concerns. Some children in this study did not use any assistive devices unless engaging in parasport, while others required additional devices or support to engage in play in the winter months due to a decrease in accessibility during winter months. For example, one parent expressed needing to get; "*new tread for his [child's] regular powerchair so that kind of helps in the winter*" (Interview 12).

Caregivers spoke to me about the importance of overcoming their fatigue to support their children's risky play. One strategy mentioned was to hire respite workers to help support their children during inclusive programming. For example, one caregiver told me that during their daughters inclusive programming they try to; "*send a respite* *support person or caregiver with her because no one wants their parents as their helper*" (Interview 8). Another caregiver told me that their child; "*cannot run [his] wheelchair himself so we can do, or we can get a respite* worker [to help him]" (Interview 9). This is important for children to feel comfortable engaging in these programs with their peers, while still being supported in their participation. Unfortunately, caregivers expressed that, "*it is not that easy, [as they have to] pay for respite support during the programming*" (Interview 8).

This theme explored how caregivers perceive risky play and their own experiences in relation to how their children are participating in risky play. Caregivers are supportive of their children's engagement in risk-taking, but they face many barriers themselves to supporting their children's engagement (e.g., busy schedules, increased financial burden to assistive devices, their own fatigue). Some caregivers mention strategies to help overcome certain barriers, such as hiring respite workers. Unfortunately, this is not as easy as it seems, due to a lack of funding and availability for respite workers. When thinking about how to support CWPD' to engage in risky play, we should also be considering how to support their families and caregivers as they face additional pressures to supporting their children's risky play.

4.7 Theme 5: Not Just Access but Belonging

It is important that CWPD' not only have the opportunity to engage in risky play, but that they have options for quality participation in activities they enjoy. Many caregivers talked at length about various programs their children took part in. Many of these programs were run by Easter Seals; for example, Learn to Ride, Learn to Dance, Learn to Sledge, and Powerchair Soccer were all popular activities brought up throughout the interviews. The importance of these programs was clear, as one caregiver said, *"sledge hockey has really been the only thing that has gotten her out of her wheelchair, and doing something physical where she is not in her wheelchair"* (Interview 11). Another caregiver expressed the importance of these programs to their child as they said to me that, *"The organizations that are out there like power wheelchair soccer, that is huge for him it is probably one of his favorite things to do. And it is something for him to look forward to"* (Interview 12). Parasport and adapted programs did not only allow children to be more active but helped increase their risk-taking; one mother explained that the; *"More involved with Parasport they are, their risk-taking skills have developed significantly. They are more willing to take risks and more comfortable"* (Interview 3). They felt this way as these types of programs allowed their child to; *"feel more comfortable taking those risks in an environment where other people also have some form of limitation, there is less judgment involved"* (Interview 3).

In order for children to take risks during play it is important that they feel physically and socially supported. Caregivers expressed that their child often held negative perceptions about their bodies and impairments, which acted as a barrier to their risky play participation during unstructured play. For example, one caregiver said, *"the main thing that he is sensitive to is his appearance"* (Interview 10) when talking about barriers her son faced to engaging in risky play at the playground. Another caregiver told me that the main barrier their child faced to engaging in play with their peers was their child, "*telling himself that he shouldn't, or he can't do it"* (Interview 1).

Providing CWPD' with spaces where they feel supported and that they belong can help to reduce their negative self-perceptions and foster quality participation. CWPD' should be afforded the opportunity to engage in a variety of activities that they enjoy and feel comfortable doing. Many caregivers spoke about Learn to Ride, an inclusive horse camp for CWD'. One mother told me that her daughter is, "*obsessed with horses and loves horse camp"* (Interview 8). Another spoke about her daughter participating in Learn to Dance where; *"she gets to move her body and gets the exercise that she needs and she just really enjoyed doing that"* (Interview 6). Others talked about an adaptive ski program where children would go on a sit ski and volunteers would assist them down the hill. One mother explained this saying, "*So it's two skis and a chair. They have volunteers who are trained to use the sit ski and they take people out in the sit ski who need support in skiing"* (Interview 7). These programs would not be as successful or popular with caregivers or CWPD without their volunteers and coaches. Caregivers expressed this as one told me, *'I think having a coach who understands and is encouraging definitely helped last year"* (Interview 3) and that, *"those are the kinds of activities especially with good coaches that will help build that confidence and risk-taking tolerance"* (Interview 3). Notably, these are all structured programs and fewer caregivers told stories of their children engaging in risk during unstructured play as their child often faced physical and social barriers to unstructured play environments.

Having multiple programs that CWPD' can try is important to their quality participation. One caregiver expressed this, saying, *"yeah I think the non-profit organizations or programs are helpful to try different things"* (Interview 9). The fact that these programs are free for children was a large facilitator to their engagement. Caregivers also spoke about respite workers and the importance of this type of support for their children. One caregiver said, *"the respite worker has been a human facilitator"*

(Interview 9). Funding for CWPD' to engage in community programs is important, although caregivers often must attend with their child for support. Having access to respite funding allows CWPD' the ability to engage in programs without their caregivers, while still being supported. When asked about opportunities in the community, one mother expressed that a large facilitator for their child's participation was that, *"community services not only paid for the support worker to attend with her they also paid transportation costs to get to the camp"* (Interview 8).

While accessible programs are important to CWPD' quality participation, accessible spaces are needed so that caregivers can get their children to these programs. Accessible spaces are important for CWPD' to engage in active transport and overall, PA and play. One caregiver explained that they struggle with accessibility, saying that, "*The world is not really set up for persons who need extra support right. I mean the big, the basics, steps, doors, not being accessible, those kinds of things"* (Interview 7). Another caregiver emphasized their challenge with accessibility in their community by saying, "*umm I mean I more just want to emphasize that like when something is constructed its typically not constructed with the lens of like what is possible for everyone"* (Interview 5). Caregivers spoke about how their children want to engage in play at playgrounds but many struggle due to the lack of accessibility. When speaking about their child's school playground one caregiver said, *"like the one at his school is up on top of a gigantic hill and there is no pathway it's just grass which in the spring and fall is basically a big hill of mud"* (Interview 2). Even if the child can get to the playground, many times they cannot access the entire play structure. For example, one caregiver explained the lack of accessible structures at their local playground as she said, *"a lot don't have stairs"*

(Interview 6). Being able to engage at playgrounds was seen as important to caregivers, as one mother explained that, *"it makes her sad that she cannot engage with the playground equipment the way the other children can"* (Interview 8).

While this is the reality for many CWPD' and their caregivers, others expressed changes in their community structures to make play environments more accessible. For example, one mother spoke about being able to go to the beach with her daughter, noting how, *"In the past I would say, like beaches and things like that, it would have been hard for her to get down there is sand its uneven. But now in our community they have a new beach, which is accessible"* (Interview 4). I asked her what made this beach accessible, and she explained *"they have large matts and things you take for granted unless you have a child who has those needs"* (Interview 4). Another caregiver spoke about an accessible playground near their home, describing how, "*here it is definitely an accessible playground it has the soft matting and not gravel"* (Interview 12). Another caregiver said they had the opportunity to send their child to; *"an inclusive accessible daycare in the city that she went to for I want to say three or four years"* (Interview 8). It is important that when designing play structures that CWPD' needs are considered. Increasing accessibility of play spaces, while maintaining elements of risks, are important for CWPD, as it helps them engage in more PA, play, and risky play within their communities.

This theme touched on the factors which influence CWPD' quality participation in risky play. Attendance to sport programs that were tailored to CWPD', were very influential in helping children feel belonging. Caregivers expressed excitement when talking about the wide variety of programs offered for their children to engage in risky play. Across caregivers they agreed that, *“Easter Seals does a great job”* (Interview 8) at providing their children with quality inclusive programming. They also spoke about the importance of these programs being offered throughout the year. It is important that CWPD’ have the opportunity to pick and choose activities that fit their interests and needs. While programming has helped CWPD’ quality participation, many still face physical and social barriers to play spaces within their communities. It is important that when designing play spaces, we consider CWPD’, and their caregivers needs to better support their risky play.

CHAPTER 5: DISCUSSION

5.1 A Summary of the Findings

I had the opportunity to speak to twelve caregivers about their personal experiences and perspectives of their children's risky play behaviours. Every caregiver told a unique story of their child's risky play experience, although across interviews there were many communalities.

One of the main take-aways of this thesis is that caregivers of CWPD define and categorize risky play somewhat differently than ways risky play is defined and characterized in the literature (Kleppe et al., 2017; Lee et al., 2022; Sandseter, 2007). For example, caregivers expressed that their children engaged in play at great heights and high speeds, but that their children experienced an increased risk of injury due to their impairment when playing, making most play risky. They commonly spoke about how activities that would typically not be considered risky such as walking unsupported, was risky for their child due to their impairment. Overall, they expressed that anything can be considered risky when you have a child who lives with a physical disability.

Risky play is commonly defined based on physical risk-taking; however, caregivers in our study emphasize the social risks that arise for CWPD' during play. Play is an inherently social activity for children (Barnett, 1990). Caregivers of CWPD shared stories about their children experiencing social risks when engaging in play with their peers. They emphasized that social risk-taking was exacerbated when their children engaged in play with peers without disabilities. It was believed by caregivers that these social risks originated from negative experiences created by a lack of understanding about disability from other children and cultural stigma surrounding disability. These social influences affected the way CWPD' perceived their own abilities and consequently their engagement in risky play. Caregivers expressed that it was not only children without disabilities who lacked knowledge about disability and risky play, but also school staff. Caregivers told stories about how their children were not allowed to engage in risky play at school due to beliefs held by staff, which emphasized fear of injury for CWPD'. Caregivers valued risky play for their children and often had to advocate for their them to be allowed to participate in risky play when at school. Caregivers spoke about how they often faced additional pressures to supporting their children's risky play. These pressures were often linked to barriers which included children's negative self-perceptions, caregiver fatigue, and the cost of adaptive equipment often needed to engage in risky play.

This thesis highlights that caregivers believe that it is not only important for their children to be allowed to engage in risky play but that they should have a variety of options to experience quality participation. Quality participation is important for all children, but CWPD' are often given fewer options than children without disabilities. Quality participation is a determinant of whether a child continues to engage in an activity (CDPP, 2018). The CDPP is an alliance of university, public, private, and government sector partners that work together to support community participation among Canadians with physical disabilities (CDPP, 2018). Their last project focused on three sectors: employment, mobility, and sport and exercise. Within the sport and exercise group, the CDPP created a framework which supports building quality participation in sport for children, youth, and adults with disabilities (CDPP, 2018). According to the CDPP (2018), quality participation is built on six building blocks: (1) belonging, (2) autonomy, (3) mastery, (4) challenge, (5) engagement, and (6) meaning. My findings highlight aspects of quality participation and its importance for CWPD’ when engaging in risky play. As caregivers expressed, it is not only important that CWPD’ be able to access risky play but that they are able to fully participate in inclusive activities that suit their own passions and desires.

These findings helped respond to the research questions, which explored how caregivers of CWPD’ perceive risky play, how they define and characterize risky play, and the factors that they believe influence their children’s risky play. Below, I will situate the findings within the ICF and SEM frameworks, as they were used to guide this thesis. These frameworks emphasize the role of the environment and outside factors which influence CWPD’ participation. Throughout these sections I will emphasize how the findings are situated in each model as well as how they interact with each other. Following, is the importance of CWPD’ having the opportunity to exert their own autonomy through DoR, an important concept which should be discussed when exploring risky play for CWPD’. This chapter will then discuss how these results can help us reconsider the way we define and think about risky play. Lastly, this chapter discusses the strengths and limitations of the project and future recommendations to expand on the literature to understand how we can better support CWPD’ engagement in risky play moving forward.

5.2 Risky Play for CWPD through an ICF Lens

The ICF framework is a biopsychosocial model of disability. It describes how disability is experienced complexly, with notable dynamic interactions between a person’s environment, functioning, and participation (WHO, 2001). A citation analysis revealed that the ICF and the F-words of childhood disability have been used to support a holistic approach to childhood disability, promoting participation in PA and rehab interventions, and measuring quality of life for CWD' (Soper et al., 2019). These frameworks have been used by service providers, caregivers, researchers, and policy makers to support CWD' and their overall health and well-being (Soper et al., 2019). The aim of the ICF is to provide a universal framework across users. The F-words of childhood disability are closely related to the ICF framework to increase comprehension when putting the ICF into practice with children and their families, as it represents the fundamental aspects of every child's life (Rosenbaum & Gorter, 2012). The next section will include examples of factors which caregivers described as influencing CWPD' risky play. Using the ICF framework we can understand how these factors are interconnected and influence how children experience disability, function, and participation. This section will then provide insight on strategies of how healthcare providers can use the ICF and the F-words of childhood disability in practice to support CWPD' risky play.

5.2.1 Examples using the ICF Framework

Figure 2, found in Chapter 2, shows the ICF framework which describes how body functions and structures, interact with environmental and personal factors to influence how people with living with a disability experience participation (World Health Organization, 2001). Participants in this study discussed environmental and personal factors which influenced their child's participation in risky play. They also provided examples of how impairment (body structure and function) influenced their experience of disability and risky play. To keep their identities confidential, examples provided are from various participants. These factors can also be situated onto the SEM framework.

These frameworks work together to provide a better understanding of where there may be a need to intervene in order to better support CWPD' risky play needs.

The following explores how body functions and structures impacted CWPD' participation in risky play from the perspective of their caregiver. These are microsystem factors, which are found closest to the individual. Caregivers in this thesis reflected on how disability can make anything risky. Here, the term disability can refer to impairment as caregivers described their children's physical impairments (e.g., amputations, decreased balance, joint stiffness, etc.) in relation to risky play. Due to these impairments, caregivers perceived a higher risk of injury for their children when engaging in play. The degree of risk may have also been lower for CWPD' due to impairments of their body functions. CWPD' face barriers to engaging in risky play related to their impairment; for example, many CWPD' face increased fatigue during play (Maher et al., 2015). Participants in this study spoke frequently about how their child's decrease in function as a result of a physical impairment was a barrier to engaging in risky play. For example, as children age their function changes, they typically get taller and stronger, therefore the risks they take are typically larger (Sandseter & Kennar, 2011). Many CWPD' have progressive disabilities, resulting in a decrease of their function as they age. This may lead to fewer opportunities for CWPD' to engage in risky play as they require increased support.

Environmental factors also play an important role in CWPD' engagement in risky play. A few examples of environmental factors which acted as facilitators to CWPD' risky play included: accessible play spaces and access to supportive programming, people, mobility devices. These factors can be found in both the mesosystem and exosystem level of the SEM. CWPD' often accessed adaptive and inclusive programs, such as Easter Seals, as they seem to foster a supportive environment. These programs provided children with environments where they felt physically and socially supported as they are created based on the values of quality participation. Many caregivers spoke about how these programs gave their children the confidence to take risks and how they felt a sense a belonging as all children were included, no matter their abilities. Belonging is one of the six building blocks to quality participation (CDPP, 2018). These programs provided support to caregivers as they were free and provided adaptive equipment for their children. It is important that CWPD' and their families feel supported when engaging in risky play, as risky play builds self-confidence, increases PA and play, and is associated with socioemotional well-being (Brussoni et al., 2015).

Caregivers, school staff, peers, and coaches all influence CWPD' risky play. Caregivers and coaches were frequently seen as facilitators to risky play, while school staff and peers were viewed more often as barriers. At school, CWPD' were often not allowed to engage in risky play opportunities with children without disabilities. Peers were influential in CWPD' risky play experiences, as CWPD' were often left out of play. This may have been a result of ableism and/or stigma of disability in the school culture. Past research has examined how school staff values and cultures acted as barriers to children with learning and neurodevelopmental disabilities engaging in risky play (Grady-Dominguez et al., 2021).

Other barriers CWPD' experienced to engaging in risky play included caregiver fatigue and a lack of respite funding. Many caregivers of CWD balance caregiving and their out-of-home employment (Murphy et al., 2007). Caregivers of CWPD provided their children with physical and emotional support during play. For example, they spoke on how they must transfer their child from their wheelchair to their car and then into a sled at sledge hockey or into a pool which led to their physical fatigue. Attending multiple programs a week, on top of school and medical appointments, can also lead caregivers to emotional fatigue. It is important that families and their realities are considered when looking at opportunities for play and PA, or when considering programs for CWPD'. For example, will the caregiver have to perform any transfers, or will there be volunteers? Are caregivers responsible for buying adaptive equipment, or is it provided by the program? These are realities of being a full-time caregiver of a child with a physical disability and must be highlighted as they can be a barrier to CWPD' participation.

In addition to environmental factors, personal factors influenced how CWPD' experienced risky play. Personal factors include characteristics of the individual outside of their health condition (World Health Organization, 2001). Caregivers spoke about age and how it influenced their children's risky play experiences. In some cases, they spoke about age as a facilitator as their child was bigger and taller, and resultantly, they felt the risks their child was taking also got bigger. This resulted in caregivers giving CWPD' more independence to engage in play which is similar to trends in the literature for children without disabilities (Jelleyman et al., 2019). In other cases, children's function decreased with age, making it more difficult to engage in risky and independent play. This piece can also fit into how body structure and function influences participation in the ICF framework.

Another personal factor which was briefly discussed by caregivers included SES.

Caregivers spoke about how they were lucky to have insurance which covered assistive devices and respite funding for their children to facilitate their independent and risky play. During a recent strike in Nova Scotia which led to EPAs and support workers not attending school, schools also recommended that CWD' not attend school as they would not be adequately supported. Parents in Nova Scotia reported having to hire respite workers to take care of their children while they went to work during the strike (Wilick, 2023). As mentioned by participants, respite funding is not always available or accessible. These are significant financial impacts associated with having a child with a disability, including medical costs, cost of adaptive equipment (e.g., wheelchairs, scooters, braces), and the increase in everyday living expenses. It is important to consider families' realities when promoting risky play opportunities for CWPD'.

Similarly to family realities which are complex, disability and participation are complex phenomena which are influenced by multiple factors. All of these factors act together in a dynamic relationship to impact how CWPD' experience their disability but also in this case how they experience risky play. Healthcare providers can use the ICF framework to support children's participation at multiple levels and areas. These factors which influence CWPD' risky play can be positive or negative and are not independent of one another. For example, as discussed by caregivers in this thesis, there are many factors that negatively influence their children's risky play from their mobility impairment to inaccessible play spaces, to ableist cultural ideas about disability. On a more positive note, it was found that caregiver support, peer support, and inclusive programming helped to increase CWPD' risky play. It may be of interests for healthcare providers to focus on increasing the mobility of an individual to support their participation, but to also expand on the positive environmental factors through a strength-based approach to facilitate risky play for CWPD'. In addition to helping increase the child's mobility, they can provide support to caregivers to help them better facilitate their children's risky play. An example could include introducing caregivers to programs such as Easter Seals, which highlight the importance of quality participation for all children.

5.2.2 Implementation of the F-words of Childhood Disability

The purpose of the ICF is to enhance opportunities for collaboration between sectors and users and to provide a common language across partners and collaborators to avoid contradictory mechanisms in service delivery (World Health Organization, 2001). The language used in the ICF framework can be somewhat advanced, so the F-words of childhood disability are best used when engaging children and their families. The F-words of childhood disability contain six words which reflect the main components of children's lives: functioning, family, fitness, fun, friends, and future (Rosenbaum & Gorter, 2012). As seen in Figure 3, the F-words of childhood disability can be mapped onto the ICF.

There have been tools developed using the F-words to help with the implementation of the ICF framework to engage children in their health-related decisions. One tool is the F-words Agreement, which was developed by Diane Kay (Rosenbaum & Gorter, 2012), a CanChild researcher and parent of a child living with a disability. CanChild is a research group which is housed within the School and Rehabilitation Science at McMaster University, in Hamilton, Ontario. Their focus is on creating innovative knowledge through research to support children and youth with disabilities and their families and to ensure research is accessible to families and service providers

(CanChild, 2023). This tool can be seen in Appendix G and was developed by Diane Kay to help her son share what was important to him with his service provider. She notes that the F-words should be the minimum standard when making decisions about services and interventions in relation to children's participation in life (CanChild, 2023).

There are other F-word tools provided on the CanChild website, including the F-words Goal Sheet (Appendix G). Many of these tools are created by parent researchers of CWD and health professionals who work with CWD' to help engage them and their families in their health care decisions. While other tools are created by family members of children experiencing disabilities and therefore, they showcase what is important to CWD when it comes to making decisions about their health. Tools such as these provide children with the opportunity to assert their autonomy and provide them with a voice in regard to their healthcare decisions. Looking at the findings from caregivers, it may be helpful for healthcare providers and school staff to use the F-word tools to better understand what is important to CWPD' during risky play. CWPD' and their families' should be included in the decision-making process as it influences their health and wellbeing and is important to supporting their risk-taking during play.

5.3 Exploring CWPD' Risky Play Through an Ecological Systems Lens

Bronfenbrenner's SEM focuses on the multiple levels of factors which influence health behaviours of an individual and emphasizes the importance of how these levels are interconnected (Stokols, 1996). These levels, starting farthest away from the individual and moving closer to the individual include the chronosystem, the macrosystem, the exosystem, the mesosystem, and the microsystem (Bronfenbrenner, 2005). Ecological models are important in the development of public health programs as they are based on the understanding of both the individual and their environment (Mehthälä et al., 2014). Past literature has used the SEM to explore the factors which influence children's risky play from the perspective of their caregiver, to consider the interacting levels of influence that impact parents' perceptions of children's risky play (MacQuarrie et al., 2022). Findings from this thesis have revealed many interacting factors which influence the way CWPD' engage in risky play. These factors have both positively and negatively influenced and impacted CWPD' risky play experiences. Looking back at MacQuarrie and colleagues' (2022) paper, many of the factors which influence risky play in children without disabilities are also impacting CWPD' risky play experiences.

At the macrosystem, seasonal shifts in weather appeared to influence risky play opportunities for CWPD and children without disabilities. Caregivers of CWPD often spoke about barriers to risky play which arose in the winter, for example, unplowed sidewalks were a barrier to accessing play spaces for children who are wheelchair users. MacQuarrie and colleagues' (2022), found winter to be a barrier as their study focused on outdoor risky play, caregivers expressed the poor weather conditions in the winter resulted in decreased outdoor play for their children. Another finding from this thesis was that that weather not only impacted children's access to risky play but that winter weather exacerbated characteristics related to their impairment or health condition. For example, one caregiver expressed concerns about their child's decreased immunity and how they feared that their child may get sick going out in the winter to play. Another caregiver said that rain and snow triggered seizures for their child, restricting their activity during that time.

In addition, at this level societal influences were found to be a factor which influenced children’s risky play (MacQuarrie et al., 2022). This is consistent with the findings in this thesis, as societal views on children living with physical disabilities impacted how children were able to engage in risky play, especially at school. As seen in other literature (Grady-Dominguez et al., 2021), school staff perceptions and values influenced CWD’ accessed to risky play at school. Interestingly, MacQuarrie and colleagues (2022), found that parents of children without disabilities were prioritizing structured activities over unstructured activities, resulting in decreased opportunities for unstructured and autonomous risky play. In this study, caregivers expressed that structured activities, such as parasport programs, gave their children the opportunity to take risks. CWPD’ faced many barriers to engaging in unstructured risky play, including inaccessible play spaces and cultural stigmatization of disability.

At the exosystem level, past literature has identified neighbourhood characteristics to impact children’s risky play (MacQuarrie et al., 2022). This finding also came up when speaking to caregivers of CWPD. While MacQuarrie and colleagues’ (2022) findings focused on dwelling type and neighbourhood location, size and perceived safety, caregivers in this study spoke about accessible spaces in their communities. For example, CWPD’ often encounter barriers to play spaces in their neighbourhood or communities, including inaccessible playgrounds, and other community spaces, a lack of ramps, or uneven ground surfaces. One caregiver expressed that their child’s playground at school was placed on top of a large grassy hill, making it inaccessible to them during both the winter due to snow and the spring due to muddy conditions.

They also spoke of facilitators to risky play at the community level. For example, children in this thesis all participated in one or more parasport programs run by Easter

Seals. Caregivers expressed how impressed they were by the accessibility and inclusion of these programs and the accommodations made to increase risky play opportunities for all children. Caregivers often expressed that their children had more opportunity to engage in risky play at inclusive structured programs, such as sledge hockey and had less opportunity to engage in risky play during unstructured play. These programs were designed around the principles of quality participation, which provided children with a sense of belonging. Structured inclusive programming removes many social and physical barriers CWPD' face to engaging in unstructured play. For example, these programs take place in accessible spaces, and are designed around individual needs. They foster an inclusive social environment where children can feel a sense of belonging and autonomy. Caregivers in this thesis reported that their child felt more comfortable taking risks during these programs as they felt an increased sense of confidence.

At the mesosystem level, MacQuarrie and colleagues (2022) found play companions influenced children's risky play, which was also a finding in this thesis, with peers influencing risky play both positively through support and negatively through exclusion. Although CWPD' may have different experiences during play with peers than children without disabilities, all children can experience exclusion during play. Caregivers feared that their child would be excluded from play with peers without disabilities due to a lack of knowledge about their disability. This was also found during interviews with parents of children with neurodevelopmental disabilities (Stillianesis et al., 2021).

A novel finding of this thesis includes the idea that CWPD' sometimes must rely on others to support their play, although trusting others can sometimes make play risky.

For example, caregivers spoke about how children would let their peers push their wheelchair on the playground. They would have to trust that their peers would not push them too hard or too fast. This created the sensation of risk-taking as it was thrilling and exciting and out of their own control.

Finally, at the microsystem or intrapersonal level, MacQuarrie and colleagues (2022) found that children's characteristics (age, size, ability to self-assess, comfort with risk) and parents' values (understanding of risky, outdoor play benefits, comfort with risk) influenced a child's risky play experiences. For example, when parents trusted their children to understand their own abilities, were more comfortable with risky play, and recognized the benefits of risky play, it facilitated children's opportunities to take more physical risks during play (MacQuarrie et al., 2022). Similarly, this thesis found that CWPD' were engaging in more risky play at home with families as caregivers trusted them to engage in risky play and gave them opportunities to do so. Caregivers interviewed in this thesis recognized and appreciated the benefits of risky play for their children and were supportive of their children engaging in risky play at home and in other settings (e.g., schools, community recreation programs). Caregivers of CWPD discussed how their child's impairment and level of functioning could negatively or positively influence their child's risky play behaviours as they were dependent on their strength and function.

There is plenty of crossover between the factors which influence CWPD' and children without disabilities' risky play behaviours. Both groups may face the same barrier to engaging in risky play, for example weather, yet experience this barrier differently due to their impairment, functioning, and environmental and personal factors.

Factors which influence CWPD' risky play can be interpreted using an ecological lens, but also relate back to the ICF framework. Environmental and personal factors influence children without disabilities' risky play, but one must consider how an impairment interacts with these factors to better understand CWPD' risky play experiences.

5.4 Dignity of Risk for CWPD

Giving children the autonomy to make decisions around risk-taking during play is important in allowing them the opportunity to receive the same benefits as children without disabilities (Brussoni et al., 2015; Sando et al., 2021). This is especially important for CWPD' as they are often not afforded the dignity over their own risk-taking (Ball et al., 2021). DoR is a concept which values giving autonomy to make decisions around risk-taking (Ibrahim & Davis, 2013). It is not specific to CWD' and risky play, although it is important when looking at CWD and their engagement in risky play. DoR is rooted in the belief that regardless of a person's age or *ability* they have the right to self-determination (Ball et al., 2021). In Chapter 4 of this thesis, five themes were presented, which were created based on the stories of caregivers of CWPD and their risky play experiences. It is important to relate the findings of this thesis to the concept of DoR, as there is limited literature discussing risky play for CWPD' through a DoR lens.

It is well documented that children understand their own boundaries when engaging in risky play and will not place themselves in dangerous situations (Brussoni et al., 2012; Harper & Obee, 2021). Although CWPD' may have a lower boundary for risk-taking, they should be afforded the chance to understand their own bodies and their limits. Allowing CWPD' the DoR when engaging in play at school will benefit their overall health and development, as DoR is associated with increased independence (Ball et al., 2021).

There are many barriers which were identified by caregivers of CWPD that limit their engagement in risky play. A lack of knowledge and understanding about disability from not only children but adults is a major barrier CWD' face to engaging in play (Stillianesis et al., 2021). It was found by Ball et al., (2021) that physical education teachers limit CWD' risky play due to fear of injury. Findings from this thesis support this, as caregivers expressed that school staff often restricted their children's risky play due to increased fear of injury or risk. Research has found that there is a lack of knowledge about disability and disability culture, resulting in increased anxieties when children attempt to exert autonomy over their risky play behaviours (Stillianesis et al., 2021). Caregivers have described that their children's educators and peers often hold ableist beliefs about disability and tend to stigmatize children living with disabilities (Stillianesis et al., 2021). It is important to educate children and adults who support CWPD' risky play (e.g., educators, coaches, volunteers) about the importance of inclusion in play, including risky play and DoR so they can better support all children to engage in risky play at school and reduce stigma surrounding students with disabilities.

By giving CWPD' the autonomy to decide which risks they would like to engage in, they can build knowledge about their own bodies. Autonomy can ultimately be the deciding factor for independent living (Savage & Bowers, 2022). It is therefore important that we allow CWPD' the same opportunities to assert their autonomy in play as we do children without disabilities, while keeping them safe. Autonomy is not only giving an individual the opportunity to participate but giving them the choice in a range of activities. Scott (2010) found that CWD' are often given less opportunity than children without disabilities to make their own choices around their play experiences. Autonomy is one of the six building blocks to quality participation (CDPP, 2018). Providing children with independence, choice, and control over their PA, play, and risk-taking are important components to supporting their overall health and wellbeing and providing them DoR. Caregivers, coaches, school staff, and volunteers are all critical to supporting CWPD' engagement in risky play. Although arguably, the child themselves is the most important factor and should always be given the autonomy to make their own decisions around their risk-taking.

5.5 Expanding the Interpretation of Risky Play for CWPD

Risky play is commonly defined as "a form of play that is thrilling and exciting, which involves uncertainty, unpredictability, and varying degrees of risk-taking" (Lee et al., 2022, p.12). This definition is similar to others in literature. For example, Sandseter's definition of risky play is play that is "thrilling and exciting forms of physical play that involve uncertainty and a risk of physical injury" (Sandseter, 2010, p.22). In addition to definitions of risky play, there are currently eight categories of risky play. Sandseter (2007) developed the first six categories: (1) play at great heights, (2) play at high speeds, (3) play with dangerous tools, (4) play near dangerous elements, (5) rough and tumble play, and (6) play where children can get lost. These categories were developed by observing children without disabilities engage in outdoor risky play. In 2017, Kleppe and colleagues (2017) identified two additional categories of risky play by further observing children at play. They included: (7) play with impact and (8) vicarious risk during play to form the current eight categories.

Children living with physical disabilities experience risky play differently than children without disabilities. This study found that although children are engaging in similar activities, the degree of risk-taking or the way in which a category may be interpreted varies with each individual, as their environmental factors and physical impairment may contribute to how they experience risky play or what that may look like. For example, if we look at a child who does not experience a physical impairment and is engaging in stand-up hockey, and a child experiencing a mobility or balance impairment who is engaging in sledge hockey, they are both participating in play at high speeds and play with impact. These activities fit within the same categories of risky play, yet they look different and the degree in which each child is taking risks may vary. Another example from this study, is how children run during unstructured play. Many caregivers described this as risky due to their child's physical impairment, which often led to decreased balance; and the impact of uneven surfaces, such as that of a field, increased the risk of walking or running for CWPD'. Running or walking unsupported for children without disabilities may not be considered risky as it may not be thrilling, yet for CWPD this activity was described as risky. Caregivers described not knowing where to place this type of risk within the current categories of risky play (Sandseter 2007; Kleppe et al., 2017).

Past research has explored caregivers' perspectives of factors that may influence risky play for children living with neurodevelopmental (Stillianesis et al., 2022). This study was conducted as part of the Sydney Playground Project in Australia by Bundy and colleagues (2015), described in Section 2.6.2. Despite the difference in disability to children in this thesis, many of the findings align. For example, some play is inherently riskier for CWD' because of the interaction between their impairment and environmental factors as described in the ICF framework.

Caregivers in this thesis also spoke about how disability makes play inherently riskier. Environmental factors play a role in this, as we live in a world where accessibility is typically an afterthought, including in play spaces. Playgrounds, schoolyards, and parks are all important spaces where children can engage in play (Brown et al., 2021). Unfortunately, they are typically designed and informed by normative understandings of children's bodies, mobilities, and play behaviours, which can create barriers for CWD (Brown et al., 2021). Despite a space lacking accessibility, many CWPD continue to engage in play within these spaces. This can create an increased risk of injury for CWPD' as they may experience decreased mobility or balance compared with children without disabilities.

Caregivers also spoke about the importance of considering the social risks associated with play. Stillianesis and colleagues (2022) found that "overwhelmingly, participants reported their concerns about harms or dangers to their child's physical and emotional safety during play" (p.1278). They spoke about how caregivers had anxieties about the possibility of their children being emotionally harmed by others during play, especially the psychological impact of their child being "left out" or bullied by other children (Stillianesis et al., 2022). Many caregivers in this thesis spoke about others lacking knowledge around disability, creating stigma around disability within play spaces, including at school and within their community. This is a result of ableism, the operation of the "belief that it is better or superior not to have a disability than to have one and that it is better to do things in the way that non-disabled people do" (Storey, 2007, p. 56). To combat ableism in the school environment, Storey (2007) recommended adding disability content in curriculum and in school activities to celebrate disability culture.

To summarize, the way in which a child experiences risky play is dependent on the interaction between their impairment and environmental factors. Environmental factors include physical environmental (e.g., uneven surfaces) and social environments (e.g., ableism). These environments can act as supports or as barriers to engaging in play and influence the degree of risk associated with children's play. Therefore, the way in which we define risky play, and the categories of risky play, can be expanded upon (Sandseter, 2007; Kleppe et al., 2017). Risk is a perception, as it differs between children and does not remain constant. It changes with age, function, and mastery over an activity (Sandseter & Kennair, 2011). Further research is required to better understand the unique experiences children with various disabilities have when engaging in risky play.

5.6 Where are CWPD' Engaging in Risky Play?

Over the years there has been a shift in parental values, away from unstructured play to children spending more of their time in structured activities (Van de Eecken, Spruyt, & Bradt, 2019). Both structured and unstructured play provides children with opportunities to be physically active (Barnes et al., 2013), although research has indicated that unstructured play provides greater bouts of PA for children (Fairclough, Ridgers, & Welk, 2012; Stone & Faulkner, 2014). Children living with disabilities have less opportunities to engage in unstructured play due to barriers in the built environment, such as a lack of accessibility in their community (Sterman et al., 2016). They also face increased social barriers to engaging in unstructured play (Stillianesis et al., 2022).

Caregivers of CWPD spoke often about their children accessing risky play through structured programs, such as adaptive sport. For example, all participants engaged in Easter Seals programs, such as Learn to Sledge, Learn to Dance, Learn to Ride, or Learn to Wheel, and Powerchair Soccer. These programs provided children with the opportunity to engage in parasport and in risky play. Caregivers spoke about unstructured opportunities for their children to engage in risky play, such as at schools and playgrounds, but that often CWPD' faced physical and social barriers to these spaces, limiting their risky play opportunities'. Adapted PA programs are specifically designed to be inclusive for children living with various disabilities, as they can be easily adapted, and therefore, may pose fewer barriers to risky play for CWPD.

Caregivers spoke about how the Easter Seals programs provided not only physically supportive environments for children to take risks, but also fostered a supportive social environment where CWPD' felt comfortable taking risks. It is important that CWPD' have access to both structured and unstructured play opportunities to support their PA and risky play. Accessible play spaces may be conducive to supporting CWPD' unstructured play opportunities, as they can rely less on the support of their caregivers to help them engage in play and be more independent in their play (Sterman et al., 2016). It would be of interest to better understand how to foster supportive physical and social environments for children living with disabilities to engage and direct their own unstructured play opportunities.

5.7 Strengths & Limitations

This thesis used RTA adapted by Braun and Clarke (2016, 2019, 2021, 2022) to analyze the data. This process is well used throughout qualitative research for interpreting qualitative data and telling a story about the patterns of meaning (Braun & Clarke, 2016). RTA is a strength of this thesis as it allows the researcher to be reflexive in their own positions while remaining close to the data throughout the entire process. As the researcher, I immersed myself in Braun and Clarke's literature and their detailed process to foster quality RTA. For example, a strength to this study includes my closeness to the data throughout the project. I conducted interviews with participants, transcribed the data, analyzed the data, and presented the data in this thesis. By fully immersing myself in this project and the data over time, it helped me to better understand the context in which the participant spoke, but also gave me the time to reflect on how the findings should be presented to best represent the participants stories and context in relation to the research questions (Braun & Clarke, 2022).

In addition to conducting all the interviews myself, I had built a trusting relationship with my participants, where they could share with me their personal stories about their children's risky play. This trust was built through my supervisor's engagement in the community, supporting CWD' risky play for over two decades. I, myself, also engage in volunteer work to support CWD' and their risk-taking. It is a strength of this study, that I am able to work *with* caregivers to explore their lived experiences of how children's risky play behaviours and the many factors which influence their risky play.

Another strength of this research was that I was able to recruit a total of 12 caregivers to participate in this study, which created diversity amongst my participants as their children varied in age, and disability which varied in severity and function. This is a strength of the study, as play may look different as children age, and CWPD' may experience risky play differently based on their disability or impairment, as each disability is experienced in a unique way and is related back to their function.

It is important to acknowledge that this study is not without its limitations. First it is important to note that the majority of participants identified their race and their child's race at white. This is important to note as there was a lack of cultural diversity within my participants. Culture and race influence how people experience and are able to access risky play (Watson et al., 2024). It would be important to understand the perspectives of families across cultures as they may hold different opinions and values towards their children's risky play behaviours.

Caregivers also lacked diversity in the location in which they resided, as all caregivers lived in or near a major city centre. This may have been due to recruitment, which was primarily done through disability advocacy organizations, including organizations that offered adapted and parasport experiences. Therefore, these children were already engaged in recreational activities that were associated with risky play. Caregivers most often supported their children's risk-taking as they were engaged in these programs. CWPD' who are not engaged with Easter Seals or other sport programs may have different risky play experiences. This may not necessarily be considered a limitation, but an area in which future research should explore.

The final limitation to this study, which is important to note, is the incongruencies of the methodology chosen for this study. For example, I decided to use qualitative description as I wanted to describe the lived experiences of caregivers using their own language and voices. This did not allow for me to be as interpretive as I sometimes wanted to be within the findings. Caregivers spoke about school staff values which negatively impacted their children’s access to risky play. If I were to explore this using a more interpretive design such as phenomenology through a social justice lens, I could further explore how findings such as these were caused by ableist ideations and historical stigmatization of CWD. It would therefore be important for future research to explore CWPD’ risky play experiences through a more interpretive design allowing for a more critical lens to be applied to the findings.

5.8 Recommendations and Future Directions

This thesis has explored how physical disability impacts a child’s risky play experience from the perspective of their caregiver and in doing so has uncovered future areas where work is needed. In this section, I will provide multiple examples which arose from my thesis findings of where future directions should take place within research, community, and policy.

One of the aims of this thesis was to understand how caregivers of CWPD’ defined and categorized risky play. It is important that any definition of risky play be inclusive, as definitions inform research, interventions, and policies. For example, Brussoni and colleagues (2015) used the current categories of risky play to conduct a systematic review of the literature exploring risky play. It is important that definitions and categories of risky play be inclusive of all children to better capture the full picture of risky play. Caregivers in this thesis described risky play as unique to their child because of their impairment. They provided examples of children engaging in activities that fit within the categories of risky play such as sledge hockey which they considered to be play at high speeds and play with impact, yet also described activities such as walking to be risky for their child, which did not fit within the categories of risky play. Therefore, it is important that we expand our interpretation of this definition and the categories of risky play to include all types of activities and risks in all different forms.

This thesis explored risky play in CWPD through the perspective of their caregivers. Future research, which is underway through the CDPP, will explore how children with neurodevelopmental and sensory disabilities experience risky play from the perspective of their caregivers. Understanding how children engage differently in risky play when they have a physical, neurodevelopmental, or sensory disability, will provide an opportunity to create more inclusive risky play resources and supports. In addition, the CDPP will further explore the perspective of children themselves in regard to their risky play experiences, as there is limited literature exploring risky play from the perspective of the child. A scoping review which I conducted, looked at risky and outdoor play for CWD. It revealed that only 11 of the 63 included articles included CWD' own perspectives of their play experiences (Locke et al., 'in preparation'). Future research should therefore focus on the voice of CWD to better understand their needs and how we can help support their engagement in risky play.

This thesis used qualitative description as the research design, which allowed me to describe the lived experiences of caregivers. As noted in the limitations, this methodology did not always serve this study best. Future research should explore CWD' risky play through a more interpretive and critical lens to be able to push the ideas of caregivers and how they may relate to disability concepts and frameworks. For example, future research could take on a social justice lens to explore how ableism impacts CWD' risky play. As currently planned, the CDPP will explore risky play for CWD' from the perspective of the child by applying an interpretive methodology such as phenomenology using a social justice lens. This will help to better understand the full picture of how CWD' experience risky play and some of the factors which influence their risky play on various levels.

One of the factors which negatively impacted CWPD' risky play, as described by caregivers in this thesis, was a lack of understanding and knowledge about children's disability from school staff. School staff's aversion to risk for CWPD' resulted in children having decreased opportunities to engage in risky play at school with their peers. One recommendation from this finding would be to increase the education of those who support CWPD' play, including school staff, coaches, and their peers. Past research has looked at risk-reframing interventions for children without disabilities (Brussoni et al., 2018) as well as children with neurodevelopmental disabilities (Grady-Dominguez et al., 2021). During these interventions, school staff and caregivers learned strategies to help promote manageable risk-taking for children (Brussoni et al., 2018). Future research could explore how to implement a risk-reframing intervention tailored to school staff who support CWPD' risky play. This intervention could include elements of the importance of risk-taking for children but also include knowledge about CWPD' and the importance of providing them the dignity to take risks. Other research has also indicated the importance of having trained staff at school to be a facilitator to inclusive play as they can help promote a physically and socially inclusive environment for children with and without disabilities to engage in risky play. Overall, it is important that those who facilitate and support CWPD' risky play be well educated and have adequate training in risky play.

Children typically engage in risky play during unstructured, outdoor play (Brussoni et al., 2015; Bundy et al., 2015). Caregivers in this thesis expressed that their children primarily engaged in risky play during structured programs as they felt safe and supported to do so in these environments. Furthermore, they expressed facing physical and social barriers to accessing unstructured outdoor play spaces. It is important that we identify solutions to help CWPD' feel physically and socially included within these play spaces alongside their peers, so that they feel safe and supported to take risks during play. Brown and colleagues (2021) conducted a scoping review, which provided 13 evidence-based recommendations for inclusive playgrounds for CWD. Inclusive playgrounds refer not only to the accessibility but to the usability and playability of the space (Taylor et al., 2022). Findings from this scoping review should be applied into practice to help CWPD' access playgrounds in their communities and schools. One recommendation which they provide includes having children and families with lived experiences included in the design process of playgrounds to increase inclusivity and ensure that their particular needs are met (Brown et al., 2021). They also suggest not only looking at the playground structure but at the accessibility of entry points to the playground to increase accessibility (Brown et al., 2021).

Once CWPD' are able to access outdoor play spaces, the implementation of loose parts may help to facilitate risky play in these spaces. Past research has explored how the implementation of loose parts at playgrounds has helped to facilitate unstructured risky play opportunities for children without disabilities (Branje et al., 2022) and children with neurodevelopmental disabilities (Grady-Dominguez et al., 2021). Reflecting on the limited research which has been conducted exploring CWPD' risky play, I believe it would be of interest to explore how loose parts play can help facilitate inclusive environments and increase opportunities for CWPD' to engage in risky play alongside their peers. Unstructured play provides children with many unique benefits such as increased PA (Tremblay et al., 2015), increased social engagement, and increased emotional well-being (Lee et al., 2020). It would be of value to understand ways in which we can support CWPD' engagement in unstructured, child-directed risky play. Future research should explore the possibility of loose parts interventions to support risky play and social inclusion in outdoor unstructured play environments for all children.

There is a need for future research to investigate factors across the SEM levels which influence CWPD' risky play. For example, many strategies to support CWPD' engagement in play and PA typically start at the individual level. It is important that we look across levels when implementing strategies for inclusion, specifically, the policy and community level, as there are more opportunities to increase inclusion for many children at these levels. Examples of policy change which may trickle down, include the Accessibility Act which Nova Scotia signed in 2017. The aim of this Act is to have an accessible province by 2030, which means there will be many changes to community spaces to increase accessibility and inclusion (Government of Nova Scotia, 2018). These spaces may include schools, parks, playgrounds, or recreation centres where children engage in risky play. It is important that policies be in place to show the importance of accessibility for people living with disabilities. Nova Scotia was the third province to sign an Accessibility Act in Canada. It is important that other provinces follow their lead and show their support to working towards an accessible country. Furthermore, it is important that we take responsibility of inclusion and access to PA and play off caregivers and CWD', and onto our government and communities.

Finally, it is important to include collaborators and partners, such as CWPD’ and caregivers, from the beginning of the research process to inform the research and the most appropriate form of disseminating the findings. As described earlier, future work is in progress through the CDPP to explore how children with neurodevelopmental and sensory disabilities experience risky play. This will help us to better understand how overall CWD’ experience risky play and how we can re-define, re-characterize, or expand our interpretation of risky play to be more inclusive. The integrative knowledge translation framework exemplifies how it is important to engage collaborators and partners in the research from the beginning (Bowen & Graham, 2013). This project will include people with disabilities from the beginning stages to ensure that we are working towards what is most important to them and ensuring they have a voice in research.

Furthermore, it will be important to expand the knowledge found from this research to caregivers, school staff, and healthcare providers to provide them with the knowledge of how to support CWPD’ risky play. It will be important that caregivers who have not participated in this study be informed of the results to better support their children’s risky play. Knowledge pieces such as online posters and websites which are accessible to caregivers across provinces may be one method to informing caregivers in rural communities about the importance of risky play. Knowledge can also be delivered to healthcare providers such as rehab staff across provinces where they can relay messages to caregivers in these rural communities who may not have access to programs which support risky play for CWPD.

CHAPTER 6: CONCLUSION

6.1 Reflections

The research process can be a long and daunting one, with many steps that take time to complete and that are sometimes out of your own control as a researcher. Throughout this research project, I made sure to take the time to reflect upon my own assumptions and feelings beyond those on the surface to try and better understand how these assumptions have come to be. During these reflections, I thought it important to acknowledge to the readers that I am an able-bodied woman, who is not a parent nor a caregiver. I have worked alongside CWD for many years helping to facilitate and support their engagement in play and PA through various volunteer jobs. Therefore, coming into this project, I had an idea of some forms of barriers that CWPD' may face to engaging in risky play, although I recognize that every family's experience would be unique as is every disability.

It was important to me that caregivers did not feel as though I was coming into their community and asking questions about their children's play behaviours while having the wrong intentions. I am currently volunteering in several adapted PA programs. My hope is that they have gotten to know me not only professionally but on a personal level and that my passion for this work has shown through.

It is worthy to note that accessibility legislation and accessible communities are important in supporting children's play. Findings from this thesis revealed that a key barrier to risky play are accessible play spaces. The province of Nova Scotia was the third province in Canada to sign an accessibility Act in 2017 (Government of Nova Scotia, 2018). Their goal is to create an accessible Nova Scotia by 2030. As mentioned by many caregivers in the interviews, there is a need for more accessible playgrounds in their communities to increase their access to unstructured risky play. Future plans to increase accessibility in the province continues with the hope that they will increase children's opportunities to engage in various sports, programs, and play. It is important that CWPD' and their families be included in the design of community spaces, including play spaces (e.g., parks and playgrounds), as they can provide insight and first-hand experience on the needs of CWPD' to help create inclusive and accessible environments (Brown t al., 2021; Woolley et al., 2013, Lynch et al., 2020).

While writing this thesis I often thought about the bigger picture in which this work would contribute to, what was next, and how it would help CWPD' to engage in more risky play. To do this, I went back to my reflexive journal, where I took notes throughout the duration of the study, reflecting on the participants perspectives and my own. Thinking about what is next, many caregivers wished for more accessible spaces where their children could engage in PA and play within their communities. These spaces need to support both structured play (e.g., community centers) and unstructured play (e.g., playgrounds and parks). Caregivers also mentioned their desire for more socially inclusive spaces for their children. They spoke on educating others about disability and disability culture to support CWPD' participation. Parasport programs are excellent examples of both physically and socially supportive environments. I have seen firsthand how children are able to come out of their shells and fully engage in inclusive programs with their peers. It is important that CWPD' have access to these programs but also that there is an emphasis on supporting CWPD' risky play within other spaces, for example, at school. By thinking of the future and how this work could be a stepping stone to what is next, it shaped the way I approached and analyzed the data, and the way in which I chose to present the findings from caregivers. This work is important me, as it is important that the stories of people with lived experiences are being told in this space.

6.2 Conclusion

Caregivers provided many perspectives on their children's risky play experiences. Many of their stories were positive as they were supportive of their children's participation in risky play. Other stories were centered around concern and anxiety about risky play, as they felt their children had an increased risk of injury compared to other children and were fearful that they would not be accepted by others during play. Although caregivers supported their children's engagement in risky play, it was equally as important that other adults such as school staff and coaches foster supportive environments for CWPD' to be autonomous in their risk-taking. Caregivers identified numerous barriers that their children faced to engaging in risky play. Many of these barriers included the lack of inclusive outdoor unstructured play spaces. Caregivers also spoke about the additional pressures they encountered to supporting their children's risky play, such as time constraints and costs of adaptive equipment needed to support their children's risky play. Overall, caregivers expressed the importance of having various opportunities for their children to engage in play and sport, where they can take risks.

Based on the findings from caregivers of CWPD, it may be worthy to look again at the definitions and categories of risky play, as risky play likely looks different for CWPD. CWPD' face unique barriers to engaging in risky play, including the built environment (e.g., uneven ground surfaces, lack of ramps, inaccessible play structures) and social environmental characteristics (e.g., ableism and stigma). Despite these barriers, caregivers supported their children’s engagement in risky play and sought out opportunities to help them be active and engage in risky play within their communities as they saw it as beneficial for their children’s overall growth and development. In conclusion, there is a need to further explore this novel topic to understand how children with various physical disabilities are experiencing risky play in their community, at school, and at home. Future research should look into how we can expand on opportunities to better support CWPD’ risky play, through engaging CWPD in research. Educating educators and students at school, as well as coaches and volunteers in community recreation, and policy makers on these topics may help to reduce ableist notions and stigma in these spaces. Finally, it is important to place inclusion and belonging at the forefront of our efforts to support CWPD in risky play.

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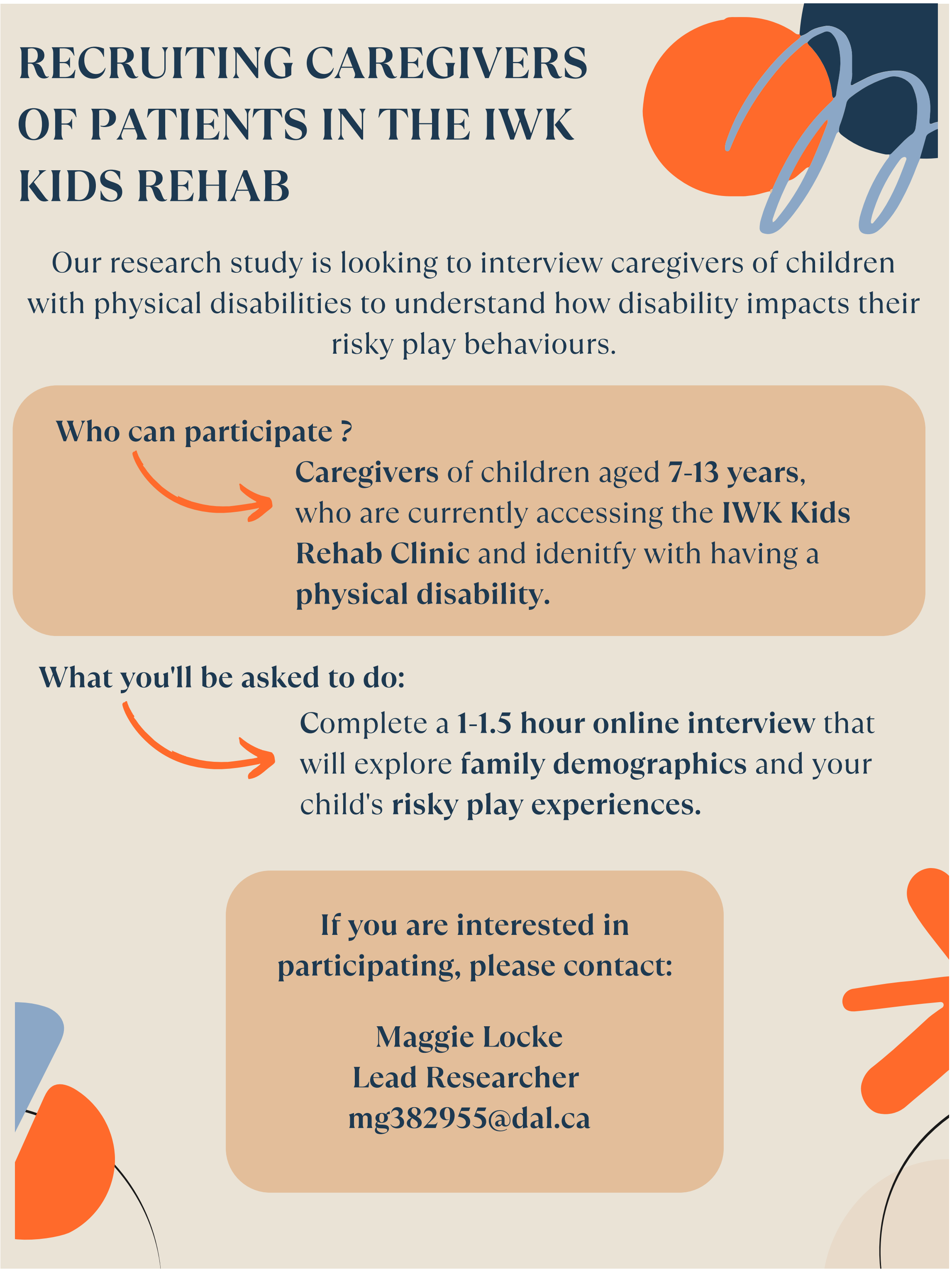
APPENDIX A – RECRUITMENT POSTER



RECRUITING CAREGIVERS OF PATIENTS IN THE IWK KIDS REHAB

Our research study is looking to interview caregivers of children with physical disabilities to understand how disability impacts their risky play behaviours.

Who can participate ?

Caregivers of children aged **7-13 years**, who are currently accessing the **IWK Kids Rehab Clinic** and idenitfy with having a **physical disability.**

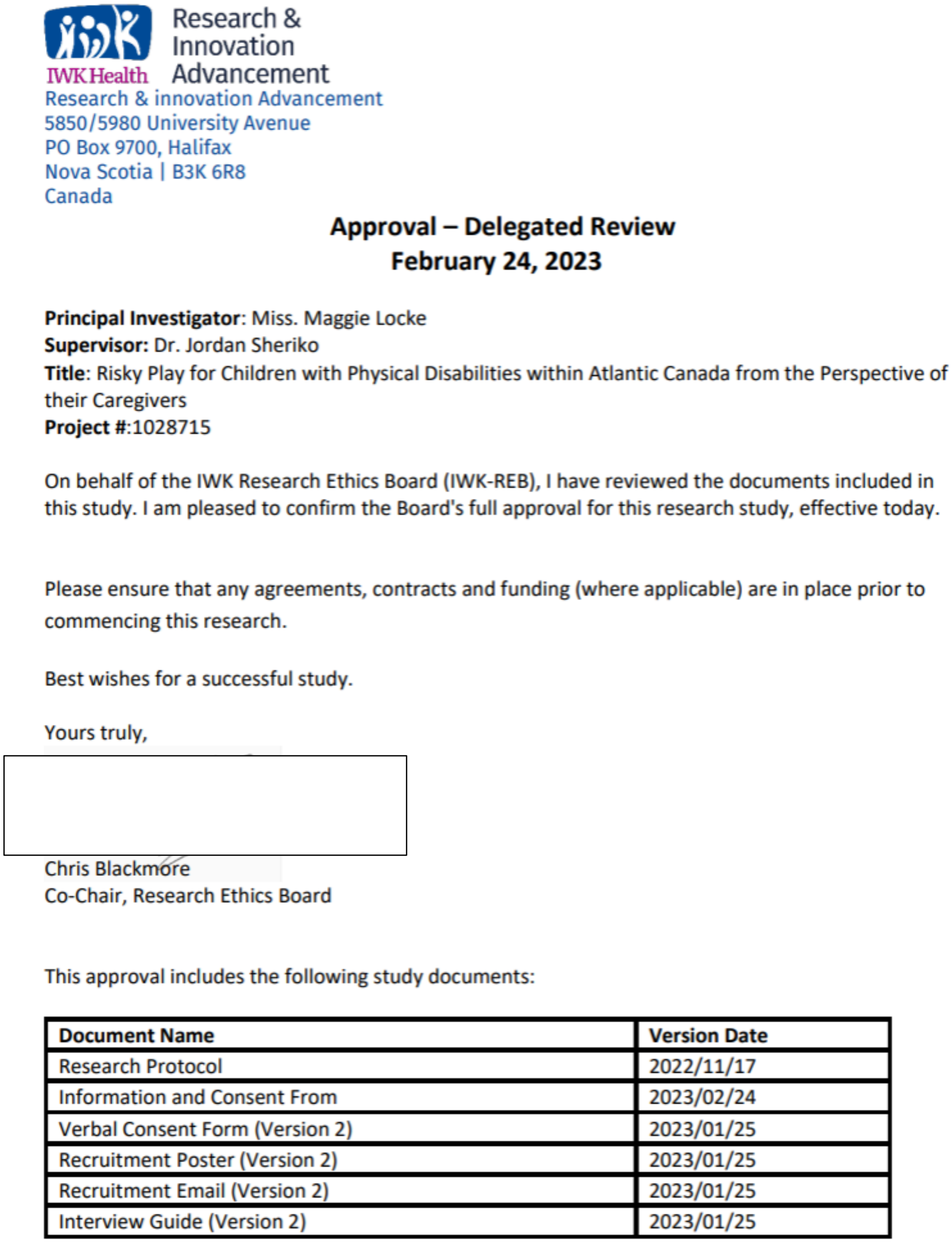
What you'll be asked to do:

Complete a **1-1.5 hour online interview** that will explore **family demographics** and your child's **risky play experiences.**

If you are interested in participating, please contact:

Maggie Locke
Lead Researcher
mg382955@dal.ca

APPENDIX B – IWK REB APPROVAL LETTER



IWK Health
Research & Innovation Advancement
Research & innovation Advancement
5850/5980 University Avenue
PO Box 9700, Halifax
Nova Scotia | B3K 6R8
Canada

Approval – Delegated Review
February 24, 2023

Principal Investigator: Miss. Maggie Locke
Supervisor: Dr. Jordan Sheriko
Title: Risky Play for Children with Physical Disabilities within Atlantic Canada from the Perspective of their Caregivers
Project #:1028715

On behalf of the IWK Research Ethics Board (IWK-REB), I have reviewed the documents included in this study. I am pleased to confirm the Board's full approval for this research study, effective today.

Please ensure that any agreements, contracts and funding (where applicable) are in place prior to commencing this research.

Best wishes for a successful study.

Yours truly,

[redacted]

Chris Blackmore
Co-Chair, Research Ethics Board

This approval includes the following study documents:

Document Name	Version Date
Research Protocol	2022/11/17
Information and Consent From	2023/02/24
Verbal Consent Form (Version 2)	2023/01/25
Recruitment Poster (Version 2)	2023/01/25
Recruitment Email (Version 2)	2023/01/25
Interview Guide (Version 2)	2023/01/25

APPENDIX C – PARTICIPANT CONSENT FORM

Study title: Risky Play for Children with Physical Disabilities within Atlantic Canada from the Perspective of their Caregivers

Investigators:
Maggie Locke (MSc Student, Dalhousie University, Principal Investigator/Lead Researcher)
Dr. Sarah Moore (PhD, Assistant Professor – School of Health and Human Performance, Co-Principal Investigator)
Dr. Michelle Stone (PhD, Associate Professor – School of Health and Human Performance, Co-Principal Investigator)
Dr. Jordan Sheriko (MD, FRCPC, Assistant Professor – Pediatrics and Medicine, Co-Principal Investigator)
Dr. Becky Spencer (PhD, Instructor – School of Health and Human Performance)

Funding source: N/A

The lead researcher of this study, Maggie Locke, is a Dalhousie University student, who is working on a study called "Risky Play for Children with Physical Disabilities within Atlantic Canada from the Perspective of their Caregivers".

Initial consent process

Before you participate in this study or before you give any personal information, you will be asked to read over this consent form and provide your consent in writing. Please contact the lead researcher, Maggie Locke, if you have any questions about the consent form. Her contact information can be found at the end of this consent form.

If you provide consent, the lead researcher will contact you to arrange a date and time for your interview. She will contact you by the email address you provide. After that, she will send you an email with the link to the interview, which will take place using Microsoft Teams.

Why are the researchers doing this study?

It is important for children to engage in risky play throughout their childhood. Risky play provides children with unique health benefits. Risky play is a form of play that is thrilling and exciting. Many children with physical disabilities experience barriers to risky play.

This is a voluntary research study that will look at your perceptions of risky play for your child with a physical disability. The lead researcher will use your interview responses to answer the research questions. This study is looking at how caregivers perceive risky play, how caregivers define and characterize risky play, and factors that caregivers think influence children's risky play experiences. The results of this study will add to the limited literature on risky play. This study may help develop new research to help support risky play for children with physical disabilities.

As a study participant, what will you be asked to do?

If you are a caregiver of a child with a physical disability between the ages of 8 and 13 years and your child attends the IWK, you will be asked to participate in a one-on-one interview about risky play. These interviews will take place online using Microsoft Teams and last about 60 to 90 minutes. The interviews will include questions about your perceptions of risky play for your child. You will also be asked for some information about your child, like their age, gender identity, disability, residency, and relationship. This information will help describe the study's cohort. At the end of the interview, you will be asked to think of a different name for your study file, a pseudonym, or the lead researcher can assign you one. This is to keep your information confidential and protect your identity. Approximately 8-10 caregivers will be recruited to participate in this study.

Are there any potential harms or burdens?

We don't anticipate you will experience any harms from participating in this study. Though, it is possible that you may become distressed when answering questions (for example, you may recall times when your child was excluded from play). It is important for you to understand that you are not required to answer any questions and can pass on questions that you do not feel comfortable answering. If you do become distressed, you will be reminded of this during the interview. We can also refer you to Dr. Jordan Sheriko at IWK Health to support you. He is also a member of this research team. Another possible harm is a potential breach in confidentiality. To ensure your identity and information is protected, measures will be put in place, including using a secured interview platform, using a different name for your file, and all files being locked at IWK.

Are there any potential benefits?

You or your child may not receive any direct benefits from participating in this study. Though, we do hope that the study results will go on to benefit others in the future by improving children with physical disabilities risky play experiences.

What are the alternatives to participation?

You are not required to participate in this study. Your child's care at the IWK will not be affected by your decision to participate or to not participate in this study.

Can you withdraw from the study?

If you change your mind from the time you sign this consent form to the time of your interview you can withdraw from this study by contacting the lead researcher. If you change your mind after the interview and would like your information to be removed from the study, please contact the lead researcher within two weeks after your interview. The lead researcher's contact information can be found at the bottom of this consent form. Withdrawal from the study will not affect your care at the IWK Health Centre.

Are there any costs and reimbursements?
There will be no cost to you for your participation in the study. You will receive a $50 gift card as a token of appreciation for your time spent completing the interview.

Are there any conflicts of interest?
There are no known conflicts of interest.

How will your privacy be protected?

Any personal information about you will be kept private. Pseudonyms will be used to identify your transcript. In other words, you will be asked to choose an alternative name for your file to protect your identity and your child's identity. Personal information will be kept separate from your interview information. These documents will be kept separately, on a password protected computer, which only the lead researcher will have access to. After the interviews are transcribed, the recordings will be deleted immediately. As per IWK policies, any physical records will be kept for 5 years after the results of this study are published or 5 years after the closure of this study, whichever is longer. When this happens, the records will be permanently deleted from any electronic databases. The lead researcher will seek guidance from the IWK Privacy Officer to do this properly.

You will be asked to provide some personal information, like your child's age, gender identity, and disability. You will also be asked to provide your email address to schedule your interview, and to send study information as well as the gift card at the end of the study. There are minimal risks that personal information files would be compromised (e.g., accessed by non-members of research team). However, these risks will be mitigated by immediately assigning your file a pseudonym and separating personal information files form interview files. Also, all files will be stored on password protected IWK secured network drive.
Your audio recordings and interview transcripts will be stored on the IWK secured network drive. After the interview is transcribed the audio recording will be deleted. Your file with personal information will also be stored on the IWK secured network drive. This will be separate from your other files. Any paper copies will be stored in the IWK research office in a locked filling cabinet. This cabinet will be dedicated to this study. If the result from this study get published, your information will be confidential, and any personal identifiers will be removed.
To help answer the research questions and report the study's results, direct quotes from your interviews may be used. If a direct quote from your interview is sued in the study,

any personal identifiers will be removed. Only your interview pseudonym will be used to identify your interview.

What if you have study questions or problems?
If you have any questions about the study, please contact the lead researcher, Maggie Locke, Monday to Friday between the hours of 8am to 5pm by email at mg382955@dal.ca

What are my Research Rights?
Your consent indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. If you become distressed, ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you/they are entitled to receive. If you have any questions at any time during or after the study about research in general you may contact the Research Office of the IWK Health Centre at (902) 470-7879, Monday to Friday between 8:00a.m. and 4:00p.m.

How will I be informed of study results?
At the end of the interview, you will be asked if you would like to receive a copy of the study results. If you say yes, you will be asked to confirm your email address. If you would like a paper copy of the results, you will be asked for your mailing address. The results may take up to one year to prepare.

Study Title: Risky Play for Children with Physical Disabilities within Atlantic Canada from the Perspective of their Caregivers

Participant INITILAS:
Participants preferred email address (for future contact):

Please check the box indicating that you acknowledge and consent to having your interview recorded for research purposes.

☐**Yes, I consent to having my interview recorded**

Please check the box indicating if you which to be contacted with the research results.

☐☐**Yes** **No**

Participant Consent

I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant: (Print)
Participant Signature:
Date: Time:

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY

I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.

Name: (Print)
Signature: Position:
Date: Time:

STATEMENT BY PERSON OBTAINING CONSENT

I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating

Name (Print)
Signature: Position:
Date: Time:

APPENDIX D – CAREGIVER INTERVIEW GUIDE

Script: Thank you for agreeing to chat with me today- it is nice to meet you. Today I want to talk to you about your perceptions of your child's risky play behaviours and how their physical disability may impact these behaviours. I will be asking you questions about a few different topics- how you perceive risky play, the factors that you believe influence your child's risky play experiences, how you define and characterize risky play, and your family demographics. The information you share here with me today, will help with a research project. Your perspective as a caregiver is invaluable. I would like to remind you that this interview will be recorded in order to access its information later on for the purpose of this research. If you want to stop the interview at any point, you can tell me you would like to stop. You can take a break whenever you want. If you want to skip a question, you may as well.

A: CAREGIVER'S PERCEPTIONS OF RISKY PLAY FOR CHILDREN WITH PHYSICAL DISABILITIES

A.1. Can you please tell me a little bit about your child's play?

Probes:

- Describe where their play typically takes place.
- Describe some of their favourite activities.
- With whom does their play typically take place.

A.2. **Can you please tell me about what risky play looks like for your child?**

Probes:

- Does it occur indoors and/or outdoors?
- Is it structured and/or unstructured?
- With whom? (alone, with friends, with family)
- Where? (at school, at home, at the park)
- I've noticed you mentioned (add in categories of risky play discussed), could you tell me a bit more about (add in categories not discussed) (categories: great heights, high speeds, with dangerous tools, near dangerous elements, rough and tumble play, unsupervised play, play with impact, vicarious play.

A.3. Can you please describe to me how you would define or characterize risky play?

Probes:

- Any examples of activities that may fit within this definition.

A.4. How you feel when your child participates in risky play?

Probes:

- Emotions you may feel when they are participating in risky play (fear, nervous, happy)
- How do your feelings differ between activities? (indoor/outdoor environment?)

A.5. Can you describe any benefits that you feel your child receives from engaging in risky play?

A.6. What are some factors makes risky play difficult for your child?

Probes:

- Environments, people, culture, stigma, money, time, lack of opportunities, fear, transport, policies?
- Are these barriers personal or created by others?
- What are some strategies your child uses to overcome these barriers?
- How long has your child encountered these barriers? Have they changed over time? If so, how?

A.7. What are some factors that make risky play easier for your child?

Probes:

- Environments, people, culture, stigma, money, time, lack of opportunities, fear, transport, policies?
- Would your child's use of loose parts in their play add a level of risk to their play? If so, how?
- Are these facilitators personal or are they created by others?
- Have these facilitators changed over time?

A.8. Can you describe any other factors that we have not touched on that influence your child's participation in risky play?

Probes:

- Anything that has helped your child experience more risk in their play or has gotten in the way of them participating in risky play.

A.9. Now that we have had this discussion about risky play, I am wondering how you would define risky play?

Probes:

- Would you change your answer? How? Why?

Script: Thank you for participating in this interview and sharing your personal stories regarding your child's risky play experiences and behaviours. I appreciate all the information you have shared with me today. I am now going to ask you just a few demographic questions. These questions will help me describe the group of caregivers that are going to participate in this study. These questions will include information about yourself, your family, and more specifically your child who attends the IWK with a physical disability.

B: FAMILY DEMOGRAPHICS

B.1. May I ask how old you and your child who attends the IWK Kids Rehab Clinic are?

B.2. As gender and gender-expression are fluid and individual concepts, please describe how you identify your gender and how your child identifies their gender. Some examples of gender include, but are not limited to woman, trans*, and non-binary.

B.3. Cultural identity is your self-defined sense of belonging to a group, which could include (but is not limited to) race, ethnicity, nationality, or religion. Please describe the ethno-racial-cultural group(s) with whom you identify and with whom your child identifies with. Examples include Mi'kmaq, Italian, African Nova Scotian, Lebanese, Inuit, Acadian, Jewish, English, Canadian, Chinese-Canadian, Colombian, German, etc.

B.4. May I ask about your child's disability (or disabilities)? (acquired or congenital)

B.5. May I ask where you and your child live? (rural or urban)

B.6. Can you describe the relationship between you and your child who attends the IWK Kids Rehab Clinic? (parent, grandparent, aunt/uncle)

B.7. Would you like to be informed of the study results?

- Yes (please provide your name and email address):
- No

Script: Thank you for your participation in this interview. In order to protect yours and your child's identity, we do not want to use your true names in the data. I would now like you to choose an alternative name for your file in order to protect your identity. If you do not wish to choose an alternative name, I will do so for you. Before we end do you have any questions, or anything you would like to add?

APPENDIX E – VISUAL MAPS

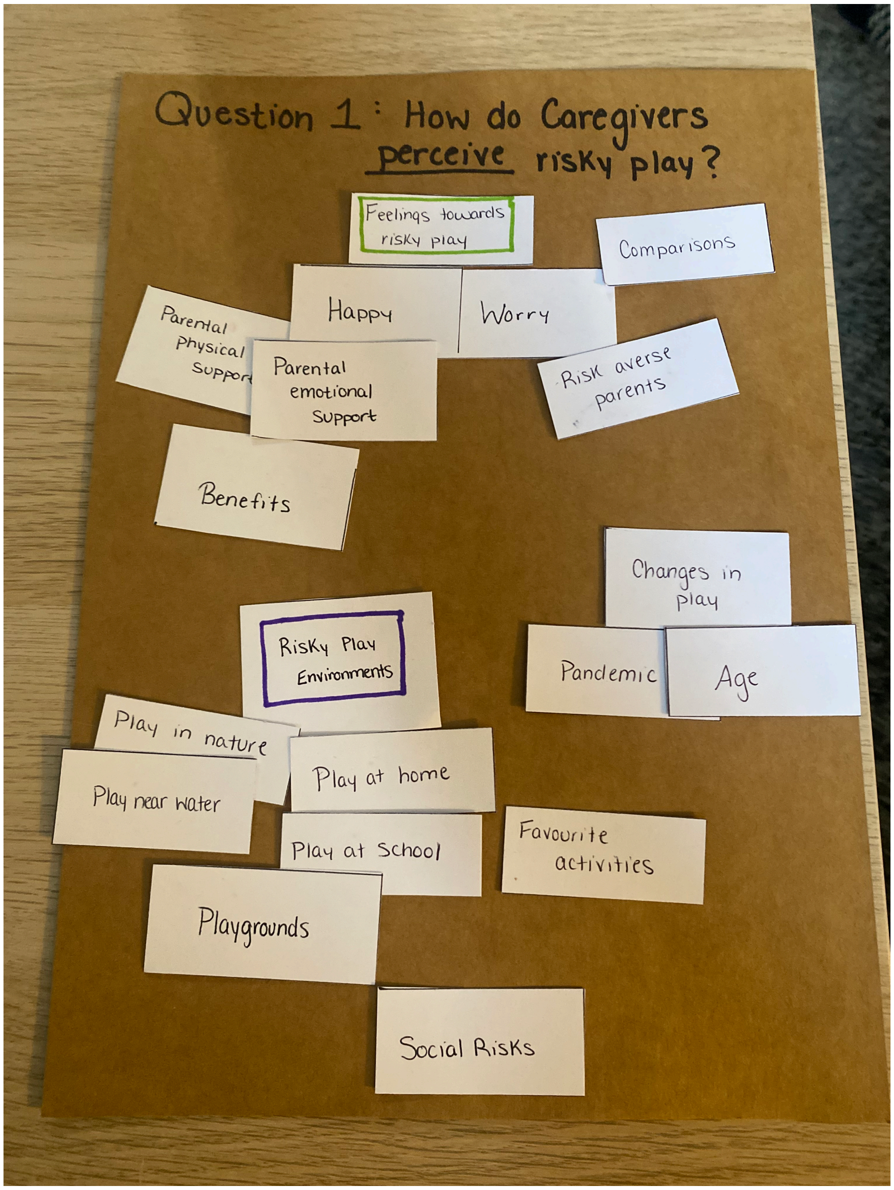


***Figure* 4.** *Visual map of codes created in data analysis mapped onto research question 1: How do caregivers of CWPD perceive risky play? (e.g., their attitudes towards risky play for their CWPD).*

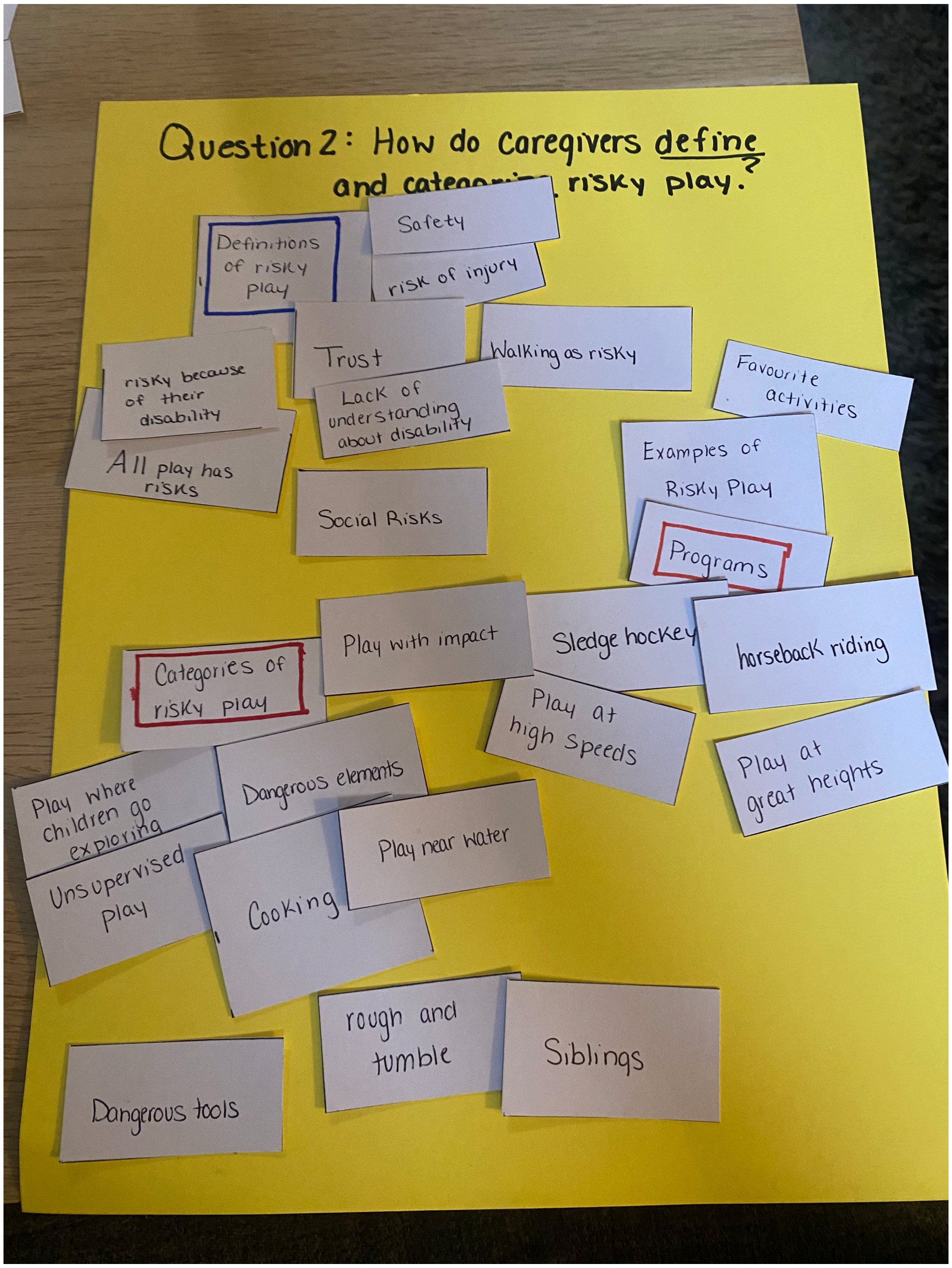


***Figure** 5. Visual map of codes created in data analysis mapped onto research question 2: How do caregivers of CWPD define and characterize risky play?*

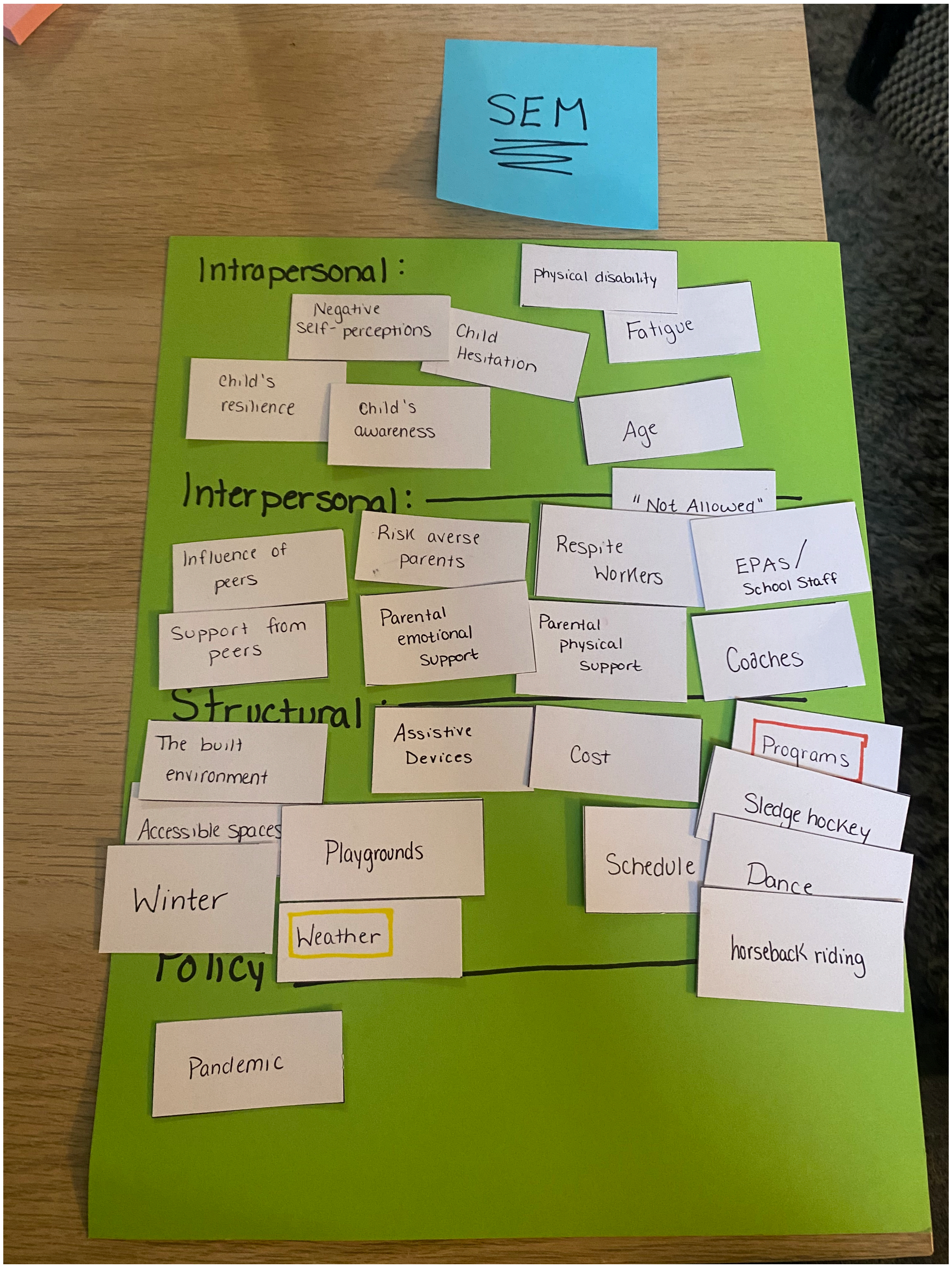


***Figure** 6. Visual map of codes created in data analysis organized using the SEM and mapped onto research question 3: From the perspective of the caregiver, what are factors that influence CWPD' risky play experiences?*

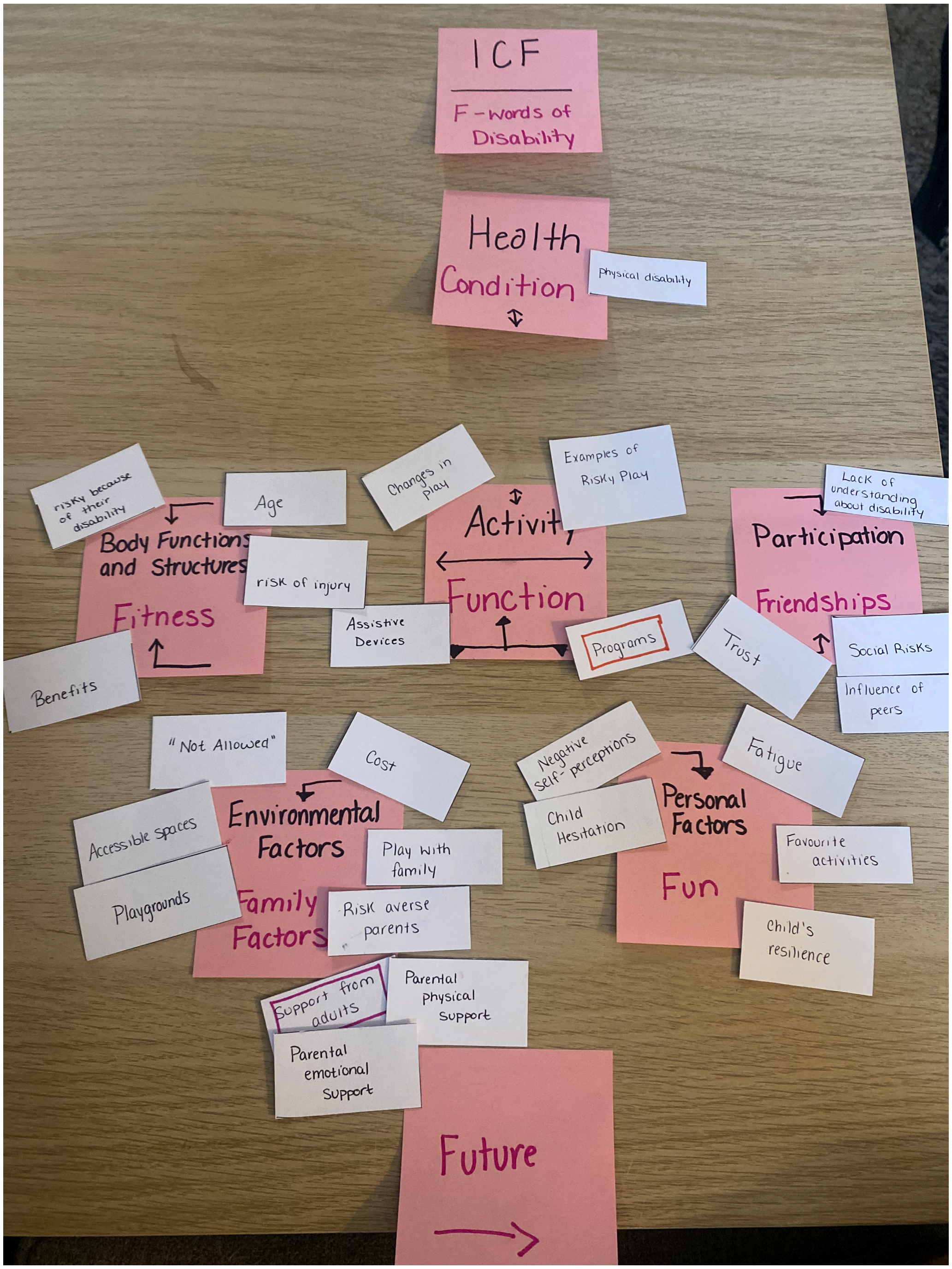
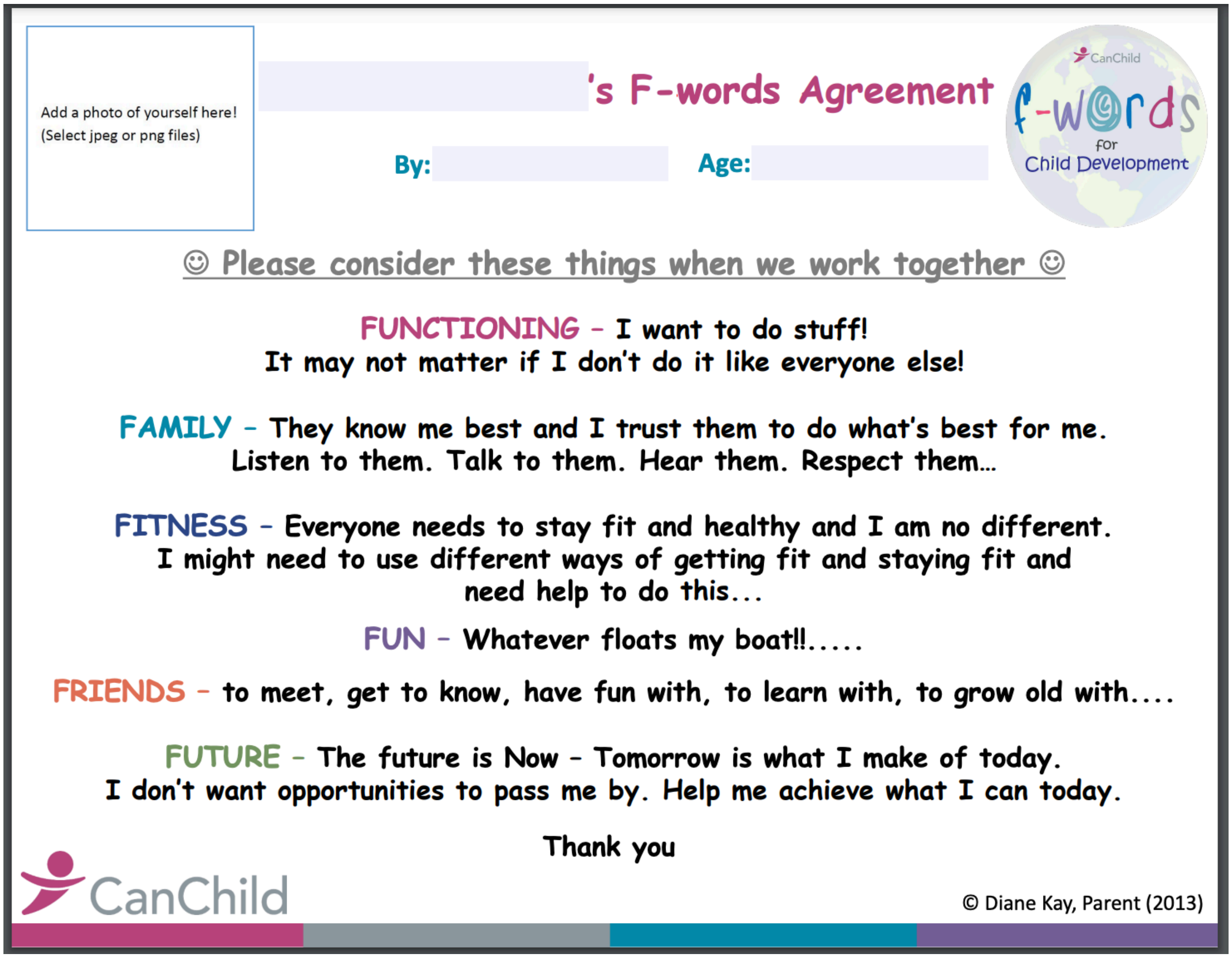


***Figure** 7. Visual map of codes created in data analysis organized using the ICF and the F-words of childhood disability.*

APPENDIX F – BRAUN AND CLARKE'S (2022), 15-POINT CHECKLIST FOR GOOD REFLEXIVE THEMATIC ANALYSIS

No.	Process	Criteria
1	Transcription	The data have been transcribed to an appropriate level of detail; All transcripts have been checked against the original recordings for 'accuracy'.
2	Coding and theme development	Each data item has been given thorough and repeated attention in the coding process.
3		The coding process has been thorough, inclusive and comprehensive; themes have not been developed from a few vivid examples (an anecdotal approach).
4		All relevant extracts for each theme have been collated.
5		Candidate themes have been checked against code data and back to the original dataset.
6		Themes are internally coherent, consistent, and distinctive; each theme contains a well-defined organizing concept; Any subthemes share the central organizing concept of the theme.
7	Analysis and interpretation – in the written report	Data have been - interpreted, made sense of - rather than just summarized, described or paraphrased.
8		Analysis and data match each other - the extracts evidence the analytic claims.
9		Analysis tells a convincing and well-organized story about the data and topic; Analysis addresses the research question.
10		An appropriate balance between analytic narrative and data extracts is provided.
11	Overall	Enough time has been allocated to complete all phases of the analysis adequately without rushing phase, or giving it a once- over-lightly (including returning to earlier phases or redoing the analysis if need be).
12	Written Report	The specific approach to thematic analysis, and the particulars of the approach, including theoretical positions and assumptions, are clearly explicated.
13		There is a good fit between what was claimed, and what was done – i.e. the described method and reported analysis are consistent.
14		The language and concepts used in the report are consistent with the ontological and epistemological positions of the analysis.
15		The researcher is positioned as *active* in the research process; Themes do not just 'emerge'.

APPENDIX G – F-WORDS OF CHILDHOOD DISABILITY TOOLS DEVELOPED BY RESEARCHERS AT CANCHILD



Add a photo of yourself here!
(Select jpeg or png files)

's F-words Agreement

By:

Age:

☺ Please consider these things when we work together ☺

FUNCTIONING – I want to do stuff!
It may not matter if I don't do it like everyone else!

FAMILY – They know me best and I trust them to do what's best for me.
Listen to them. Talk to them. Hear them. Respect them…

FITNESS – Everyone needs to stay fit and healthy and I am no different.
I might need to use different ways of getting fit and staying fit and
need help to do this...

FUN – Whatever floats my boat!!.....

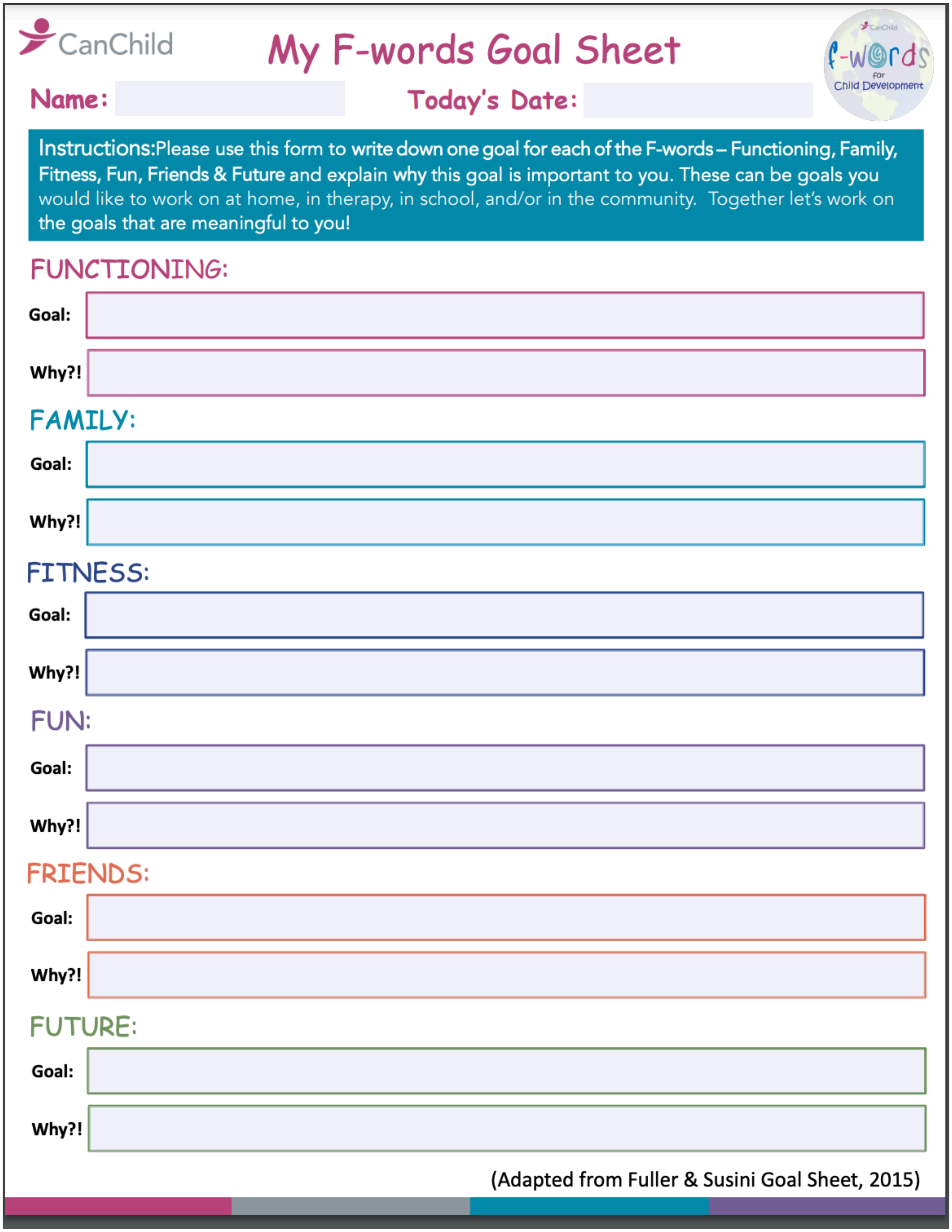
FRIENDS – to meet, get to know, have fun with, to learn with, to grow old with....

FUTURE – The future is Now – Tomorrow is what I make of today.
I don't want opportunities to pass me by. Help me achieve what I can today.

Thank you

© Diane Kay, Parent (2013)

Figure *8. The F-Words Agreement, developed by Diane Kay at CanChild (Rosenbaum & Gorter, 2012)*



CanChild

My F-words Goal Sheet

f-words for Child Development

Name:

Today's Date:

Instructions: Please use this form to write down one goal for each of the F-words – Functioning, Family, Fitness, Fun, Friends & Future and explain why this goal is important to you. These can be goals you would like to work on at home, in therapy, in school, and/or in the community. Together let's work on the goals that are meaningful to you!

FUNCTIONING:

Goal:

Why?!

FAMILY:

Goal:

Why?!

FITNESS:

Goal:

Why?!

FUN:

Goal:

Why?!

FRIENDS:

Goal:

Why?!

FUTURE:

Goal:

Why?!

(Adapted from Fuller & Susini Goal Sheet, 2015)

***Figure** 9. F-Words Goal Sheet,(adapted from Fuller & Susini, 2015), accessed from the CanChild website.*