# RISKY PLAY: EXPLORING PERSPECTIVES OF PARENTS IN ONTARIO

by

# Denver Hilland

Submitted in partial fulfilment of the requirements for the degree of Master of Arts

at

Dalhousie University Halifax, Nova Scotia April 2019

### **Dedication**

This thesis is dedicated to Meghann Spencer, who became a dear friend and inspiring role model in the midst of this project. Thank you for motivating me and creating an innovative environment to work. Your selflessness and innate ability to lead by believing in others was an influential ingredient to the completion of this project. This thesis was developed by the input of five wonderful mothers looking to create the best world possible for their children.

You embody that spirit, thank you.

# **Table of Contents**

List of Tables.	vi
List of Figures.	vii
Abstract	viii
Acknowledgements	ix
Chapter 1: Introduction	1
Key Terms	1
Play in the Early Years	4
Purpose	7
Significance	8
Summary	10
Chapter 2: Literature Review	11
Healthy Childhood Development in the Early Years	11
Cognitive Domain	11
Socio-Emotional Domain	12
Physical Domain	13
Summarizing Early Childhood Development	15
The Role of Play in Childhood Development	16
Socio-Emotional Development	16
Cognitive Development	17
Physical Development	18
Addressing all Three Domains	20
Declining Levels of Play	22
Risky Play	24
A Social-Ecological Approach to Supporting Childhood Play	26
The Interpersonal Sphere	28
Understanding Parental Beliefs	30
Basis for the Current Study	32
Summary	33
Chapter 3: Methods	35
Introduction	35

	Design	35
	Methods	36
	Participants and Recruitment	36
	Setting and Procedure	37
	Data Collection	38
	Measures	38
	Quantitative Data	38
	Qualitative Data	40
	Data Analysis	42
	Framework and Methodology	44
	The Social-Ecological Model	44
	Directed Content Analysis	44
	Ethical Considerations	45
	Researcher Details and Reflexivity	46
	Summary	47
Cha	apter 4: Results	48
	Introduction	48
	Tolerance of Risk in Play Scale	48
	Defining Risky Play	51
	Comfort with Risk	53
	Play at Heights	53
	Play at Fast Speed	55
	Play with Harmful Tools	57
	Rough and Tumble Play	61
	Elements	64
	Disappearing or Getting Lost	66
	Perceptions, Negotiations and Consequences of Risk	67
	Perceiving Risk through an Occupational Lens	67
	Conflicting Parenting Styles	71
	Risk Assessment versus Hazard Check	74
	Why is Risk Important?	76

Injury as Part of Childhood	79
Summary	80
Chapter 5: Discussion	82
Introduction	82
Interpreting Qualitative Themes in the Context of Quantitative Data	82
Comfort/Discomfort with Specific Categories	82
Framing Perspectives through Risk-Tolerance	85
What is Risky Play?	86
When Does a Risk Become a Hazard?	87
Unpredictability and the Element of the Unknown	88
Trust	89
Taking Action	90
Interpreting Risk	92
The Influence of Education	92
Parenting Styles	93
Benefits	94
Strengths	95
Limitations	96
Future Research	98
Implications for Health Promotion and Policy	100
Conclusion.	102
References	103
APPENDIX A: Recruitment Poster	113
APPENDIX B: Information Sheet.	115
APPENDIX C: Signature Page.	118
APPENDIX D: Tolerance of Risk in Play Scale	119
APPENDIX E: Interview Script	121
APPENDIX F: Dalhousie Research Ethics Board Approval Letter	123
APPENDIX G: TCPS 2 CORE Certificate	124
APPENDIX H: Request for Study Information	125

# **List of Tables**

Table 1	Participant Characteristics	49	
	•		
Table 2	TRiPS Items with Complete Consensus	50	

# **List of Figures**

Figure 1	The Social-Ecological Model	27
----------	-----------------------------	----

#### **Abstract**

The aim of this study was to contribute to the understanding of parental attitudes regarding risky play, and to understand how parents negotiate between safety and risk in their child's play. This project used mixed methods by framing qualitative data from five semi-structured interviews, within individual risk-tolerances assessed by the Tolerance of Risk in Play Scale. Interviews revealed parents' definitions of risk aligned with current literature, with the exception of their three- to five-year old engaging in play where they could get lost/disappear. Participants with lower TRiPS scores displayed more discomfort with risk than others, however, were still able to incorporate risk into their child's play. These results challenge current assumptions that risk-tolerance is the most important target variable for parents to allow their child to engage in risky play. This study lays a foundation for future studies to examine parental risk-assessment, and the need for perspectives from diverse populations.

### **Acknowledgements**

It has been a winding and unpredictable journey to get here, but it is with so much excitement and happiness that I take the final steps in completing this project. I cannot thank enough, the individuals who walked with me through this process and stuck with me until the end. It is difficult to put into words how much your support has meant to me.

To my supervisor Dr. Sara Kirk, for being supportive and patient of my needs throughout the past three years. Though this experience was very different than what we began in 2016, I am so grateful that you were flexible and understanding to help me carry this through! I have learned a wealth of knowledge from you and am so thankful for your encouragement along the way. To my committee members Drs. Karen Gallant and Michelle Stone, thank you for offering such excitement and wisdom towards my project, as well as refreshing creativity. All three of you are incredible role models to me, and I am grateful for the opportunity to have worked alongside you.

To my participants who offered their time and energy to provide me with their rich experiences as mothers, thank you! I enjoyed laughing and reflecting with you on such exciting times in your lives. Thank you for letting me into your world in the middle of the chaos of parenthood, your generosity was indispensable.

To the MacDonald family and friends who welcomed me to Halifax in the form of Sunday dinners, it was an absolute privilege to be in the presence of brilliant, witty and adventurous company every week. You truly gave me a second home, and for that I am infinitely grateful.

To my wonderful friends at Dalhousie who have taken up permanent residency in my heart, thank you for your laughter, exuberance, and guidance. You were the most valuable take-away from my time as a graduate student.

To my Laurier friends, you have inspired me to push through any difficulties and obstacles and continue pursuing this goal. Every one of you is doing something exceptional and I feel so fortunate to have you not only as friends but as fierce women making a mark in this world.

To my family, for always giving me a new goal to reach for. Thank you for being listening ears, and shoulders to lean on during this eventful chapter of my life. I am proud to be a part of this clan, and I'm excited to see what new adventures lie ahead. Rainer, Agnes and Sanborn, thank you for check-ins and life chats that always made me feel secure. Daddy, thank you for always picking up the phone. Your unconditional support and empathy is invaluable to me. And of course, thank you to Mum and Al. Thank you for opening your home and providing me with a safe space to continue this project. You have both been in the thick of it with me since we drove to Halifax for my first day of classes. This project is as much yours as it is mine.

#### **Chapter 1: Introduction**

The World Health Organization (WHO) highlights early childhood development as the most important developmental stage throughout the life course, critical for long-term health (Siddiqi, Irwin & Hertzman, 2007). Research demonstrates links between early childhood development and cognitive functioning, mental health, obesity, heart disease, literacy, criminality, and overall well-being (Siddiqi, Irwin & Hertzman, 2007). Indeed, promoting an optimal environment for children to learn, grow and prosper is a priority across a variety of health fields.

Supporting the stance of the WHO, the Public Health Agency of Canada (PHAC) lists healthy childhood development as a Social Determinant of Health (Public Health Agency of Canada [PHAC], 2013), reiterating that development as a child has long-term repercussions. Early childhood specifically is marked by rapid changes in cognitive, socio-emotional and physical domains. Many activities, behaviours and interventions assist in the development of these areas. However, play is arguably one of the most influential contributors to optimal development and well-being (Milteer, Ginsburg et al., 2012). In the early years, play is used as a way of understanding one's environment, communicating with others, forming strong relationships, and learning to move (Siddiqi, Irwin & Hertzman, 2007). It has an integral role in physical literacy, as well as positive cognitive, emotional and social development (Ginsburg, 2007; Ramstetter, Murray & Garner, 2010).

#### **Key Terms**

Before continuing, some important terms and constructs that will arise throughout the current study will be defined. Mentioned above, **physical literacy** is a term used to

describe "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life" (International Physical Literacy Association [IPLA], 2014). Physical literacy encapsulates affect toward physical activity, as well as a number of physical constructs such as fundamental movement skills, gross motor development and motor skill proficiency. These three terms are regularly used interchangeably in studies. For the current study, fundamental movement skills refer to physical building blocks for movement, such as walking, hopping, running, skipping, throwing, etc. (Cohen, Morgan, Plotnikoff, Callister & Lubans, 2014). Gross motor development refers to the progression of skills and movement patterns that involve large muscle groups (hopping, running, skipping), and motor skill proficiency refers to the level of mastery of fundamental movement skills or gross motor movements. These constructs are critical in optimizing health in early childhood.

Play is commonly divided into structured or unstructured categories. Structured play refers to activities that are organized, have enforced rules, and are often led by a supervising body (e.g., parent or caregiver). Conversely, **unstructured play** is ever evolving, exploratory in nature and is often child-led (rules, dynamics, and components of the activity are defined by the child). For the purpose of this study, "outdoor, energetic, active, free, exploratory, and physical play" are interrelated constructs falling under the category of unstructured play. Throughout the literature, the terms "active, energetic, free, exploratory, and physical play" are often used interchangeably to describe play that is absent of parental or caregiver influence, and organically changes as the child explores and interacts with their environment. These forms of play rely on creativity from the child and are often very physically involved, which is why for the purpose of this study, **active** 

**play** was the broader term chosen to encompass all the above-mentioned constructs seen throughout the literature.

As will be discussed in the following chapter, risky play is a type of active play that introduces feelings of fear or exhilaration, and has the child exploring their physical prowess in a way that may result in injury. Other themes involve activities that are challenging or new, and associated with feeling almost out of control (Stephenson, 2003). Risk can be introduced to play in many forms, and in many environments (both indoor and outdoor), however, the literature posits that outdoor environments tend to increase opportunity and prevalence of risky play among children more than indoor environments (Waters & Begley, 2007). Therefore, for the purpose of this study, **risky play** refers to unstructured, active play in the outdoors that introduces the possibility of injury.

Throughout the current study, several categories will be described to understand the various elements and types of danger that may arise during risky play. This study used the six categories of risky play identified by Sandseter (2007): great heights, high speed, harmful tools, dangerous elements, rough and tumble, and getting lost.

- Great heights involves play where there is a risk the child may fall from something. This could include climbing trees, jumping off tall rocks, or swinging from monkey bars.
- 2. *High Speed* involves play that is fast paced, and the child may experience feelings of being out of control. Activities may include running down a hill at top speed, games of chase, or racing a bike.
- 3. *Harmful Tools* involves play with objects that may cause harm if used improperly. Sandseter (2007) discussed play with sharp tools such as knives or scissors. For

- the current study, participants were also asked about the use of sticks, rocks or other objects that may cause harm to oneself or another if used inappropriately.
- 4. Dangerous Elements involves play in or near elemental hazards. This includes play in or near water, or an interaction with fire. Participants in the current study were also asked about their child's engagement with Canadian weather such as snow, rain and mud puddles.
- 5. Rough and Tumble involves play that often resembles wrestling. Rough and tumble is very physically engaged and may occur with other children, a parent or a family pet.
- 6. Getting Lost is play that may result in the child leaving the sight range of adult supervision. This could occur in hide-and-seek type games, or children being able to wander off while on a hike.

Finally, this study aimed to understand parent perspectives of risky play in early childhood. The age range chosen to incapsulated early childhood was between three and five years of age. Children aged three have typically begun to develop fundamental movement skills and are in control of gross motor movements, allowing them to participate in the six categories listed above. Play in this way may continue past five years of age, however, children aged five are typically not enrolled in school, thus their parent would still be a main influencer of their behaviour. For these reasons, three to five years of age defined early childhood for the current study. With these definitions in mind, the culture around child's play will now be explored leading to the basis for the current study.

## Play in the Early Years

Play begins in infancy, peaks during childhood, declines in adolescence and is often absent into adulthood (Pellegrini & Smith, 1998a). Characteristic of early childhood

is the emergence of active play, where children increase their heart rate, engage in gross motor development, form social bonds with others and feel excitement and exhilaration. Active play is the foundation of a healthy childhood.

Unfortunately, growing concerns around safety and injury prevention have led to a reduction of play in general, particularly active play in the outdoors. In a study conducted by Veitch, Bagley, Ball, and Salmon (2006), the most popular theme that arose from parents regarding where their children were allowed to play was safety. Parents were concerned about strangers, teenagers, and high traffic roads, which strongly influenced whether their children would be allowed to play outside (Vietch et al., 2006). Active play in the outdoors is a strong facilitator of risky play, because children have an inclination to explore natural landscapes (greenery) more freely than indoor settings, and these natural outdoor spaces promote more risk-taking behaviors than indoor, or man-made settings (paved play spaces) (Waters & Begley, 2007). As described by Sandseter and Kennair (2011) children have an evolutionary need to engage in free, unstructured, exploratory play in the outdoors. The loss of active, outdoor play is related to an increase in sedentary lifestyles, obesity, and psychopathology (Gray, 2011). These outdoor play opportunities are critical for children to develop accurate risk appraisals, resilience and develop coping mechanisms to deal with risk in the future.

Currently, there are two opposing sides to the risky play debate. A large body of literature is dedicated to risk reduction and safe play with the goal of reducing injuries among children. On this side of the argument, children's health is measured by the absence of physical injury, and safety is prioritized. Playground injuries are one of the largest concerns, motivating research on how to get children to be safe and use caution during play (Heck, Collins & Peterson, 2001; Morrongiello & Mark, 2008; Schwebel,

2006). As Sandseter and Kennair (2011) point out, "no matter how safe the equipment, the children's need for excitement seems to make them use it dangerously" (p. 259). This places an emphasis on children's natural propensity towards risky play, though parents may feel the urge to intervene. Consequently, this focus on injury prevention also has ramifications for how often a child is allowed in the outdoors, and under what conditions. If safe play is most important, there may be a decline in allotted time in the outdoors due to the need for supervision. This difficulty is described by a parent interviewed by Veitch et al. (2006): "it all comes down to how busy I am at the time. Because there's no way I'd let him go to parks by himself" (p. 388). Evidently, if a parent is unable to supervise their child or does not trust the safety of the environment in which they play, the child may end up stuck indoors. As mentioned by Brussoni et al. (2015), limiting play in this fashion due to fear of risk can lead to a decrease in active play, hindering early childhood development, and contributing to poor health outcomes later in life.

On the opposing side, emerging research is emphasizing the developmental advantages and health benefits of risk in children's play. Researchers on this side of the debate argue that in order for children to understand their limits, cope with constructs such as pain or fear, make decisions, problem solve, and develop physical literacy, risk is a necessary component in children's play (Brussoni et al., 2015; McCurdy, Winterbottom, Mehta & Roberts, 2010; Sandseter & Kennair, 2011). Unlike safety promoters, risky-play supporters believe that, although severe injury should be avoided, minor injuries are a natural part of children's activity (Sandseter & Kennair, 2011). Furthermore, children are naturally drawn towards risky play and letting children learn how to manage that risk is part of keeping them safe (Brussoni, Olsen, Pike & Sleet, 2012). It is important to note that this is not to say that those in favour of risky play actively encourage less supervision

of children's activities; rather, they advocate that parents avoid over protecting their children to the point of developmental hindrance. In other words, "keep children 'as safe as necessary' not 'as safe as possible'" (Brussoni et al., 2012, p. 3134).

In order to best support the development of children, safety promoters and riskyplay supporters must find a way to reconcile their differences. If, as Brussoni et al. (2012)
put it, allowing children to manage risk through risky play *is* a safety measure, then there
is in fact no debate; risky-play supporters and safety promoters are synonymous. One of
the goals of this study was to assist in bridging this gap by understanding how parents
negotiate risk and safety while supervising their children's play. Specifically,
understanding the behaviours, actions and cues utilized by parents of young children to
either encourage or discourage risky play was paramount in this study. In doing so,
researchers, parents, educators, caregivers and policy makers can begin to work together
to create best practices to reduce hazards, promote safety and manage risk harmoniously.

#### **Purpose**

The purpose of this study was to understand the thoughts, actions, and beliefs of parents in regard to their child's risky play. Conflicting opinions in the literature about what is optimal for childhood development in regard to risk in play, and how to implement best strategies have left parental perspectives on the backburner. Furthermore, with mounting evidence in support of risky play, yet continued declining levels, there must be a disconnect between recommendations and actual parenting practices. This study aimed to expose some of the missing links, such as what specifically motivates parents to allow or prohibit different forms of risk, and what actions they take to do so.

To understand the dynamic between parental perceptions/actions and children's behaviours, the study was guided by the Social-Ecological Model (Bronfenbrenner,

1977). This model highlights how children's play behaviours are strongly influenced by interpersonal relationships with their parents, but also, that there are higher influencing bodies such as social norms and public policies which may be affecting the disconnect between theory and practice just described. Through a social-ecological lens, the current study brought light to the strong parental influence on children's risky play, while probing for what contextual circumstances are contributing to that influence. Using the Social-Ecological Model as a framework, this study aimed to address the following three research questions:

- 1. How do parents define risky play?
- 2. What are the perceived benefits and consequences of children engaging in risky, outdoor play, from the perspective of parents?
- 3. What actions and behaviours do parents engage in during their children's play that promote both risky play and safety?

With the three research questions as a guide, this study set out to understand parents' thoughts regarding risk, particularly in comparison to conventional definitions of risky play, and how parents are either promoting or discouraging risky play.

#### **Significance**

Recommendations for safe or risky play are developing from a growing body of literature from researchers and health care practitioners; however, the main supervisors of a young child are their parents (Tremblay et al., 2015). There is evidence that parents understand the importance of risk and outdoor play in children's lives, but there is little qualitative research on their thoughts, opinions or how they negotiate risk within the context of their child's play (Valentine & McKendrick, 1997). Furthermore, a study by Ferrao and Janssen (2015) demonstrates that verbal parental encouragement can increase

a child's participation in active outdoor play. If the consensus is that risky play is beneficial for children, it is paramount that parents are supportive of risky play, particularly for younger children such as those in this study.

There is growing support for the idea of risk in children's play, though there is less known about *how* to implement this concept. Ferrao and Janssen (2015) recommend that interventions should target parental beliefs and attempt to alleviate safety concerns, however, there is evidence to suggest that favourable parental beliefs regarding risky play don't increase actual risky play behaviours (Cevher-Kalburan & Ivrendi, 2015). In other words, it is possible for a parent to be very risk-averse and still understand the benefits of risky play, leading them to encourage it in their child's play. Current literature proposes that beliefs and actions are always congruent, which evidently may be untrue.

To better understand this dynamic, the current study used a mixed methods approach. Participants of this study were surveyed to place them on a spectrum of risk-averse to risk-tolerant. Then, their qualitative responses were examined through the lens of their individual risk-tolerances, which provided context to their perspectives and opinions. They offered first-hand accounts of their children's activity, as well as guided the experience of the contextual variables, which would lead them to either allow or prohibit their child from engaging in risky play. Participants in this study discussed which aspects of risky play in particular made them uncomfortable, and provided personal strategies as to how they coped with safety concerns and alleviated anxieties around their child's activities. Furthermore, they were asked to describe why a particular situation made them comfortable or uncomfortable which brought a deeper understanding to the higher influencing spheres of the Social-Ecological Model. This study is significant for

the novelty of this mixed methods approach, as well as the depth of data detailing the thought processes and actions parents may take regarding risky play.

## **Summary**

In conclusion, early childhood development is an important priority for life-long health. Active play is a crucial building block in supporting that development. Growing concerns about safety and injury prevention are limiting children's engagement in risky play – the best outlet for active play. To address both perspectives of promoting safety and risky play, this study collected interview data and commentary from parents on how they balance their concerns about safety, while still allowing their children to develop in physical, social and emotional domains. This data were then framed by survey responses indicating individual risk inclinations. Participants in this study have contributed to our understanding of what risky play means, and how we may negotiate our own internal struggles to optimize children's experiences. Lastly, and perhaps most importantly, participants in this study remind us that context is paramount; each account of risky play is unique, and is influenced by a wide variety of factors. Thus, parental beliefs and actions in combination with physical literacy and adequate risk assessment skills on the part of the child, all contribute to creating a safe play environment with plenty of opportunity for healthy risk taking.

The following chapter will further investigate the literature regarding early childhood development, declining levels of active play, our present understandings of risky play, and how the current study was developed to supplement those understandings within a social-ecological framework.

## **Chapter 2: Literature Review**

Healthy childhood development is listed as a social determinant of health by the Public Health Agency of Canada (PHAC, 2013), indicating that development as a child is linked to the health of an individual later in life. Specifically, the early childhood years are integral for socio-emotional, physical and cognitive development. The following chapter highlights the importance of healthy early childhood development, and the role that risky play has in supplementing that development. Relevant literature will be examined, and gaps will be explored to support the basis for the current study.

# **Healthy Childhood Development in the Early Years**

Healthy childhood development encompasses mental, emotional, social, spiritual and physical aspects (PHAC, 2013). Specifically, early childhood years exhibit large changes in socio-emotional, physical and cognitive domains. These early years are considered to be the most important developmental period throughout the lifespan by the World Health Organization (WHO), noting the strong influences on well-being, obesity, mental health, heart disease, literacy and more (WHO, 2019). Children aged three to five explore and absorb more environmental information, rapidly develop gross motor skills and begin to interact and communicate more with others than in infancy. Research has thoroughly examined key developmental components of early childhood, supporting interventions that promote optimal development across several domains. The following will highlight the importance of the cognitive, socio-emotional and physical domains in early childhood development.

*Cognitive Domain.* Cognitive development in early childhood is marked by the emergence of specific functions not seen in infancy. Characteristic of these years are the development of language (Tomasello, 2010), memory (Bauer, Larkina & Deocampo,

2010) and executive function, which involves the ability to regulate attention and behaviour. Cognitive changes during early childhood affect a child's behaviours, beliefs and attitudes. A systematic review by Carson et al. (2015) compiled research relating types of early childhood sedentary behaviour and its effects on cognitive development. Research demonstrated that reading was consistently associated with positive cognitive outcomes (most commonly assessing the language domain), while screen time either had no effect or a negative effect on cognitive development. This review demonstrates that different types of activities can have a lasting impression on early childhood cognitive abilities. Discovering ways to optimize cognitive development gives children the opportunity for growth in communication, memory and regulating abilities.

Socio-Emotional Domain. The socio-emotional domain encapsulates both social development and emotional development. Early childhood is especially crucial in these areas as children begin to form relationships and understand how to interact with others, both adults and peers. Children begin to express emotions in ways that are socially and culturally appropriate, as well as form close bonds with others (Yates et al., 2008). The WHO notes that "a child's individual development is transactional, reciprocal and mutually constituted" (Siddiqi, Irwin & Hertzman, 2007, pp. 23), indicating that optimal development involves communication and participation on behalf of the child as well as those in its environment.

Learning to appropriately manage and express emotion, develop empathy and self-confidence, form and maintain relationships are necessary prerequisites for functioning in a social environment (Darling-Churchill & Lippman, 2016). Many of these constructs, as well as social problem solving, and both positive and negative social behaviour, are used to assess readiness for school entry, which usually occurs at age five

(the age limit for this study) (Denham, 2006). Ensuring a child has successfully acquired these skills or is on track to acquire them, will affect their readiness for school, as well as other social environments (Denham & Brown, 2010). Furthermore, the proper development of socio-emotional constructs has been shown to affect academic success not only in early childhood, but continuing through school. Children who are able to communicate effectively, regulate emotions and have an awareness of the social environment are able to focus on and accomplish school-related tasks, as well as contribute to a positive learning environment for their peers (Denham & Brown, 2010).

Therefore, positive socio-emotional development is not only necessary in the early years, but it affects opportunities for growth later on. A study by Moffitt et al. (2011) even found that childhood self-control (beginning at age three) is a predictor of physical health, substance dependence, personal finances and criminal offences into adolescence and adulthood.

Physical Domain. Early childhood development in the physical domain is often assessed by the measurement of fundamental movement skills, or gross motor development. Fundamental movement skills and gross motor development are observable building blocks for movement, involving locomotor, object control and stability components (Cohen, Morgan, Plotnikoff, Callister, & Lubans, 2014; Gallahue & Ozmun, 2006). As an infant transitions into early childhood, unintentional, reflexive movements are refined. Crawling and unstable locomotor movements are replaced with the mastery of gross motor skills such as walking, running, jumping, climbing and skipping. Children learn to control their movements, test their limits and develop their physical skills.

Mastery of fundamental movement skills contributes to the development of an overarching construct called physical literacy. Physical literacy encompasses not just the

ability to complete physical skills but can be described as "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life" (IPLA, 2014). Therefore, physical literacy spans not only the physical domain, but the socio-emotional, and cognitive domains as well. Physical literacy is necessary to carry out daily activities of living, and has also been shown to have a profound effect on physical activity habits later in life (Barnett et al., 2009; Lloyd, Saunders, Bremer & Tremblay, 2014; Lopronzi, Davis & Fu, 2015).

In a study by Cantell, Crawford and Doyle-Baker (2008), a cross-sectional examination of the effects of low motor competence (a component of physical literacy) on a number of physical health measures was explored across eight to nine-year-old children, 17 to 18 year-old adolescents, and 20 to 60 year old adults. Motor competence was determined via three separate questionnaires and compared to a number of physical health measures including body composition, blood pressure, blood lipids and energy expenditure. Fitness measures were also included in analyses, including lung capacity, flexibility, muscular endurance and strength (Cantell, Crawford & Doyle-Baker, 2008). Low motor competence was associated with a number of negative health outcomes including muscular endurance, strength, flexibility, higher Body Mass Index, lower levels of blood HDL (high density lipoprotein), and higher levels of triglycerides, than individuals with high motor competency. This study demonstrates that motor competency may have a wide range of health related correlates, and suggests that low motor competency may pose barriers for regular physical activity participation.

Lloyd, Saunders, Bremer and Tremblay (2014) found similar results to those of Cantell et al. (2008), showing that motor skill proficiency (a component of fundamental movement skills) at a young age was positively associated with physical activity into

adulthood. Objective motor skill proficiency was measured at age six, and compared to self-report scores at age 16, and 26 years. Higher motor skill proficiency at age six was related to higher proficiency at both follow-up times. Furthermore, high motor skill proficiency at age six was related to more participation in moderate-to-vigorous physical activity in women at 26 years (the relationship in men was not significant) (Lloyd, Saunders, Bremer & Tremblay, 2014).

Though neither of these studies included children aged three to five, they demonstrate that lacking basic physical skills and components of physical literacy are barriers to physical activity later in life, leading to poorer health outcomes. Ensuring children not only develop fundamental movement skills, but also the confidence and positive affect towards physical activity, is crucial in forming healthy habits throughout the lifecourse.

Summarizing Early Childhood Development. It is clear that early childhood is a time of profound development in several domains with repercussions into adulthood, indicating that great care and attention should be given to this stage of an individual's life. As highlighted by Caplin & Cooper (2007), children progress and mature along predictable pathways, however there is vast variability within the normal range. Evidently, uncovering ways to promote optimal childhood development gives individuals a better chance of a healthy life. Luckily, one of the most profound landmarks of early childhood is the propensity towards and engagement in play, a crucial component of healthy development in all three of the domains just highlighted. The literature regarding play and its effect on early childhood development will now be explored within the context of cognitive, socio-emotional, and physical development.

# The Role of Play in Childhood Development

Play is defined by its enjoyable and purposeless nature. It has an inverted-U developmental course; it begins in infancy, peaks during childhood, declines in adolescence, then plateaus as it is often absent into adulthood (Pellegrini & Smith, 1998a). As Buriss and Tsao (2002) point out, there are several theories as to *why* children engage in play, some studies arguing its evolutionary basis; that children engage in play to develop skills necessary for survival (Sandseter & Kennair, 2011). Though the days of hunting and gathering are long gone, play still has an integral role in childhood development and presents itself in many different forms, including role-playing, active, imaginative, structured (formal guidelines), and unstructured or free play (ever-evolving and changing). From a holistic perspective, play addresses the multiple domains of healthy childhood development described previously.

Socio-Emotional Development. "Play provides an important socializing function, beyond the merits of being physically active, in which children learn about and negotiate identity and the social subtleties of relationships" (Siddiqi, Irwin & Hertzman, 2007, pp. 23). Studies that highlight the development of the socio-emotional domain regularly champion 'child-centered play' (Arnott, 2018). This construct refers to free play, in which activities are child-initiated and child-led. Young children explore their sense of self and learn to negotiate their social environment when they are provided with opportunities to take ownership of their play experiences. An article by Arnott (2018), reflected on two studies examining child-centered play in early childhood, and outlined the ways it developed constructs such as empathy, leadership, understanding and awareness of rules, and sharing knowledge.

The positive effects of play on socio-emotional development are even used within the field of clinical psychology, in the form of child-centered play therapy (CCPT). CCPT has been used as an effective tool for promoting communication when addressing mental health, behavioural and emotional concerns, especially in early childhood (Lin & Bratton, 2015). Through the use of toys and nondirective play, therapists allow the child to express emotions, experiences, thoughts and perspectives of their world, promoting socio-emotional development.

Research has demonstrated that physical play has an impact in this domain as well. Children who engage in motor and exercise play improve their fundamental movement skills. This mastery can contribute to improving self-confidence and self-esteem (Bunker, 1991). Conversely, poor motor development is linked to negative affect toward physical activity, and lower self-esteem. As a child plays and explores their physical limits, they begin to feel confident in their abilities, which can also translate to confidence in other skills outside the physical domain.

Fundamentally, play provides a platform to facilitate social interaction. Learning to communicate and self-regulate are important skills within the socio-emotional domain. As children play with others, both peers and adults, they gain these fundamental skills for social engagement.

Cognitive Development. As described in the previous section, cognitive development in the early years includes language, memory and executive function.

Similar to the benefits of child-centered play seen in the socio-emotional domain, child-led play is beneficial for cognitive development as well. A study by Cavanaugh,

Clemence, Teale, Rule and Montgomery (2016), tested the effectiveness of a literacy-rich guided play intervention by measuring kindergarteners' scores on the Dynamic Indicators

of Basic Early Literacy Skills (DIBELS) assessment, as well as journal writing and teacher observations. A control group was given toys and miniature items and instructed to use them in a teacher-given activity (e.g. naming objects and sorting them by sound). The experimental group was instructed to follow the teacher-given activity first, and then create their own game with the items. The intervention was implemented for 15 minutes each day and after only three weeks, there was a significant difference between conditions, in favour of the experimental, child-led condition. Children in the experimental condition scored higher on the DIBELS, and showed application of new vocabulary, improved executive function, and communication. Evidently, providing opportunity for creativity in play supports both socio-emotional and cognitive development in early childhood.

Physical Development. Active play serves as a platform for physical development, contributing to the acquisition of fundamental movement skills. As described earlier, these fundamental movement skills are part of physical literacy, which has a large impact on an individual's health throughout the lifecourse. Changing forms of play mark different stages of development; rhythmic stereotypes are characteristic of infancy, active/exercise play for early childhood, and rough-and-tumble play for later childhood (Pellegrini & Smith, 1998a). It is well supported that active play, which is play that involves regular bursts of moderate-to-vigorous physical activity, contributes to motor training in endurance, strength, and skill acquisition (Berghanel, Schulke & Ostner, 2015; Pellegrini & Smith, 1998b), all important components of physical development.

A study by Adamo et al. (2016), aimed to understand whether improving opportunities and support for locomotor play (a component of active play, which involves movement in any direction such as tag, or chase) in children aged three to five improved

their fundamental movement skills. Using a cluster-randomized control trial, daycare providers in six childcare centres across Ottawa were either given training and workshops to improve active play, or received no alterations to their curriculum. After six months, children in both control and experimental groups demonstrated improved fundamental movement skills; however only results from the experimental group were significant (Adamo et al., 2016). This study demonstrates both the importance of active play on development, as well as the influence of adults on the opportunity for play for preschoolaged children.

A study by Hai, Zezhao and Weimo (2015) assessed the effectiveness of a play and music program for three to five year old preschool children in China. Utilizing the Test of Gross Motor Development-2 (TGMD-2), researchers assessed various locomotor skills (running, galloping hopping, jumping, and sliding,) as well as object control skills (striking, dribbling, catching, kicking and throwing). TGMD-2 scores were positively correlated with the length of participation in the play and music program, indicating that play is effective at promoting physical development in preschool aged children.

Developing fundamental movement skills through play in early childhood is linked with physical activity participation throughout the lifespan, while poor motor competency is associated with negative affect and disengagement from physical activity (Bunker, 1991). Children who do well in physical tasks feel competent, confident, and are more likely to stay physically active as they age. The opposite can be said for children with low motor competency. This aligns with the construct of physical literacy, which encompasses actual physical skill as well as knowledge and positive affect. It is unknown whether disengagement from physical activity occurs because of negative affect or objective skill. Regardless, active play improves both motor competence and self-esteem,

which may influence an individual's decision to remain physically active beyond childhood (Bunker, 1991). Therefore, active play contributes to early childhood physical development, with lasting effects into adulthood.

Addressing all Three Domains. Play as a foundation for early childhood development is evidently well supported. Though play comes in many forms and is ever changing, unique to active play is its ability to encourage development across all three domains. Active play not only provides opportunity for the progression of fundamental movement skills and physical literacy, but it also stimulates cognitive, and socioemotional development. Participating in active play addresses the three domains through different pathways, enhancing the process by which children learn and grow (Yogman, et al., 2018).

A systematic review of the effects of physical activity (elicited by active play) on motor skills and cognitive development in early childhood (ages four to six) included 15 randomized controlled trials (Zeng et al., 2017). Researchers found that 80% of the included studies showed significant positive changes in motor skills or cognitive development, such as language learning, academic achievement, attention and working memory, as a result of increased physical activity.

Physical activity has even been shown to change the structure and function of the brain. As ParticipACTION's *Expert Statement on Physical Activity and Brain Health in Children and Youth* summarizes: "Children and youth who are physically active have larger brain volumes in the areas involved with memory and executive functions, including the hippocampus (deals with memory and emotions) and basal ganglia (deals with routine/voluntary motor movements). Physical activity can positively affect the amount of grey matter (i.e., the "living brain") as well as support better communication

between grey and white matter (i.e., tissue that connects different parts of grey matter to each other)." (ParticipACTION, 2018b, pp. 4)

A study by Cliff et al. (2017) assessed the relationship between social-cognitive development and adherence to the *Australian 24-Hour Movement Guidelines for the Early Years*. According to the guidelines, preschoolers are meant to have at least 180 minutes of physical activity including 60 minutes of energetic (active) play, less than one hour of sedentary screen time and 10-13 hours of good sleep. Data collected from 248 children indicated that children who met all three guidelines or just the sleep and physical activity guidelines performed better on the Test of Emotional Comprehension and Theory of Mind (both tests used to assess social cognition, i.e. the emotional state of others). These results demonstrate that active play has an effect on children's social and emotional skills.

Pellegrini and Smith (1998b) further support active play, noting the benefits to multiple areas of development. Cognitive development may be supported due to the breaks active play provides in learning cognitive tasks, or due to enhanced feelings of well-being and mastery after engaging in active play. They point out that rough and tumble play, a category of risky play that is examined in the current study, is also useful for social development. Children learn to code and decode social cues during rough and tumble play to distinguish the difference between "play fighting" and actual fighting, as well as interpret the emotional state of the other child. This demonstrates active play's role in social development (Pelligrini & Smith, 1998b).

There is evidence to support active play as a crucial component of early childhood that promotes development in all domains. In fact, a clinical report by the American Academy of Pediatrics goes so far as to say, "It could be argued that active play is so

central to child development that it should be included in the very definition of childhood" (Milteer, Ginsburg, et al., 2012). Though children are naturally drawn to active play, emerging literature is exposing a loss of physical play opportunities in early childhood. We will examine this change in the following section.

#### **Declining Levels of Play**

Just as active play promotes healthy development in the early years, a lack of physical activity is detrimental to several developmental domains and is associated with a host of negative health outcomes. In ParticipACTION's 2018 report card (using data collected through the Canadian Health Measures Survey), Canadian children received a D+ overall score for adherence to physical activity guidelines, and a score of D specifically in reference to active play (ParticipACTION, 2018a). Only 62% of children aged three to four, and 35% of children aged five to seven, meet the minimum physical activity requirements. Only 20% of children aged five to 11 spend several hours a day in unstructured play (ParticipACTION, 2018a). Mirrored by the Australian 24-Hour Movement Guidelines in the Cliff et al. (2017) study, the Canadian Society for Exercise Physiology (CSEP) pioneered the first 24-hour Movement Guidelines for the Early Years in 2017 (CSEP, 2017). Unfortunately, only 13% of Canadian children aged three to four meet those requirements (ParticipACTION, 2018a). Declining levels of physical activity in children have been linked to historical declines in outdoor play, and more time spent indoors, which are described in the following paragraph.

A survey conducted by Clements (2004) of 830 mothers across the United States, indicated that children take part in more indoor activities than outdoor. This is significant because children engage in more active play outside than inside. 70% of mothers recalled playing outside every day, compared to only 31% indicating their child played outside

every day. Interestingly, mothers in the study recognized the importance of outdoor, active play in their child's development, yet cited the dependence on television and computers, and parental safety concerns as barriers to their children's activity (Clements, 2004). Some parents in this study noted that their children *chose* to play inside, rather than outside.

Peter Gray (2011) supports this claim, arguing that due to parental concerns around safety, children spend much more time playing indoors. When they finally do have the opportunity to play outdoors, the outdoor play spaces are less frequented by other children, leaving them much less appealing. This is further supported in a study by Veitch, Bagley, Ball and Salmon (2006), as parents referenced "social aspects" as a facilitator or barrier to children's active play. Not having neighbours, siblings or other children at the park to interact with, children find active play less appealing, as the social aspect has been removed (Veitch, Bagley, Ball & Salmon, 2006).

Current trends demonstrate a decline in active play for children in their early years. Though there are several contributing factors, parental safety concerns and disinterest in playing outdoors, appear to be strong barriers listed by parents.

Interestingly, a qualitative study by Moore and Lynch (2017) examined children's (aged six to eight) own perceptions of well-being and happiness. The most popular activity described by children that made them happy was outdoor, active play at home, such as monkey bars, swings, and trampolines. Furthermore, they described how their environments facilitated participation in those activities (going to the park and materials available to them) (Moore & Lynch, 2018). Therefore, it would appear that parents may think that their child is disinterested in going outside to play, however that is the activity that makes them most happy. Children are also aware that where they play is influential

on what they are allowed to do. Both opportunity, and environment, affect how a child can play.

Active play may be declining for several reasons. In order to support optimal, healthy childhood development, young children must have regular opportunities for active play, and be exposed to environments that facilitate this type of play. As mentioned, play in the outdoors has been shown to promote active play (Nicaise, Kahan & Sallis, 2011). When children are allowed to go outside, how to make that opportunity as appealing as possible must also be considered. Facilitating freedom to be creative in outdoor play (as we have seen child-led play is significant for development), and explore a range of activities and movements, allows children to maximize the developmental benefits associated with being active. A form of play that accomplishes all these things is the topic of the current study. It is appealing to young children, occurs mainly outdoors, increases physical activity, drives physical literacy, promotes socio-emotional and cognitive development, and is child-centred. The overwhelming academic support for risky play will now be examined.

#### Risky Play

Research in recent years has championed risky play as a facilitator of active play. Children have a natural propensity towards trying new things and engaging in risk during play. Though it is difficult to explicitly define, recurring common themes expressed by researchers and early childhood educators include activity that is new and exploratory, involves feelings of thrill, exhilaration and some risk of injury. Sandseter (2007) categorized risky play by interviewing young children in a landmark study. Compiled data gave rise to six categories: play at heights, fast speed, rough-and-tumble, dangerous elements, dangerous tools, or disappearing/getting lost (Sandseter, 2007).

An important element of this type of play is that children are active and challenging their physical skills. The outdoor environment is a natural facilitator of children's engagement in risky play, which is why the current study aims to understand risky play in the outdoors. An observational study conducted by Waters and Begley (2007) found that natural outdoor play spaces encourage more risky play behaviours, thus both the outdoor and risky elements of this type of play are important for facilitating more active play. Engagement in risky play has been associated with positive health outcomes, particularly due to an increase in physical activity, but also its effects on resiliency, self-regulation and coping skills (Brussoni et al., 2015; Sandseter & Kennair, 2011). These last three components emphasize risky play's ability to target all domains of early childhood development.

A randomized control trial performed by Engelen et al. (2013) explored the effects of an outdoor, loose parts and teacher-parent risk perception intervention. Loose parts are objects without predetermined uses (e.g. a stick can be a sword, a shovel, or a broom), and have been demonstrated to increase levels of risky play. Over 13 weeks, the physical activity of elementary school children aged five to seven years old was measured using accelerometry. Children in the experimental group demonstrated an increase in levels of moderate-to-vigorous physical activity (MVPA) levels, as well as a decrease in sedentary time (Engelen et al., 2013). Though this study measured physical activity and not active play, the increase in MVPA was through an increase in risky play, thus encompassing active play.

A number of other studies have also found that risky play supportive environments can lead to an increase in children's active play (Brussoni et al., 2015). The systematic review completed by Brussoni et al. (2015) concluded that risky play is

beneficial for children's healthy development, highlighting increases in physical activity as well as social competence. Tremblay et al. (2015) performed two systematic reviews to develop a *Position Statement on Outdoor Play*. Considering the benefits to psychological and physical health, even with the risk of injury, the overall recommendation was to encourage children to engage in outdoor (and risky) play (Tremblay et al., 2015).

Review of the literature endorses risky play as important for childhood development. Brussoni et al. (2015) indicate that just as risky play promotes development across several domains, *restriction and limitation* of play due to a fear of risk, hinders that development. In turn this fear of risk has led to a decrease in allowances of risky play, which may be contributing to the decline in active play, having detrimental effects on physical literacy, and childhood development as a whole.

If an increase in risky play is positive for childhood development, it should be encouraged. Yet there are many factors that affect childhood play, and many ways to affect change in a child's behaviour. Personal, social, environmental, societal and political spheres can all impact the choices, opportunities and freedoms that children experience during play. For this reason, the current study was developed within a social-ecological framework. To understand the contextual circumstances affecting children's risky play, we will now examine support for the Social-Ecological Model, and why parental perspectives are key in understanding childhood behaviour.

#### A Social-Ecological Approach to Supporting Childhood Play

The Social-Ecological model (SEM) was developed by Bronfenbrenner (1977) to describe contextual influences on human development. Bronfenbrenner posited that affecting influences are reciprocal; not only does the environment affect the individual, the individual in turn affects the environment. Since then, the model has been used as a

framework to understanding individuals' behaviours, particularly in the field of health research. Using a social-ecological approach, one proposes that an individual's health behaviours and habits are not solely influenced by them, but that they are a result of a much larger, intricate environment.

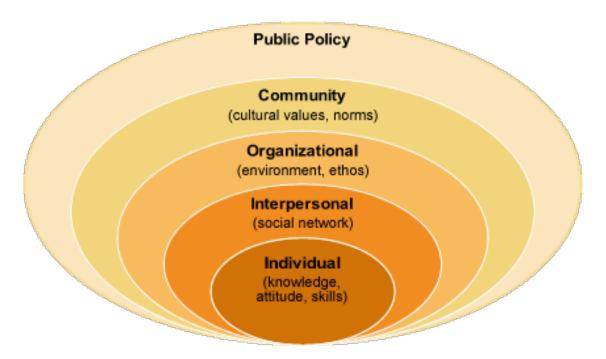


Figure 1: The Social Ecological Model (Bronfenbrenner, 1977)

The SEM places the individual at the centre of five spheres:

- 1. *Individual*: Individual characteristics such as personality, attitudes, skills and other personal factors are included in the very center of the model, indicating that individual factors strongly affect personal choices.
- Interpersonal: Individual behaviours are affected by influencing bodies in their social network. For children aged three to five, this includes peers, siblings, parents, family members, and daycare workers or early childhood educators.

- 3. *Organizational*: This includes the local environment and institutions with which an individual is affiliated. For young children, this would most likely include schools, daycare centres, and early childhood education centers.
- 4. *Community*: Regarding children's risky play, this sphere would include cultural norms and values, as well as spaces that provide opportunity for risky play engagement. Parks, outdoor play spaces, green space and access to those spaces are encompassed by the community sphere.
- 5. *Public Policy*: This refers to national, provincial/territorial and local laws and policy regarding risky play. This could refer to funding and development towards parenting services, pre-schooling or day-cares, as well as government funded and promoted research institutions such as the Public Health Agency of Canada.

The Interpersonal Sphere. Higher spheres in the model may influence childhood behaviour in different ways by providing resources and opportunity for risk play.

However, it is recognized that young children are significantly dependent on their parents, meaning the interpersonal sphere may strongly influence risky play behaviours. But how influential is the interpersonal sphere compared to organization, community and public policy? Children at this stage are still forming their own beliefs, behaviours, norms, likes, and dislikes. They are learning what is appropriate and what is inappropriate, most often from their parents. Therefore, it would be logical to argue that the interpersonal sphere is more significant to childhood behaviour than any other sphere.

This claim is supported in a study by Ohri-Vachaspati et al. (2014) that used survey data from 560 parents to determine the relative contribution of each layer of the SEM on children's weight status. Of all layers of the model, interpersonal characteristics

represented by parental perceptions of their neighbourhoods and parent demographics were most strongly correlated to predictions of whether a child was overweight or obese. Neighbourhood characteristics also proved to be a significant predictor. Evidently, parental opinions and perceptions are important factors in a child's health. Understanding the interpersonal sphere is integral to understanding how to engage children in risky play.

Similarly, qualitative findings by Veitch, Bagley, Ball and Salmon (2006) indicate that one of the most important aspects listed by parents as a barrier to their child's active play were their own safety concerns. Clearly, parental perceptions may be a facilitator or a barrier to a child's play, either way exerting strong influence.

A study by Loprinzi and Trost (2010) measured physical activity levels of preschool aged children in Australia via accelerometry, compared to a number of parental perceptions of physical activity. Loprinzi and Trost (2010) found that parental support for physical activity was positively associated with physical activity behaviours in preschool aged children at home. Furthermore, parental perceptions of their child's physical activity competence was positively associated with physical activity levels both at home and in a childcare setting.

Dowda, Pfeiffer and Brown (2011) found that parental perceptions were related to their preschool aged children's physical activity levels. Physical activity was measured using accelerometers, observation using the OSRAC-P, and a parent survey recording their child's coordination, enjoyment of physical activity and availability of at home physical activity equipment that is used by the child. Children's moderate-to vigorous physical activity (MVPA) was associated with home equipment and children's enjoyment of physical activity, as well as the quality of the preschool and sex of the child (Dowda, Pfeiffer & Brown, 2011). Most importantly, MVPA was most strongly correlated to

family support, indicating again that the interpersonal sphere is a crucial influence on a child's activity choices.

Understanding Parental Beliefs. As Sandseter (2009) describes, children are naturally drawn to risky play, as it elicits both fear and exhilaration. However, we have seen that parents have a direct impact on what their child chooses to engage in. Societal shifts have drawn attention to parents' growing concerns of risk, strangers, and traffic as safety hazards in their children's play (Veitch, Bagley, Ball & Salmon, 2006). Children aged three to five are not yet enrolled in school, and require round-the-clock supervision. At this time in their lives, parents and caregivers are the main supervisors of activity. This means that rules regarding appropriate play are dictated by parents, early childhood educators, and/or daycare staff.

Little (2010) found that parents who support their children's risky play can serve an important role in supporting that behaviour, and can also provide guidance for safety while supervising. If parents are supportive of risky play, they can allow it in their children's day while simultaneously teaching their child about safety.

There are many interrelated factors that have led to the decline of children's risky play, which makes it such a complex phenomenon to understand and tackle. Increased media coverage surrounding stranger danger, perceived insufficient public provisions for play (Valentine & McKendrick, 1997; Boufous, Finch & Bauman, 2007), and societal shifts in perceptions of risky play that lead parents to believe it is inappropriate, are all contributing factors. As Valentine and McKendrick (1997) describe, some parents even experience social stigmatization when they give their children more freedom during play. This aligns with the proposal stated earlier by Brussoni et al. (2015), that societal shifts in

parenting beliefs are restricting opportunities for outdoor play, inhibiting children from exposure to acceptable forms of risk.

If parental beliefs towards risky play are one of the main controlling factors in whether children can engage in risky play, an effective intervention would involve targeting parental beliefs regarding risk. Several studies have targeted parental beliefs as the modifying variable for children's risky play. As mentioned, Engelen et al. (2013) successfully increased children's time spent in MVPA by introducing both loose parts and targeting parental and caregiver perceptions of risk. Parents involved in the intervention participated in group discussions and risk-reframing sessions to explore their beliefs regarding risky play. The results from this intervention are outlined by Neihues et al. (2013). Many parents experienced "Aha!" moments, noting that while over-control of their children's activities had the best intentions, it also acted as a barrier to their children's risk-taking in play (Neihues et al., 2013, p. 230). They also noted the negative stigma they sometimes felt when they allowed their children to engage in risk, as well as how acceptable risk changes with each child and is dependent on situational factors. This demonstrates a gap in knowledge as to what exactly is acceptable and appropriate risk for preschool aged children.

There is a body of literature indicating that targeting parental beliefs of risk may increase their child's engagement in risky play. Interestingly, much of the qualitative findings regarding parental beliefs indicate that parents are already aware of the dwindling amounts of outdoor and risky play. In a study by Valentine and McKendrick (1997), questionnaires regarding neighbourhood characteristics, their child's play, and changes in their child's play over time were distributed across North-West England.

Semi-structured interviews were then conducted in response to questionnaires. Parents

noted the differences between their own childhood experiences and what is currently missing in the experiences of children today, particularly with regards to outdoor play. Valentine and McKendrick (1997) note that it may not be that children are spending too much time indoors, but that they are spending more time under adult supervision. This aligned with parent responses emphasizing their concerns of safety the need for supervision, even though they valued outdoor play for their children.

## **Basis for the Current Study**

If many parents understand the value of risky, outdoor play, yet levels are still decreasing, perhaps there is a disconnect between theory and practice. Evidently, parents may want their children to engage in appropriate risk, but have trouble coping with their own concerns regarding safety. A study by Cevher-Kalburan & Ivrendi (2015) examined the role of parenting styles and risky play opportunities for children. Interestingly, the study confirmed that favourable opinions toward risky play were not as influential in childhood behaviour as were parenting styles; perceptions and actual behaviours may not always align. Interventions are successfully targeting parental beliefs, yet is that the real reason why they are successful when parenting styles have been shown to be more effective? We could ask the question of whether the risk-reframing used by Neihues et al. (2013) to alter parental beliefs was the contributing factor to increases in risky play, or whether it was that parents became more aware of their own risk-inhibiting behaviours.

Literature exploring parent perceptions have cited parents admitting that their own anxieties are much of what inhibits their children's risk-taking (Neihues et al., 2013; Valentine & McKendrick, 1997). If this is true, there is a current gap in the literature. Recommendations have been made to parents indicating that they should allow their children to engage in risky, outdoor play, or interventions have been implemented to alter

parental perceptions of risky play (Tremblay et al., 2015). Yet, altering a parent's perception of risk may not actually change whether they provide opportunities for their child to engage in risky play. The underlying mechanisms of *why* parents feel discomfort when their child is doing something risky, or *what* in particular they are concerned about, is unclear. Furthermore, the actions taken by parents that are influencing children's risky play have not been identified. Collecting a mix of both qualitative and quantitative data allowed the researcher in the current study not only to learn how parents feel about risky play, but also to examine anxieties, thoughts, decisions, and actions with an understanding of the participant's directionality regarding risk. This study broke down risky play into individual categories and prompted participants to thoughtfully consider the underlying factors influencing their beliefs. The researcher regularly prompted explanations of the *why* parents feel a certain way and *what* they are doing as a response, explanations that are currently missing in the literature and fill a much-needed gap.

# **Summary**

This chapter has compiled the growing body of research regarding risky play and its role in early childhood development. As shown, early childhood is a significant stage in overall healthy childhood development, with play as a crucial component. In recent years, emerging evidence has demonstrated a decline in physical activity and play in the early years, but also a strong basis for the integration of risky, outdoor play to counteract this decline. Risky play has been shown to positively affect socio-emotional, cognitive and physical development in the early years, yet conflicting societal pressures around safety have made it difficult to implement. Play for children aged three to five is heavily influenced by supervising bodies, specifically parental figures. Therefore, it is crucial to

understand parental thoughts and beliefs regarding risky play, and how it is either encouraged or discouraged in childhood play.

Current research has categorized risky play, and examined parental beliefs, primarily in quantitative forms, or aimed to alter perceptions of risk. There is a lack of indepth understanding of the perceptions, struggles, stigmas, opinions and actions of parents regarding risky play in early childhood. This study aims to fill these gaps, not only by explicitly asking parents for their perspectives, but also framing those perspectives within their inclinations toward risky play. A mixed methods approach has not been used in this way before, which contributed to the methodological design of this study. The next chapter will outline the study design, and describe how data were collected, analyzed and interpreted.

## **Chapter 3: Methods**

#### Introduction

A mixed methods approach was used to address the goals of the current study. To frame the directionality of qualitative data, parents of children aged three to five completed a survey to assess their risk-tolerance. Then, semi-structured, open-ended interviews were conducted with participants to collect rich, in-depth qualitative data. Responses were then compared, compiled, and contrasted to previous literature using a directed content analysis approach, to address the three research questions posed in Chapter 1:

- 1. How do parents define risky play?
- 2. What are the perceived benefits and consequences of children engaging in risky, outdoor play, from the perspectives of parents?
- 3. What actions and behaviours do parents engage in during their children's play that promote both risky play and safety?

The following chapter details the design, collection and analysis of data used to contribute to our understanding of parental perceptions of risky play. Ethical considerations and researcher reflexivity will also be described.

## Design

As described in Chapter 2, previous research has implemented interventions to alter parental opinions of risky play as a means to increase risky play in young children (Solmon, 2015). The goal of the current study was not to alter, but to deeply understand perceptions, reasoning and assessments behind parents encouraging or discouraging their children's play. If it is possible for parents to be risk-averse and still encourage risky play, then interventions may also aim to address other factors regarding risk in play. Therefore,

the current study quantitatively assessed risk-tolerance prior to collecting qualitative data, a novel approach to risky play literature.

To collect in-depth data on parental behaviours, the original study design also involved video recording of an outdoor play session. Children were to be filmed and adults observed, paying close attention to body language, proximity and verbal encouragement when their child engaged in risk-taking. The video data were to be used as an elicitation tool during the qualitative interview. Recruitment proved to be incredibly challenging, potentially due to parents being uncomfortable with their child being filmed, or due to the time commitment required to participate. An amendment to the ethics application was submitted and approved to remove the video recording portion of the study. This significantly improved recruitment, though there were still fewer participants than anticipated. The following section outlines the amended study design.

#### Methods

Participants and Recruitment. Eligible participants were any parent of a child aged three to five at the time of the interview, living in Brant County, Ontario or surrounding area. Three-year olds are developing the ability to run at fast, therefore fast speed as a risk category may be incorporated into their play. Continuing to age five, children further develop their skills and explore different types of risky play primarily under parental supervision as they are not yet enrolled in school. Though there is much development between the ages of three and five, this age range includes children who generally have the same gross motor skills, are less influenced by a large class of peers, and are regularly under parental supervision. For these reasons, the three to five age range was chosen for the current study. There were no stipulations on children's abilities; any parents of children in the designated age range were accepted to participate. Ethical

approval was granted by Dalhousie University's Research Ethics Board (REB #2017-4380).

Recruitment posters were posted in community centres across Brant County and the City of Brantford (Appendix A), as well as over online social media communities such as Brantford Mom to Moms. An incentive in the form of a \$20 gift certificate to a sporting store was advertised on the recruitment poster. Interested participants contacted the researcher via e-mail. Once an individual e-mailed the lead researcher indicating interest in participation, the lead researcher sent the information sheet (Appendix B) online, and prompted the individual to ask as many questions as necessary regarding participation. If an individual confirmed that they wished to participate, a meeting for data collection was organized with the lead researcher.

Setting and Procedure. The overall study was performed in Ontario, in Brant County and the surrounding region. When an individual agreed to participate, a meeting was organized with the lead researcher at either a public location (such as a coffee shop) or the participant's house if requested. Some participants chose to bring their child, or one of their children to the interview (several had newborns). This did not interfere with their ability to answer questions; interview recording was paused as necessary. During this meeting the researcher introduced herself and her background, as well as described the purpose of the study and questionnaire/interview procedures. The potential risks involved in participating, as well as the potential benefits, were explained to the participant. It was made clear that the individual was free to skip a question, or to withdraw from the study, at any time without consequence or loss of compensation. The researcher sometimes reiterated the right to skip a question during data collection, and that there were no right answers as some participants struggled on particular topics. After the study was fully

explained and there were no more questions, written consent was obtained (Appendix C) with a copy of the consent form provided to the participant.

**Data Collection.** Data for this project were collected in both quantitative and qualitative forms. Participants filled out the Tolerance of Risk in Play Scale (TRipS; Appendix D) prior to an interview, with the researcher available for clarification at any time. Once the TRiPS questionnaire was completed, audio consent to participate in the interview was obtained. Participants spent between 60 to 90 minutes in total participating in this study, with the average interview lasting approximately 50 minutes. The quantitative and qualitative measures are described in detail below.

#### Measures

Quantitative Data. Quantitative data were collected using the Tolerance of Risk in Play Scale (TRiPS). The TRiPS survey was used to provide context for participants' qualitative data. This allowed the researcher to disclose if the data swayed in a particular direction; if all participants shared the same level of risk-tolerance, the themes arising from qualitative data would not represent a range of perspectives. Furthermore, assigning a risk-tolerance to each participant allowed the researcher to highlight differences or similarities in opinions and behaviours between those who are risk-tolerant, and those who are risk-averse.

TRiPS is a quantitative survey developed to assess an adult's tolerance of risk in children's play, with 31 dichotomous questions and one question asking parents how often they encourage every day risk (Hill & Bundy, 2012). The survey was developed by Hill and Bundy (2012), using questions relating to the six categories of risky play established by Sandseter (2007), and described in Chapter 1 of the current study. In the original study by Hill and Bundy (2012), the survey was piloted to assess its reliability

and validity as a tool to measure adult risk-tolerance regarding children's risky play.

Rasch modelling was used to create a logical item hierarchy, goodness of fit statistics in an acceptable range, person separation index >2 and reliability index of 0.87, indicating that it is an effective tool to measure adult risk-tolerance in children's risky play (Hill & Bundy, 2012).

Rasch modelling was developed by Georg Rasch, as a way of assessing the appropriateness of dichotomous surveys, and developing item hierarchies (Bond & Fox, 2007). For example, Hill and Bundy (2012) surveyed 100 parents and teachers of children aged three to 13 using the TRiPS. If the tool was effective, parents who were more riskaverse would find it difficult to endorse more risky items on the survey. Additionally, parents of older children would find it easier to endorse more risky items, than parents of children aged three. Using Rasch analysis, an item hierarchy was developed for the TRiPS; questions were ranked from relatively low risk (endorsed by nearly all participants), to very risky (endorsed by few participants). Risk-tolerance means were also established for the TRiPS, i.e. risk-averse individuals endorsed fewer items on the survey, than risk-tolerant individuals. These original risk profiles expressed as logits were as follows: 1 = risk-averse (M = -1.62, SD = 1.68); 2 = somewhat risk-averse (M = -0.37, SD = 1.30); 3 = somewhat risk-tolerant (M = 1.20, SD = 1.81); and 4 = risk-tolerant (M = 2.64, SD = 2.12) (Hill & Bundy, 2012). This instrument demonstrated a strong positive relationship between individual's self-perception of risk-tolerance as well as risktolerance associated with age (parents of children aged three to four, showed lower risktolerance than those of children aged 12-13). Therefore, it was deemed an acceptable tool to assess parental risk-tolerance, and was chosen as the quantitative tool for this study.

The original TRiPS study used a sample of 100 parents and teachers, so items on the questionnaire were asked in reference to "the" child (i.e., Would you allow **the** child to ride a bicycle down a steep hill at full speed?). This phrasing was changed to "your child" for the current study, as all participants were parents of the child in question.

Participants were asked to respond to questionnaire items only referring to their child in the three to five age range, as some had more than one child. As evidenced by Covell, Sidani & Ritchie (2012), the sequence of collection (qualitative-quantitative or quantitative-qualitative) has been shown to have no effect on participants' responses to open-ended questions when assessing the same aspects of a phenomenon. Therefore, the researcher had participants complete the quantitative portion of the study prior to the qualitative portion for simplicity.

Qualitative Data. Qualitative data were collected using open-ended, semi-structured interviews to deeply uncover the thoughts, perspectives and actions of parents regarding their child's risky play. The researcher conducted five in-depth interviews, which allowed the emergence of meta-themes, and remained a manageable breadth of data for the scope of this study (Guest, Bunce & Johnson, 2006). The researcher utilized an interview guide (Appendix E) as the starting point for each participant, prompting when necessary. Data were audio-recorded so that interviews could be transcribed verbatim.

Each participant was specifically asked the questions listed on the interview script. Initial questions collected demographic data such as the age and gender of the child. As the interview progressed, participants were asked to provide more detailed information regarding their child's play experiences, such as "What are some things your child likes to do for play?" They were asked to provide examples of each of the six risky play

categories described by Sandseter (2007) in which they have seen their child participate. Participants were asked how frequently their child was drawn to each type of play, whether they felt comfortable/uncomfortable with each type of play, and why they felt that way.

To fully understand the boundaries of each category that a participant was comfortable with, they were asked to specifically describe the situational variables regarding each type of activity. Examples of these questions would be, "How high would you be comfortable with them climbing?" ("Higher than your head?") or "Would you still be comfortable with them doing that activity without your supervision?" ("With a family member? At daycare? Out of your sight range?"). Each participant was also asked about behaviours or actions they take to encourage or discourage different forms of risk in play, such as "What kind of vocal cues do you use to encourage or discourage this activity?", or "Where would you want to be while your child is doing this activity?" ("Close? Far? Within catching distance? Within arms-reach?"). Each interview followed a natural path narrated by the participant, but was sometimes steered by the researcher as to remain within the scope of the three primary research questions of this study. Additionally, themes that had arisen during earlier interviews were prompted in later interviews to provide further context.

At the conclusion of the interview, participants were able to comment on any of the data that they provided, or summarize their overall thoughts. This ensured clarity of their data, and any statements that they may have been uncomfortable disseminating. Furthermore, they were asked if there was anything they wished to include that they hadn't had the chance to say. At the conclusion of the interview, audio recording ceased

and the participant was given their compensation in the form of a \$20 gift certificate to a sporting store.

# **Data Analysis**

Once the Tolerance of Risk in Play Scale data were collected, they were inputted into a Microsoft Excel document. Here, Rasch analysis was used to convert scores from the 31-item questionnaire into logits (log odds probability units). The process of Rasch analysis involved converting the proportion of endorsed responses to not-endorsed responses into a logit, to give each participant an "ability score" (how likely they were to endorse an activity). Logit ability scores from the current study were then compared to the baseline means developed by Hill and Bundy (2012), and used to place each participant into a risk-tolerance category. Categories ranged from 1 = risk-averse, 2 = somewhat risk-averse, to 3 = somewhat risk-tolerant, and 4 = risk-tolerant.

After the completion of interviews, audio-recordings were transcribed and deidentified to remove any identifying features. All interviews were conducted and transcribed by Denver Hilland. Qualitative data were analyzed using NVivo, software that is designed to organize and manage transcribed interviews for qualitative data analysis.

As noted by Engward (2013), data analysis can occur simultaneously throughout the collection process. A directed content analysis approach divides data analysis into three phases: preparation, organizing and reporting (Elo & Kyngäs, 2008). Preparation involved developing a matrix of codes, based on prior theory. The current study used the six categories of risky play (great heights, fast speed, rough and tumble, harmful tools, near elements, and getting lost/disappearing) to guide the first research question: "How do parents define risky play?"

In the organizing phase, qualitative data were coded using nodes if they pertained to any of the six categories of risky play, in alignment with the matrix. Any data that fell outside the six categories were interpreted to determine whether they represented a new category or a subcategory of an existing node (Hsieh & Shannon, 2005). Other codes were developed to organize responses to the second two research questions: "What are the perceived benefits and consequences of children engaging in risky, outdoor play, from the perspectives of parents?" and, "What actions and behaviours do parents engage in during their children's play that promote both risky play and safety? Data that referred to actions/behaviours or particular feelings were coded. Quotes were tagged when a particular sentiment was expressed regarding an experience or activity (either positive or negative). Additionally, any outstanding data that did not apply to the six categories, actions/behaviours or positive/negative affect, were compiled and coded. These data generally referred to contextual variables that affected or influenced parental perspectives, similar to those described in the Social-Ecological Model.

The final phase involved reporting. In alignment with the developed matrix, data were reported as the six categories and additional emergent meta-themes (Elo & Kyngäs, 2008). These data are found in the following chapter.

After all data were coded, individual risk-tolerance scores were considered in relation to emergent themes or weight in a particular direction (either leaning on the side of risk-averse or risk-tolerant). This gave context for the interview responses and provided a lens from which each participant spoke. If all participants were very risk-tolerant, we might have assumed that their opinions and perspectives regarding risk in their child's play may not have fully captured or represented how all parents felt. This would lead to a bias in our definitions and interpretations of what is age-appropriate risk-

taking. By assessing the level of risk-tolerance for each participant, any inclinations in a particular direction in the results could be identified. Themes were also compared to the Item-person map from Hill and Bundy (2012), to understand if participants in the current study endorsed or discouraged similar types of risky play as determined by the item hierarchy. These considerations and comparisons are discussed in detail in Chapter 5.

# Framework and Methodology

Social-Ecological Model. This model framed not only the target population (interpersonal sphere), but also the questions asked in the interviews (e.g. "Who decides what you do [for play]?). Did parents feel strong cultural, political or even interpersonal pressures that contributed to their actions towards risky play? They may have felt judgment from other parents, not had access to appropriate environments, or there were characteristics of their child that affected their allowances for risky play (e.g. trust that their child could execute a particular skill). With a social-ecological lens, the researcher aimed to understand the parental influence on children's behaviour, as well as the child's effect on parental behaviour, and other influential spheres, representing the reciprocal nature of the Social-Ecological Model.

*Directed Content Analysis.* As mentioned, the method used to guide the qualitative data was directed content analysis. Sometimes referred to as deductive category application (Hsieh & Shannon, 2005), directed content analysis falls under the umbrella of deductive content analysis and is applied in qualitative studies when data are used to validate or extend existing theories in the literature (Kyngäs & Vanhanen, 1999). As highlighted in Chapter 1, the current study aimed to understand parental perspectives of risky play as they compare to conventional definitions in the literature. Therefore, the

categorization of risky play established by Sandseter (2007) was used as the foundational theory from which the qualitative data were coded and sorted. As described by Hsieh & Shannon (2005), existing theory or research can help focus the research questions of a study. Using existing theory allows the researcher to predict variables or areas of interest and can provide an initial coding scheme during analysis. Using Sandseter's categories helped guide the research questions, provided a base coding matrix and allowed the researcher to compare and contrast parental perspectives to those already existent in the literature.

#### **Ethical Considerations**

This study was submitted to and approved by the Social Sciences and Humanities Research Ethics Board (REB) of Dalhousie University prior to recruitment. The letter of approval can be found in Appendix F of this document. As per the TCPS 2: Ethical Conduct for Research Involving Humans, participants interviewed for this study were exposed to no more risks than expected in day to day life (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada, 2010). However, some potential risks included altered perceptions towards risky play by asking participants to reflect on their beliefs. There was also a risk that participants may have experienced a negative impact from their children engaging in risky play or their own experiences with risky play as children. This may have caused emotional discomfort for the participant.

To ensure participants provided informed consent, they were briefed on all risks before participation in the study and reminded of their choice to skip any question, or withdraw from the study at any point. It was made clear that withdrawal from the study would not affect their compensation for participation. Furthermore, they were repeatedly

encouraged to ask for clarification throughout the process. Participants provided written and audio consent to be audio-recorded. They were also given the opportunity to clarify or comment on any data they provided at the end of the interview. At times, participants found it difficult to answer particular questions such as their thoughts on their child being allowed to get lost, or they started with responses such as "I don't know if this makes me a bad parent or not...". Allowing participants to comment at the end of the interview provided opportunity to clarify their perceptions, and ensured that their opinions were accurately depicted.

De-identifying the data during the transcription process protected the privacy and confidentiality of participants' identities. All data were coded onto a password-protected and encrypted USB key, and will be kept in a locked drawer at the Healthy Populations Institute at Dalhousie University for seven years, after which the USB key will be destroyed. The lead researcher was the only individual with access to the data. There were no foreseen conflicts of interest between the researcher and participants.

## **Researcher Details and Reflexivity**

I, the primary researcher, conducted and transcribed the interviews. My supervisor, Dr. Sara Kirk, oversaw the project, providing feedback and acting as a point of advice throughout the study.

I am a graduate of Wilfrid Laurier University, with a Bachelor of Arts in Kinesiology. I have a minor in Psychology, which drove my qualitative approach to understand perceptions toward risk in play. I am the former Group Fitness Coordinator for the Department of Athletics and Recreation at Wilfrid Laurier University, which is indicative of my vested interest in physical activity as a priority for health. I completed both research methods and statistics at the undergraduate and graduate level, as well as

the TCPS 2: CORE Certificate for ethics in research. A copy of this certificate can be found in Appendix G of this document. In regards to participants, there were no existing relationships that were foreseen as potential conflicts of interest prior to conducting interviews.

I am a young, white, female, who highly prioritizes physical health. My childhood upbringing involved strong ties to physical activity and play in the outdoors including regular camping trips, sports and ample time spent in the forest behind my house. My interest in physical activity and active outdoor play is what influenced me to pursue this area of research. This may have influenced the interpretation of themes arising from the interviews, as well the prompts or follow-up questions used when conducting interviews.

## **Summary**

Using a social-ecological lens, this study was conducted with an emphasis on the individual as the expert, using a variety of data to add context and a deep understanding of risky play. Audio-recorded interviews allowed participants to speak openly about their beliefs, perceptions and experiences while survey data provided a frame with which to interpret those data. Understanding how parents felt, endorsed, discouraged and managed risk in their child's play will assist in laying the foundation for a better plan to integrate outdoor, risky play into the lives of Canadian children and youth.

## **Chapter 4: Results**

#### Introduction

This chapter compiles the thoughts, beliefs and perspectives of five parents living in Brantford and the surrounding area, who had at least one child between the ages of three and five during the time of data collection for this study (January 2018 – December 2018). Quantitative survey data were used to ascribe a risk tolerance level to each of the participants. All five participants are identified using pseudonyms: August (somewhat risk-tolerant), Blair (somewhat risk-tolerant), Candice (risk-averse), Debra (somewhat risk-tolerant) and Evelyn (somewhat risk-tolerant). These were parents with sons aged five, three, three and a half, four, and three, respectively. Participants included first time parents, and parents of several children, sometimes including newborns. This chapter examines how these parents defined risky play, their individual comfort levels with the six categories of risky play described by Sandseter (2007), and how each parent negotiated the fine lines between healthy risk, hazard and safety.

## **Tolerance of Risk in Play Scale**

Participant risk profiles were developed using raw data scores, converted to logits and compared to standard risk profiles developed from the original literature by Hill and Bundy (2012). Individual participant logits for the current study were: August (M = 1.056), Blair (M = 0.598), Candice (M = -0.194), Debra (M = 0.742), and Evelyn (M = 1.232). A summary of participant characteristics and risk-tolerance scores can be found in Table 1.

Table 1. Participant Characteristics

Pseudonym	Gender	Child Age	Child Gender	Number of Children	Sibling Order	Risk Tolerance Score (logits)	Risk Tolerance
August	F	5	M	3	Oldest sibling	1.056	Somewhat risk- tolerant
Blair	F	3	M	3	Middle sibling	0.598	Somewhat risk- tolerant
Candice	F	3.5	M	2	Oldest sibling	-0.194	Risk- averse
Debra	F	4	M	1	N/A	0.742	Somewhat risk-tolerant
Evelyn	F	3	M	1	N/A	1.232	Somewhat risk- tolerant

Four of the participants were classified as somewhat risk-tolerant, with the 3exception of Candice who was risk-averse. Hill and Bundy (2012) also reported the mean and standard deviation for age categories: 3 to 4 years: M = -0.13, SD = 1.25; 5 to 7 years: M = 0.20, SD = 1.78. Results from participants in this study show that considering the age of their children, participants identified as somewhat risk-tolerant were actually more risk-tolerant than other parents with children of a similar age (Hill & Bundy, 2012). Candice's score fell in line with other parents that were on the side of risk-averse when comparing her score to other participants in the original Hill and Bundy (2012) study. However, she was slightly more risk-averse than most parents of children aged three to four. This indicates that although she was considered risk-averse, this score was fairly normal for parents of younger children.

Eleven items on the survey were answered the same by all participants. These items with complete consensus are displayed in Table 2.

Table 2. TRiPS Items with Complete Consensus

Item Number	Approval by all Participants	Disapproval by all Participants
Number	XX7 11 11 1111 1	
3	Would you allow your child to play	
	chase with other children?	
6	Would you allow your child to continue	
	playing if they get a few scrapes during	
	play?	
7	Would you let your child have lots of	
	challenges when they play at home?	
9	Would you let your child climb up a	
	tree within your reach?	
13	Would you encourage your child to try	
	new things that involve some risk?	
1.1	Would you allow your child to engage	
14	in rough and tumble play?	
15		Would you let your child play near the
15		edge of steep cliffs?
16		Would you allow your child to play in
16		the bush out of your sight?
	Would you let your child experience	
17	minor mishaps if what they are doing is	
	lots of fun?	
24	Would you wait to see if your child	
	could manage challenges on their own	
	before getting involved?	
31	Would you encourage your child to	
	take some risks if it means having fun	
	during play?	

Interpretations of these findings will be discussed in the next chapter. However, with an understanding of the risk-tolerance of each individual, this chapter will now highlight some of the themes that arose through one-on-one interviews. It is important to remember that the majority of data elicited were from a somewhat risk-tolerant

perspective, erring on the edge of risk-tolerant when considering the age of the children.

# **Defining Risky Play**

Each participant was asked during the interview "How would you describe risky play?" Most participants' responses included examples listed on the Tolerance of Risk in Play Scale, or made reference to similar types of play described by Sandseter (2007). Four of five participants mentioned the potential for injury as a defining feature of risky play. As August described:

I would say anything, well it's different probably for every person, but I would say anything that they could get hurt with or that they've never done before, like a new skill. A new way of playing.

The element of novelty, or a newness, was also mentioned by Evelyn. Risky play can involve a skill that hasn't been attempted before, or adding difficulty to a skill that has already been acquired:

I'm just thinking in general like the park, [...], I just look back and all the things he's tried, like climbing a new ladder or going up a few more steps or there's like the twirly bars at the park, so just trying new things like that.

Some participants didn't find it necessary to distinguish between risky and non-risky play at all, having only made the distinction when they learned of the term "risky play" through online articles or daycares. As Evelyn described:

It's just how we play, I've never thought of it like – I just want him to be a child and to have fun and play, that's always been what I wanted for my child - just to have a childhood and have fun [...]. I never knew it was titled that? And then the one day at daycare they had a big thing, a write-up on what risky play was and

then the example of my son climbing, so that's kind of when I was like 'oh yeah'...

Additionally, Evelyn was the only participant who didn't mention the risk of injury as a defining factor of risky play. For her, risky play was about allowing her child "opportunity for a bit of freedom", and space for exploration. For Debra, who had a particularly active and "rambunctious" four-year old, it was difficult to separate risky and non-risky play because of just how active her child was in all areas of play. However, for her the defining element was the physicality of the play:

Probably... I don't know...most of the stuff we let him do [laughter] [...] It's not really risky when he plays with his toys. Like when he's playing with his cars inside there's no [risk] [...] but it's more like the physical.

Several participants alluded to the idea that there's virtually no activity that involves absolutely zero risk. After making the distinction between physical play as risky over play with toys, Debra noted that even play with toys could be risky too:

I wouldn't say there's no risk, there's just not as much of a risk because he could, you know, throw them and they bounce back at him...

August noted that for some parents it might even be a deterrent to use the term 'risky', as it sounds like "legal jargon", and that really "you could just call it play!" There were mixed levels of exposure to the term risky play, and for some parents it was deemed unnecessary to distinguish between the two. Active, free and work play (physical play that simulates adult tasks such as mowing the lawn) were other terms that were used by participants to describe the type of physical play that has been coined 'risky' in recent history.

## **Comfort with Risk**

During the course of each interview, every participant was asked specifically about their comfort levels with each of the six categories defined by Sandseter (2007); play at heights, great speeds, rough and tumble play, play with tools, near elements (e.g. near fire or water) and the opportunity to get lost. Furthermore, they were asked how they supervised or monitored each type of activity, and how they encouraged or discouraged specific activities.

Play at Heights. For all participants, heights played a large role in their child's daily play. Climbing up and down slides and on park equipment, as well as jumping off rocks and structures, were some of the activities mentioned. All participants allowed their child to climb and jump from heights, even though August, Candice, and Debra specifically noted feeling fear or discomfort when their child was playing at heights.

Candice, who described herself as risk-averse, often spotted her child and preferred to be in close proximity:

I'd let him [climb a tree] but I'd probably be like right at the base of the tree just like watching everything. But I think that's just my personality too, like I have anxieties [...] whereas some parents might just be like totally relaxed about everything and just let their kid do whatever, whereas I'd be a little bit more worried about things.

August mentioned how heights in particular made her uneasy:

...when he wants to jump off tall towers at the park I definitely feel it in my stomach like [gasping noise] 'please let nothing go wrong' [...]

However, she described how she tried not to let that affect her son's choices for play:

I try not to let my son see that I'm scared. Like the other day when we were at a new park and he wanted to jump off a tall thing, I just kind of said "you're really high", and just let him decide whether or not he was going to jump.

Several participants also made note of how the context affected whether or not they were accepting of height. For Debra, a play structure was acceptable, whereas climbing a tree came with unexpected risks such as branches breaking, and did not limit the distance in which her child could climb (a play structure stops at around seven feet, whereas a tree can be much higher). She allowed her child to climb a very tall structure at a trapeze camp her child attended because it was surrounded by mats, however she disapproved of her child climbing a shorter tree, because it was surrounded by pavement. Candice also highlighted how her comfort with height is context and child specific:

I think it's also...a parent would know their skill and ability. I wouldn't allow him to do a climbing wall on his own obviously, but like if there was somebody there spotting him and he had the proper equipment then, that takes some of the danger out, but gives him a chance.

Every participant alluded to the idea that context was important; the degree of risk, particularly with heights, is reliant on a variety of factors. What the child is climbing, the height of the structure, the footwear of the child, whether the child has climbed that particular structure before, the child's confidence in climbing, trust that their child has the skill to come back down, and even trust that their child *will* come down, were just a few of the numerous assessments chronicled by participants regarding whether they would encourage or discourage their child's play at heights. Debra recalled a time when her husband put her son in a tree for a photo:

I don't like him going too high. Like my husband put him up in a tree when he was like two and a half and he actually started climbing up and neither one of us could reach him and it was in a parking lot so it was surrounded by concrete. So that kinda scared me a bit. He came back down [laughter] and I'm like "Don't do that again!". So he was within the reach of my husband but then he decided to stand up and climb up the tree himself.

This situation evidently elicited discomfort because of several factors: fear of heights, unknown risks of the climbing structure, surrounding material, and a child opposing instruction. The idea that every situation is different, and that a parent is always making judgment calls was a common theme amongst all categories of play, and will be discussed in detail later.

Play at Fast Speed. All participants allowed their child to engage in play at great speed, with none conveying its consequences as a personal fear. Candice outlined her comfort with speed due to the fact that running was a skill at which she knew her son was adept. Parents were more likely to discourage speed when their children were involved with other children, as in chase games, or when there was an approaching hazard, such as a parking lot at the bottom of a toboggan hill.

For Debra's active four-year old, speed was the number one category of risky play for her child:

He loves speed. [...] He likes watching Turbo, or race cars, or quads. Yeah.

In general, she said she discouraged speed when there were unpredictable hazards, such as cars:

Riding a bike too fast on his own? If it's down the road I'm not too keen on it.

'Cause we live in the country so I know cars come whipping over the side and

don't always see you. But if he's like riding around our backyard or whatever, it doesn't matter.

Or if she predicted her son might lose control:

I mean some of it I don't like, when he goes on two wheels going around a corner.

I mean I stop him and tell him he has to slow down going around corners 'cause he's gonna, wipeout [...]

None of the participants mentioned needing to encourage speed in their child's play, only that they had to pay attention in case it got *too* fast. For Blair's child, who was diagnosed with autism at around two and half years of age, speed was never lacking in her child's play. She referenced that running fast was often facilitated by the toys he was using:

He has a dump truck. And it's one of those old metal Tonka toy trucks and he runs with it and he rams it into the wall. [...] We allow him to do this in the basement not in our living room, because we put thicker baseboards up. So he does that, but then he takes other toys too. He had this [...] plastic one that we were allowing him to do it with first, and it broke and he ended up getting a black eye from it. [...] And it didn't stop him, he keeps going, right? [...] He runs as fast as he can to get those objects going with him.

Her son rarely needed encouragement to engage in play at fast speeds:

So we'll use things like '1,2,3, go'! [...] Look how fast you're going. [...]

Sometimes he doesn't have cues because he's just going so fast. Right? And he's so busy all the time.

Play at fast speeds was deemed the most easily endorsed by all participants. For running and chase games, this was due to the idea that the worst that would likely happen was falling and scraping a knee - an accepted risk by all participants. The fastest that the child

could go was as fast as they were able to run, which limited the speed into an acceptable realm of risk. Debra created space for speed in her son's play by only intervening when she deemed necessary:

I'm not overtop of him saying "you can't do stuff" all the time. I watch him like run down the hill full speed – and do a faceplant. We've taken him snowboarding and he was getting mad at us because we wouldn't let him go through the fence [laughter]. We were stopping him at the bottom, but we were letting him go like straight down the kiddie hill; straight down on a snowboard and just catching him at the bottom.

Parallel to climbing, several participants also mentioned checking for appropriate footwear, and assessing the environment before encouraging this type of play.

For four of the five participants, there was little concern regarding speed on bikes due to the novelty of the skill. The biggest concern was more avoiding hazards such as roads or remaining in sight. As Evelyn illustrated:

[...] Last summer [he] learned how to ride his bike with training wheels, so he's not like going like super fast or down hills or anything but he's out of our reach. He can ride it pretty good, so he's out of our reach, and he knows to stop before he's out of our sight or not to go around a corner without us being able to see him or to stop at the end of a sidewalk. So yeah, not a lot of that with the bike.

Because several of the participants' sons were new to bike riding, they were less concerned with speed. They knew their child was unable to build enough momentum to cause any serious harm.

*Play with Harmful Tools.* This is the first category in which participants shared quite opposing levels of approval. For all participant interviews, playing with sticks was

used as a baseline example of this type of play. Interestingly, parents described trust in

their own child to be responsible with a tool or sharp object, but expressed that play

would not be allowed if another child was added to the mix. It was dependent on the

parent whether that was due to distrust in other children being irresponsible with a tool, or

distrust in their own child. Blair outlined that her son loved sticks, rocks and things he

could find in the natural environment. She said she was comfortable with him playing and

throwing them, however they would always be watching for other people, as her son may

attempt to throw the rocks at other people. Candice, who worked at a daycare, specifically

outlined her own bias towards sticks because her workplace had rules against children

using them in play:

Um, he'll carry them around but I don't, like I wouldn't let him do like sword

fighting or anything like that with sticks. Just for the sake of protecting his eyes

kind of thing. Um, but again with daycare it's the same thing like they don't allow

sticks. But if he's like just walking around and it's on his own, like as long as he's

not you know, like, trying to do like a sword fight with another child, I won't

allow that [...]

Similarly, Debra who worked in the emergency room at a hospital, expressed her

disapproval of sticks after seeing the repercussions:

[INTERVIEWER]:Okay, and let's say uh he's with another child and they're

using sticks as swords.

[DEBRA]: No.

[INTERVIEWER]: Not okay with it?

[DEBRA]: No.

[INTERVIEWER]: And why is that?

58

[DEBRA]: Because I've seen them go in eyeballs, or through a foot.

[INTERVIEWER]: So is that something that you just break up immediately?

[DEBRA]: If they're like hitting towards each other? Yes.

She continued to describe, however, that she was not against all tools. Debra recounted feeling quite comfortable with her son playing with a hammer with the proper supervision:

Um if we're watching him, like my husband just ripped apart our house and he was, he had a hammer and he was smashing tiles...and he had a hammer and he was trying to break the drywall.

Similar to her comfort with her child climbing, context was important for play with tools as well:

My husband does construction and that, so sometimes [my son] goes to where he is and he'll play with his tools there. But yea. He doesn't like pick up a hammer around the house because he's going to break something or hit the dog with it or...I'm making him sound like a little hellion. [laughter], he's not that bad. He's just active!

"Work play" and construction were two types of play that arose related to play with harmful tools. August and Candice both depicted their sons' enjoyment in assisting in yard cleaning duties, such as raking, removing sticks, and trimming the grass with scissors. August also described her son raking leaves and shovelling snow. Similarly, Evelyn listed construction as her son's favourite activity, and regularly referenced him using diggers and tools in his play. For her, there are specific ground rules for this type of play, and her son knew that he was not allowed to use tools without supervision:

He's big into construction so, we go to the [early years centre][...]. We were very involved there when [...] I was on mat leave, but every now and then they have what's called tinker time, where they work with real tools, and obviously that's right up his alley. Like, he loves construction so for Christmas Santa got him a real toolkit, so it has a real hammer and we're gonna get like a foam board that he can hit nails into. So that's an example of it too, an activity that he does that definitely involves some risk. But [...] he knows the safety rules [...] like for that activity he can't be doing it on his own we have to be in the room.

Unlike the previous two categories of risk, play with harmful tools was referred to as needing 'active supervision'. With heights, once a child had performed a novel climbing skill many participants were comfortable taking a step back and watching from a distance. With harmful tools it didn't matter how often the child had used a particular object; constant supervision was necessary every time a tool was use for play. As described by one participant, it wasn't necessarily that she was concerned about her child injuring himself, but rather her concern centred on the possibility that he would be irresponsible with the tool:

[DEBRA]: You're not gonna leave a three-year old in a garage by themselves, right? [...] Because he gets into everything, everything sharp and things that he could actually [...] wreck stuff with, I try to keep away.

[INTERVIEWER]: When he gets into stuff like that [...] do you think that he'll hurt himself? Or it's more that he's destroying the walls?

[DEBRA]: More that he's going to wreck something or hit somebody else with it.
[...] He's not gonna hit himself in the head with a hammer.

This idea is consistent with Evelyn's son having specific supervision rules with tools. It appeared that what made participants uneasy about harmful tools was that if an accident did occur, the injury was more likely to be more severe than faceplanting down a hill or falling off a bike. Participants were easing their discomfort with risk by paying close attention during times when the severity of injury would be greater.

Rough and Tumble Play. Participants had differing opinions on rough and tumble play for several reasons. Minimal exposure to rough and tumble play was a limiting factor described by Candice, whose son, until just prior to the interview, had been an only child. She confirmed that this was probably the reason why he hadn't engaged in that type of play:

I'd say very rarely [he rough and tumble plays]; I've only really seen it only once. With another child they were kind of doing a bit more rough and tumble but I think that's more of a medium risk. I think if he was rough housing with another boy, as long as they weren't too dangerous I think I would allow it. As long as they're having fun and they're happy it's not like, the one's hurting the other. [...] Yeah, and he's not in daycare so he's had less exposure to other kids rough and tumbling with him.

For Evelyn's son, being an only child also limited opportunity for rough and tumble play.

She and her husband engaged with him, being less concerned with the physicality, but particular about the language surrounding it:

Probably [he rough and tumble plays] with me and his dad the most, we roll around pretend to [wrestle]. We don't call it wrestling because we're careful of the words we use. Like we don't want to call it fighting 'cause that's not a very positive word; we're just 'playing', and he knows there's a time for that. He's still

young, I'm sure he's going to go through a wrestling phase, but yeah, so there's not too much. I know in his previous class at daycare [...] him and another boy [...] would like to kinda rough play a bit, and the teachers were saying they're just being boys really. [...] I'm totally fine as long as, they're being respectful of each other's bodies and stuff too, but yeah there's not too much of that yet. And again, I'd be okay with it, but also making sure we're being appropriate and that no one is getting harmed unnecessarily.

Although Debra's son was also an only child, this didn't seem to be a limiting factor. It would appear that her son had more of a natural propensity towards this type of play, and that rough and tumble was often initiated by him as "he's always climbing all over me so I'm always throwing him off". Furthermore, Debra's husband and the family dog regularly wrestled with her son. She recalled "there was one point when his best friend was at daycare that they had to like pretty much separate them daily because they were always wrestling".

Several participants mentioned daycare being a location where their sons engaged in rough and tumble play. This may be due to the opportunity to wrestle with children their own age, gender, and size. When recounting times when their child was rough and tumbling at daycare, stories only involved other boys. Notably, the only time a girl was referenced in rough and tumble play was when August described her son and his younger sister before bedtime.

Risks associated with rough and tumble play can be divided into person and environment. Nearly all participants highlighted "hurting each other", as their chief concern regarding this type of play, which can be considered a person risk. Not being aware of when they were causing harm to the other party, or not knowing when to stop

was described by participants as an issue. Supervising rough and tumble play was important to parents in order to gauge between rough and *too* rough, a line that their children couldn't always distinguish. Blair described this unawareness as being of heightened concern because of her son's diagnosis. She regularly described her son's "lack of fear" towards risky play in general, but also his difficulty with communication that could sometimes increase risk when engaging with other children:

He gets more aggressive and then he also gets upset because other kids don't want to play that way. Right? And since he doesn't have a lot of words, he tries to use actions to get their attention so then he's pulling and stuff on them.

August also outlined that there are times when her son's judgment of when to stop was not as sharp. She paid attention to many factors when rough and tumble play began, and regularly instilled rules and judgment skills so her children could better interpret when play was becoming too rough for the other individual:

[...] Something I say to them a lot in general is, "you need to respect their 'no". So if [my daughter] starts screaming "no, no, don't do that anymore", even if it's just like tickling, then I say, "you need to respect her 'no". He needs to know that no means no and that he needs to stop what he's doing. So that's sort of what I'm checking for there. And, I am also usually kind of looking at the time a bit to see, you know, if kids are tired, and they're play wrestling before bed, they're just going to be more likely to get hurt because they're tired. And so I'll try and stop before someone gets hurt. Because it doesn't usually stop just naturally on its own, it usually stops when someone gets hurt or when I make them stop. [...]

It is also clear that supervision was less of a concern when a participant trusted one

person in the party to make responsible judgment calls. Blair indicated that she was

comfortable with unsupervised rough and tumble play if it was between her son and his ten-year old brother, but not if her baby was also in the room. Similarly, Debra kept an eye on rough and tumble play between her son and the dog, checking beforehand "the dogs paws because that kinda hurts to get in your face". Debra also communicated that she allows rough and tumble play in the next room between her son and another child, however still monitored "if it gets too quiet, cause then they're usually doing something that they're not supposed to be doing".

Environmental risks were also described as being a concern during this type of play. Participants described regularly assessing the surrounding environment to ensure that the play wasn't too close to something that could be bumped into or cause harm.

Elements. Play near the elements was another category of risky play that elicited differing levels of discomfort for each participant. Two main examples were play in or near water, as well as close to fire. One participant described "elemental dangerous" as what she was most uncomfortable with of all categories. For play near water, all participants referenced their child's skill level in swimming as a mitigating factor. Participants felt more at ease if they knew their child was adept at swimming, or had regular exposure to it. All discussed having ground rules; their child knew they were not to be in the water without a proper supervising body in the water with them. This was steady across all participants.

Consistent with other categories of risk, context was also a contributor.

Participants felt that play at a public pool was different to play at a beach, and even more so play near the ocean, considering the undertow. The surrounding environment, such as slippery surfaces or the presence of other people added extra cause for caution. Two participants offered that it was actually their child that was uncomfortable with water.

This heightened their degree of encouragement because they wanted their child to improve his skills and have a better relationship with water.

Fire offered differing levels of endorsement, seemingly dependent on how big a role it played in the family. For Evelyn, who had taken her son camping since he was a baby, fire was something with which to interact:

We haven't had him throw logs on or anything but he roasts marshmallows. He holds the stick independently, we'll blow it out, so he does that independently. Obviously we're there, within arm's reach just in case a flame flickered up. [...] But we still allow him to do that independently, we're not there holding it with him or holding him.

Interaction with fire was allowed for Evelyn's son, however, always under supervision. Debra shared a similar sentiment, recalling letting her son throw paper into the fireplace at home, or adding something to a bonfire on her property. She noted that she trusted her child not to get too close, but was more concerned about unpredictable hazards such as flames lashing out, or her son tripping over something near the fire. Reminders of how hot it was, and being cautious when approaching were ideas often iterated by Evelyn:

[...] I think with fire, it's a huge one right? Because he gets running around and, kids [need to understand] that it's still hot the next morning [...] So we are giving — not constant — but we are giving more reminders than usual about [it]. Like, usually we only have to tell him something once but, we are more cautious if he's in the area, or if his ball rolls over there. [...] That's something that we're quite cautious about.

Participants depicted that their verbal reminders regarding fire were to reiterate just how hot it was, rather than simply telling their child not to touch it. Blair felt that to just tell her son not to, would most likely increase his curiosity.

Disappearing or Getting Lost. The final category described to participants was play that provided the freedom to wander out of sight or the opportunity to get lost. Participants unanimously expressed that this type of play is inappropriate for their child at their current age. All alluded to discomfort with their child being unsupervised for an extended period of time, with varying levels of discomfort expressed, depending on what type of activity they were doing at the time. This indicates that parents in this study, feel that this is an inappropriate type of play for children aged three to five. Participants expressed that they were able to leave a child unattended, if in an enclosed area such as the house or the backyard, and they were certain the child could not get out (by locking doors, or the backyard was fenced in). When asked what it is in particular that was unnerving about this type of play, it was less distrust in their child and more often the fear of the unexpected. Candice described:

I guess [what I'm uncomfortable with is] just the unknown. I don't think that he'd really hurt himself but also just to make sure that he doesn't somehow get out of the yard, kinda thing. Things can happen, [...] you know, you wanna make sure you know where your kids are or at least have the window open so you can hear him outside as well.

Several participants communicated that they would be comfortable with this type of play as their child got older, but for the time being, they limited their child's ability to wander off. Many also noted that "not wandering off" was a ground rule for their child.

Especially when entering a new environment, most of the participants' children knew the boundaries and would get in trouble if they left the designated area.

# Perceptions, Negotiations and Consequences of Risk

After discussing individual levels of comfort with each category, each interview began to examine risk through a broader scope. Participants were asked to offer their own experiences that may have shaped how their children interacted with risk, as well as general feelings about both the benefits and consequences of risky play. Participants were also asked how they differentiate between risk and hazard. The aim of this part of the interview was to provide context for some of the earlier responses elicited.

Perceiving Risk Through an Occupational Lens. Interestingly, all participants offered their occupation, area of work or previous schooling without prompt, as reasoning behind either their encouragement or discouragement of specific activities. The point in the interview at which this information was offered differed for each participant, but was often given as reasoning behind either comfort or discomfort with a specific risk-related activity. For some participants, their occupation shaped their endorsement of risk due to related experiences at work with children. For example, Candice noted that her work as a daycare staff member affected whether she was willing to promote an activity:

[CANDICE]: Some things will kind of overlap just because with work you have to be so meticulous about everything, so yeah there's gonna be things that I'm a bit more strict about and some things a bit more relaxed.

[INTERVIEWER]: Do you think that you went into parenthood with a different perspective because you've worked in daycare?

[CANDICE]: I think so. I think just 'cause you're bombarded in your head with like "oh that's not safe, that's not safe", whereas if I was working say in an office or something completely different I might be a bit more relaxed on safety.

Though she noted that daycare shifted her idea of what was safe or unsafe, Candice actually admitted that she was less risk averse with her own child because it was in a less overbearing environment, where she didn't need to be "constantly watching the children". At work, when a child was injured it was accompanied by an injury report. However, at home with her son she said, "it's more just on me, it's not like I have to deal with the extras."

There were other accounts of how one's job affected one's tolerance of risk in play. Parallel to Candice's experience, Debra noted that working in the emergency room at a hospital also affected her thoughts on risk. This was evident earlier when mentioning her discomfort with her son playing with sticks, after having seen the consequences.

Debra also discussed her caution in regard to dirt bikes and fire, after witnessing the aftermath. In alignment with Candice however, Debra described that her occupation steered her from allowing her son to engage in specific activities, but overall made her *less* risk averse:

I'm probably a little more laid back than most because I feel like I can handle the situation better? I kinda know what's involved. Even when they were babies and people would be freaking out [...]. I mean he fell and put his teeth through his lip but they didn't meet up so I didn't take him for stitches.

Debra described that her understanding of what actually occurs in the emergency room gave her better confidence to decipher the difference between an emergency and a nonemergency. She also inferred that exposure to such situations made her more laid back, so she rarely overreacted when an injury did occur with her child.

August listed a previous work experience as having an influence over play in water. Though it is unclear whether the influence makes her son more or less comfortable, she did admit that there was more thought put into her son's interaction with water.

[...] I lifeguarded for a long time, and so yeah maybe I just saw more things go down in water. [...] But I think I also swung the other way, [...] I would dunk him when he was a baby underwater and I always wanted him to be comfortable with water on his face in the bath and stuff. But for whatever reason he seems to not want to be, he doesn't want to learn how to swim on his own yet, even though I would love for him to do that. So maybe it's a control thing for him? And he knows how much I want him to do it because he knows that that was my thing. Or maybe I'm just sending out some cautious vibes I don't know, because I know that [...] it's a little bit dangerous to play in water regardless how deep it is. [...]

For some, handling and interpreting risk was listed as a way that a participant's job influenced their parenting. For other participants, schooling and job experience had provided a knowledge base that contributed to considerate and thoughtful parenting choices; it was the reason why they promoted risk in their child's play in the first place. Blair, after having her first child (ten years old at the time of the interview), returned to school to study childhood development. She described not having the same "awareness" of the "types of play that children needed when they were growing up" with her first child. She illustrated how this dramatically changed the upbringing of her second son, who was three-years old at the time of the interview:

It's totally different. I was like, "Here have an iPad, here have...", you know what I mean? And now it's "let's go outside, let's go play, let's go". I left this morning, and I think he thought I was leaving to go outside and he was upset at the door crying, because he wanted to go outside too!

Blair noted that there are some personality differences between her two sons, however she insisted that their opposing relationships with the outdoors was a direct reflection of the parenting styles they had received. She recounted her lack of knowledge as a first-time parent, and how she fell to the pressure of technology:

My oldest I was like, "oh, here's a tablet, here's a tv". Everyone's using all this technology and now I feel like I created a screen monster. And whereas with [my three-year old] and screen time, he's only allowed twenty minutes screen time a day, right? It's timed for him and it's at the same time every day because all my oldest wants is a screen. He does not want to go outside and play, he does not want to do any of that. After the knowledge that I pursued, I feel that it's nice, even though [my three-year old son] has a diagnosis, he wants to go outside. He fights to go outside, even if we're doing stuff, he wants to go play in the backyard, he wants to go to the park. If we drive by the park, and we're not stopping at the park he's pointing like "let's go". Whereas the oldest, we didn't have that outlook; he has no desire to do those things.

August similarly described how her and her husband's schooling shaped their parenting. Her husband's occupation as a physiotherapist gave them the knowledge that physicality was important for her son's development, and August's background in Sociology had introduced her to ideas such as "helicopter parenting". They had walked into parenthood with some "inherent beliefs" about how they were going to raise their children. She also

described that her son's shy personality inhibited attempting risk in play, which is why their previous knowledge of the importance of risk and physical exploration was so key.

Evelyn, who works in the field of mental health, outlined that her occupation less affected what activities her child did, but shaped how he interacted with other people:

I actually think it gives him more of an understanding, because he knows that mummy helps people and we talk about that and have understanding of people's feelings and emotions. So I think it's a benefit. I find I'm just more aware myself, like, [...] if we go downtown, [I'm] just more aware. But we engage with everyone we come across downtown like, if someone stops us to talk to my son, we stop and talk type of thing.

Evelyn noted that she is more aware of her surroundings because she has a deeper knowledge of various areas of town that are more heavily affected by mental health. She describes doing more in depth environmental scans in certain playgrounds due to her experience in her field. In this sense, Evelyn's occupation may have influenced her relationship with hazard, rather than risk.

Conflicting Parenting Styles. Throughout the interviews, each participant also offered information regarding their partner's parenting style without prompt. Each of the mothers in this study explicitly referred to their husband or their child's father at some point, indicating that all five participants were in a heterosexual, two parent family. Furthermore, all participants regularly used the term "we" when asked about specific situations, indicating that they were in congruence with their partner on certain activities. Partners' level of risk tolerance was not quantitatively measured in this study, however subjective opinion was regularly given from a comparative viewpoint (i.e. "my husband has no fear either").

Partner dynamics influenced levels of discomfort for some participants depending, on whether they felt their partner shared the same risk tolerance. For example, Candice (somewhat risk averse) described how her experience in daycare made her place more confidence in her supervision than her husband's:

I think if [my son] was climbing a tree I'd be very like [gasp] anxiety, but I also would probably feel more confident if I was there than, say my husband. [...] I think he's just more relaxed on things whereas I guess with my training with being a daycare teacher, [...] you have to be very meticulous about everything and have an eagle eye on the children all the time. Whereas my husband's probably just like "ahh whatever, let 'em play" kind of a 'daddy daycare' thing, where you're like "oh where'd this scrape come from?" kind of thing.

Debra also shared a similar sentiment when describing her husband who has a background in construction. She recounted trusting her child under her husband's supervision, like allowing them to be up on the roof of their house together. However, she sometimes felt that her husband put too much trust in their almost four year old's ability to assess risk:

[My husband] probably trusts the kid more. [...] Or he just doesn't realize what can happen. [laughter] right? Cause he thinks "well I wouldn't do that, so he's not gonna do that", just not think[ing] at the kid's level. [...] We have had those conversations before, "What would he do something like that for?" He's three! Why wouldn't he do something like that?

Just as each participant described their backgrounds as a large influencer of their comfort with specific types of risk, each partner's background may have affected risk tolerance.

August described how her and her husband both had their "own things [they're] more

sticky about". August was uncomfortable with heights and water, whereas she described her husband being particular about hazards such as cars and proper safety equipment.

Two participants also made reference to their child's grandparents being more risk averse than them. Neither remembered their parents being risk-averse when they were growing up, but now are very vocally responsive to their grandchild falling or attempting a risky skill.

Some participants who were particularly vocal about being pro-risky play, were asked to describe whether they ever felt negatively judged from other parents for allowing their child to attempt a risky skill. Reviews were mixed about the influence or feedback of other parents, however some parents commented on having to actively disregard commentary. Debra described that she very often felt that she allowed her son to do riskier activities than his friends, who were "afraid to do everything". Even when asked to define risky play, she had to note the difference between her beliefs on risk and those of other parents:

If I go by what I think and what I've observed from his other little friends...

'cause I let him do a lot more than his little friends do. [...] If we're at the park,
it's one of his friend's parents that are there with us, [...] [they say] "no, no!"
they're like, [gasp] at things he's doing and I'm like "he'll learn".

Blair noted that she also often felt regular judgment from other parents who didn't know her "overall situation". This became especially clear when removing her child from an activity that she deemed hazardous – because he was having a meltdown. She described that she had grown a "tougher skin" after having her first child, and no longer fell sway to other parents' opinions.

Risk Assessment versus Hazard Check. All participants referenced scanning the environment for hazards when their child was playing. Depending on the activity, their role as a supervisor was checking for things that their child did not have the knowledge or experience to check themselves. Every participant's child was characterized differently, some having a good knowledge of their own physical capabilities and others less-so. The idea of "having no fear", would affect whether a parent just needed to assess the environmental conditions, or whether they also were closely supervising their child's activities. August described how her shy son, five at the time of the interview, had taken a longer time to develop confidence in taking risks. By the time he was ready to take those risks, she had a strong sense of trust that he was making an accurate assessment, simply because he would not attempt a skill unless he was confident that he could accomplish it. In this dynamic, August took on the role of hazard checker:

[I would be] doing an environmental scan. He's assessing his own skill level, but he's not necessarily assessing what's on the ground that he's about to jump on or if it's slippery on the surface that he's jumping off of. So I'm sort of doing the other checks, while he's doing the internal check. [...] That's pretty much it. Just describe what he was doing, and making sure that he's wearing the right shoes to be able to do that or has his toes on the edge so he's not going to slip on his way off or something like that.

Blair however, had less trust in her son's ability to assess both hazard *and* risk. For this duo, Blair was regularly assessing the environment for hazards as well as ensuring her son was making accurate risk assessments. Regular supervision was necessary as she felt her son couldn't yet distinguish between risky play and hazardous play:

[...] Because of his age right now I don't know if I really trust [him] because he has no sense of fear right now. Him himself, he has no sense of fear, he would run and play in traffic right? Like there's no safety concerns at all for him. So for him to [go play] unsupervised I'm not okay with it right now, but maybe later on. That's why he needs to have the supervision. Because risky play's okay but we need to have some boundary for him as an individual.

Blair was the only participant to reference that her own child's behaviour has a hazardous component. Because her son had a lower ability to assess risk or self-monitor his behaviour, she mentioned that sometimes when his play became too aggressive that it became the hazard. Participants were in agreement that 'hazards' were to be avoided during their child's play, whereas there was space for risk. The distinction between hazard and risk however was inconsistent between participants. For some participants a hazard was something dangerous already present in the environment, for example cars or broken glass. For others, a hazard could be anything where the probability of injury was so high, it was almost certain to happen, such as throwing objects at another person or running on a slippery surface. Interestingly, both fire and water were referred to as hazards by several participants, though unlike other hazards listed, they still wanted their child to interact with both in a safe way. In other words, both water and broken glass could be considered hazards; parents would put their child in swimming lessons to lower their concerns regarding water, but would move their child away from broken glass rather than teach them how to safely remove it. The designation of hazard was different for each participant, though there was agreement that risk had to do with *likelihood* of injury, and whether the parent was accepting of that likelihood:

I think I would distinguish [hazard and risk] by the likelihood of him getting hurt. Like I think the example from the questionnaire about glass, that's a hazard and cars, versus risk just being like a lower likelihood that they would definitely get hurt from doing that but it still exists.

Participants also noted that their reactions to hazards versus risk were quite different. Risks were something that could be gently pointed out, or cued from a distance. If an activity made a quick jump from risky to hazardous however, immediate physical intervention was sometimes necessary.

He rides on the pump track at [nearby park] on his bike and I think my husband just physically intervenes. Like if he sees that he's going down a hill for a jump too fast, then he'll just grab onto the bike and slow him down.

This aligns with the supervision techniques described by participants in the categories listed earlier. Play near elements, and with harmful tools – the more heavily hazardous categories, were always supervised in close proximity, in case physical intervention was necessary.

Why is Risk Important? Four out of five participants listed confidence as the number one benefit to their child engaging in risky play. Several felt that having their child attempt something new or challenging improved their son's confidence, but also strengthened trust between the parent and child. Furthermore, risky play allowed their child to "just be a kid". Blair described that she allowed her son to engage in risky play so that he would build happy and impactful childhood memories. For her, risky play defined her childhood and she wished to pass that on to her son.

Some participants also described that risky play was part of how their child learned. Challenge through play created space to learn how to interact with the environment, as well as with other children:

I think for him confidence. And for me, his capacity to play is expanded. And I think that that's certainly how he learns. And how he learns how to solve problems and learns different ways to communicate and even just finds ways to play that's [...] independent; that's not having to be directed by me or have a screen or something like that. I think it's great, I think the more he plays the better he is, the more he learns, the less he's bothering his sister or, me [laughter].

Participants often regarded the emotional and social benefits of risky play as an important reason to encourage it. Beyond August's mention of her husband's physiotherapy background, the only other time that childhood physical development was noted by a participant, was when Blair spoke about the interaction between physical development and emotional development:

I think they feed off each other. I don't know if it's so much bundled into one but to physically be active and to create those gross motor skills, you know, if you're doing them and they make you happy, well yes, that's going to connect into the social and emotional development, right? Because then socially you can take those skills and play with other children that way. And emotionally it's going to uplift him because he's being physical right?

Though no other participants offered "gross motor skills", or other technical terms, they did note that risky play was often a platform to interact with other children. Whether at a park, daycare facility or playground, children engaging with other children was described as a facilitator for risky play. Interestingly, parents who characterized their child as less

outgoing, found that their child was more likely to experiment with risk when exposed to risky children. In congruence with this, parents of an outgoing, risky child described their child as an "instigator" for other children. Participants described that children seeing other children try new skills, or play in unique ways gave them the confidence and encouragement to also try those skills. August, whose daughter was almost three at the time of the interview, recalled that her daughter started taking risks at a younger age, simply because she saw her older brother trying new things. Though parents were a chief influence in their child's play, it would seem that other children were also large motivators for children to step outside of their comfort zone.

Participants described confidence as the most important benefit for their child, but also offered that risky play was beneficial to their relationship with their child. Allowing their child to try something new, or giving permission to explore and interact with something that could be dangerous, were ways to communicate trust. When participants felt confident that their child could execute a task or play in a way that was risky without being hazardous, it was a reassurance to their child that they were adept, and boosted their confidence. Evelyn recalled a moment when her own parents were uncomfortable with the risk about to be attempted by her son, though she had full confidence in his skill:

[His] grandparents are like "oh don't jump" and I'm like, "Why? [laughter] He can do it, he can make it". [...] I could feel him be like "thanks mum, you trust in me" [...] and he was really excited to do it.

Participants also described that trust was built when engaging in risk with their child.

When playing near elements or with tools that required close supervision, children and parents worked together to play or perform a skill. Children were afforded the opportunity to communicate to their parent when they needed help, a boost, or guidance. As the

child's skill improved, if a participant felt confident in their child, they would take a step back. This not only communicated trust on behalf of the child but also trust on behalf of the parent, further improving confidence on both sides.

Injury as Part of Childhood. When asked to describe what their biggest concern, or worst case scenario would be regarding their child engaging in risk, four out of five participants responded with injury or "getting hurt". The fifth participant described that injury "could lead to surgery [...] but it doesn't always have to be the worst". For her, the worst case scenario was her child not being exposed to risk at all. She felt that if her son was constantly being told that things were too dangerous, he would disengage from active play altogether and it would negatively impact his life.

The degree of injury that was deemed acceptable varied with each participant. For all participants, bumps, bruises and scrapes were completely normal and part of the childhood experience; more severe injuries showed variation. For two participants, breaking a bone was deemed an acceptable risk. Blair described that children heal better and recover faster when they're younger, so to break a bone, "you have a cast for a few weeks and you're fine". Debra preferred not to deal with a broken bone but was accepting of the injury if it didn't require surgery or pins. For her, "having an injury for life" would the biggest consequence of her child engaging in risky play.

Of note, though severe injury was described as the worst consequence for most participants, several participants alluded to the idea that minor injury was part of – if not necessary to – learning one's own limitations. As outlined earlier, parents played a key role in distinguishing the hazardous components of play while their child made risk assessments. While reducing or removing the possibility of severe injury, parents left the opportunity for minor injury as a choice to be made by the child. Injury was an

opportunity to learn the upper boundaries of risk and provided immediate feedback to a child when they had reached the threshold. As Blair described:

I don't know if this makes me a bad parent or not but if he's running full speed down a hill [...] we want to teach him that if he falls – you know what I mean? – he's *gonna* fall. I'm not going to be like "whoa, whoa, whoa, slow down" because, no, he's running down a hill, he wants to go as fast as he can.

Similarly, Debra felt that due to her son regularly seeking out risk in his play, injury or near injury was sometimes the only feedback he would respond to:

I think that's how he's gonna learn, he'll have to. Like it doesn't matter what I say or what I show him, he has to do it himself to figure it out.

## **Summary**

The findings in this chapter describe the subjective experiences of the five participants in this study. Quantitatively assessing the risk aversion of each participant allowed a baseline understanding of how comfortable or uncomfortable they might be regarding specific topics. As a whole, the level of risk aversion designated to each participant by the Tolerance of Risk in Play Scale aligned with how they each described their relationship with risk, as well as how closely they supervised their child and what activities they would allow them to participate in. The study found that parents endorsed play at fast speeds, rough and tumble, and at heights with relative ease, but were more cautious of harmful tools, and play near elements depending on their level of risk tolerance. Additionally, participants unanimously agreed that getting lost, or being out of sight was an inappropriate type of risky play for children aged three to five.

Participants expressed that they each brought their own lens and bias to parenthood which became more apparent when describing the parenting of other adults

such as partners, grandparents or members of the public. Participant occupations and educational backgrounds arose as a key theme that influenced their choices. Participants regularly iterated that context was paramount as to whether they felt comfortable with their child engaging in risk. Even one change in variables such as the floor surface, a child's energy level, or the presence of another child could be the deciding factor as to whether play was deemed hazardous and abruptly stopped. Lastly, the complicated reciprocity between injury and risk was explored; each participant offering different boundaries and reactions to both minor and major injuries. The next chapter will examine these findings in the context of other literature, and their implications toward policy and future research.

## **Chapter 5: Discussion**

#### Introduction

This study aimed to deeply understand parental beliefs, perspectives and actions regarding risky play. As discussed in Chapter 2, this study explored the *why* and *what* dynamics of risky play that lead parents to promote or discourage their child's risky play. Many of the sentiments expressed by participants are supported by previous literature and align with the beliefs of other key childhood influencers such as early childhood educators and policy makers (McFarland & Laird, 2018; Sandseter, 2007). Addressing specific categories of risky play as inappropriate for children in the three to five age range is supported by literature due to the motor development of children at that age (Stephenson, 2003). Participants provided some key insight into why discomfort was elicited during specific activities, and that context is paramount in assessing situations. This chapter will examine the interaction between the quantitative findings and the themes that arose during qualitative analysis. Strengths and limitations will be discussed, as well as the implications of this study and recommendations for future research.

## **Interpreting Qualitative Themes in the Context of Quantitative Data**

Comfort/Discomfort with Specific Categories. With the exception of the nine unanimously endorsed items, and two unanimously renounced items, from the Tolerance of Risk in Play Scale, all other items on the questionnaire showed some variation in either approval or disapproval by each participant. These responses are consistent with the hierarchy of difficulty demonstrated in the original Rasch modelling by Hill and Bundy (2012). All nine of the unanimously accepted activities scored low on the hierarchy indicating a low amount of risk, thus most easily endorsed. Missing from this was item

29: "Would you let your child play in a backyard supervised?" However, this could be a response error as the only participant who didn't encourage this activity was still categorized as somewhat risk-tolerant, and discussed allowing this activity during the qualitative interview. The two items renounced by all participants were rated as high on the Item-Person map, indicating that they were considered very risky. This aligns with the Rasch model that parents of younger children would find riskier items more difficult to endorse (Hill & Bundy, 2012).

The nine fully endorsed items included questions regarding fast speeds, great heights and rough and tumble play, which as discussed earlier were the three easily accepted categories by all participants. Other themes included in those nine items involved encouraging risk assessment on the part of the child such as item 7: "Would you let your child have lots of challenges when they play at home?", or item 24: "Would you wait to see if your child could manage challenges on their own before getting involved?". These ideas align strongly with results from a qualitative study by McFarland & Laird (2018), examining parental and early childhood educator practices of outdoor risky play. Themes that arose from a qualitative survey completed by parents and educators included supporting large motor skills (climbing, jumping, balancing, lifting), supporting free exploration of the environment, and supporting assessments of risk (McFarland & Laird, 2018). Supporting free exploration of the environment encapsulates the sentiments of a participant in this study who mentioned "freedom to explore" in her definition of risky play.

Unsupported items by participants included one item from play near elements, and one from disappearing/getting lost. This is consistent with the qualitative data, as all participants either expressed mixed emotions toward play near elements, or complete

disapproval for their child to be unsupervised. Notably, McFarland & Laird (2018), interpreted *free exploration of the environment* as in alignment with Sandseter's (2007) category of disappearing or getting lost. Participants in this study were adamant of the inappropriateness of their child being unsupervised, however, exploration and creative interaction with the environment were supported. It would seem that the child's perception of being alone is the key component for this category, as expressed by preschool teachers in the 2007 study by Sandseter. Children experience thrill from wandering off or feeling like they are not being watched, when in actuality, educators are fully monitoring the area. Though there is evidence to support the importance of independence and unsupervised play as a strong influence on childhood outdoor physical activity (Wen et al., 2009), this theme was not expressed by participants in this study, using age-appropriateness as the underlying factor. Furthermore, studies that report actual independence and its role in physical activity are focussed on older children (Wen et al., 2009), rather than three- to five-year olds.

It is a recommendation of this study that perhaps "independent exploration", or "perceived independence", may be more appropriate title choices to express this type of play for younger children. Little research has been done to understand whether this type of play is beneficial for children aged three to five. As well, there seems to be a lack of awareness on behalf of parents that independent exploration needs to be integrated into their child's play. Participants in this study described allowing their child to be "off in the distance" when they felt confident that their child would respect the designated boundaries of play (such as not wandering away from a park), or when they felt that their child was attempting a skill at which they were adept. It is unclear whether this increase

in freedom would be perceived by the child as *independent exploration*, and would elicit the same feelings of exhilaration described by children in Sandseter's study (2007).

the category of somewhat risk-tolerant, indicating that the majority of qualitative data collected would include favourable sentiment regarding risky play. However, collecting qualitative data from an individual who was risk-averse added some understanding of where the discomfort arose. Not only were parents assessed for their risk-tolerance, they were also asked at great depth to describe their responses to specific encounters with risk. Individual risk-tolerance scores aligned with many of the sentiments expressed by participants – that is, those that were risk-tolerant were aware that they were risk-tolerant, and those that were risk-averse were openly risk-averse. As described above, even though participants had differing levels of risk-tolerances, they still agreed on 11 items on the TRiPS survey. Variability arose when a category was considered as hazardous or including a hazard.

It is unclear how individual risk-tolerances actually affect opportunities for childhood risky play. In a study examining individual parenting styles' effects on risky play by Cevher-Kalburan & Ivrendi (2015), there appeared to be a disconnect between perceptions and actual practice of risky play. Permissive and overprotective parenting styles influenced practices, however permissive, overprotective and democratic parenting styles affected a parent's thoughts on the benefits of risky play (Cevher-Kalburan & Ivrendi, 2015). In other words, just because a parent had favourable ideals of risky play, did not mean that those ideals were put into practice; it was dependent on their parenting style. This current study did not assess parenting style, however, asking parents to provide

specific examples of encouraged or discouraged categories of risk may have mitigated some of this disconnect between theory and practice.

The current study supports the idea that beliefs do not always represent practice. Two of the unanimously endorsed survey items explicitly referenced supporting risk in child's play. They were items 13: "Would you encourage your child to try new things that involve some risk?" and 31: "Would you encourage your child to take some risks if it means having fun during play?". One participant from the current study identified as risk-averse, yet they were still able to endorse two explicitly risky items. As proposed in the basis for this study, previous interventions have mainly explored altering parental beliefs regarding risk as a tool to increase risky play (Neihues et al., 2013). However, this participant didn't need a risk-reframing intervention to allow her child to engage in risk. Clearly, risk-tolerance may not be what is guiding parental choices surrounding risky-play, which will be discussed in the following section.

## What is Risky Play?

Current interpretations and designations of risky play still remain a mixture of several different themes. As mentioned in the previous section, participants in this study defined risky play as having an underlying element of "freedom", as well as openly rejecting unsupervised play. Other widely accepted elements of risky play involve some possibility of injury (Sandseter, 2007), as well as novelty of skill (Stephenson, 2003). These themes were supported by the current study, as participants mentioned more closely monitoring activities that were new to their child, as the risk was higher. In 2007, Sandseter characterized risky play into six types (rough and tumble, great heights, fast speeds, dangerous tools, near elements and disappearing/getting lost). These categories were originally formulated by interviewing children aged four to five, and then

confirming the categories with preschool teachers. Participants in the current study offered examples from all of these categories, but always described their discomfort with the disappearing/lost category for their own child, or specified that they needed to be in an enclosed space if they were out of their parent's sight.

An interesting theme divulged by participants was that "risky" play may not be a necessary term. All play involves risk to some degree, and context is what appeared to be most important to participants. In essence, the categories of high speed, great heights and rough and tumble were deemed fairly risk-free for participants and more described what other studies have coined active, physical or exercise play (Pelligrini & Smith, 1998b). What links these three categories is the underlying theme of physicality and gross motor development (climbing, jumping, running, and wrestling). Participants in the current study found these categories and types of play easy to encourage, as the so called "risk" involved in these types of play were very dependent on the development of the child. Running, climbing, jumping, and wrestling, were all skills at which children aged three to five were most likely adept. For this reason, participants actually felt there was no need to add "risky" to the title.

#### When Does a Risk Become a Hazard?

When looking at the particulars of when parents began to feel uncomfortable, it was often the introduction or possible introduction of a hazard. Interestingly, much like the term risk, the definition of hazard was controversial. For some, hazard was something that was already in the environment that could cause harm, such as broken glass. For others, it was an activity where there was almost certain injury. Either way, there was agreement that a hazard was dangerous and should be avoided. This is where parents felt strong responsibility for their supervisory role, and took ownership of the consequences.

Participants in this study expressed that parents are responsible for hazard management. If a child did something risky and there was an injury, then that was the child's responsibility. However, if a parent allowed a child to do something hazardous and there was an injury, those repercussions fell onto the parent.

Unpredictability and the Element of the Unknown. It is quite appropriate then that discomfort with risk may actually be internal conflict of a parent's own judgment of whether a situation is risky or whether it is hazardous. This was demonstrated quite clearly when discussing play with harmful tools. Parents felt comfortable and trusting of this activity until another child was added to the situation. The other child added an element of unpredictability, which left parents discouraging this type of play. Similarly, parents felt confident allowing their child to climb on playground equipment but less so on trees, as a tree's stability was less predictable than the equipment. Again, mirroring this, parents felt uneasy about play near fire, as fire by nature was unpredictable. To further iterate, parents encouraged running or biking at fast speeds until their child went around the corner, because cars coming around the bend would be unpredictable. When asked to describe what was so unnerving about unsupervised play, several participants of this study outright said that it was the "unknown". In essence, what participants were most concerned about was what they didn't see coming.

This notion of parental guilt was captured in a study by Morrongiello, Zdzieborski & Normand (2010). Parents felt that minor injuries were part of the childhood experience, and could sometimes be used as a teaching tool about safety. However, after a major injury that involved a hospital visit, parents felt remorse and sometimes guilt, as if they had been neglectful and should have prevented the incident from occurring (Morrongiello, Zdzieborski & Normand, 2010). Participants in the current study mirrored

this sentiment, sometimes noting that it was important for their child to experience tripping or falling. They described that minor injuries were acceptable, but the severity of injury tolerable for each participant varied (some felt that a broken arm was alright but were not okay with surgery). All participants mentioned serious injury or some sort of physical harm as the biggest consequence to risky play. A study by Boufous, Finch & Bauman (2007) found that injury was the leading barrier to parents allowing their children to engage in risky play altogether.

To clarify, parents are hoping to reduce the possibility of severe injury as much as possible, which can be accomplished with some certainty by the removal of hazards. We may conjecture then that risk-aversion and risk-tolerance are in fact not assessments of a parent's "comfort with risk", but more a measurement of how confident a parent is in their own appraisal of risk over hazard, as well their need to control their environment. When discussing the Tolerance of Risk in Play Scale or particular categories, participants often asked for more information regarding the contextual circumstances of each scenario for this reason. They were hoping to make a more accurate risk appraisal of the activity in question before providing an answer.

Trust. Participants regularly made reference to the theme of trust. Encouraging a risky activity was dependent on whether the participant felt they could trust their child to make accurate risk assessments, stay with in designated boundaries, or appropriately interact with other children. This is aligns with findings by Allin, West & Curry (2014), in which mothers mentioned their child's maturity level as highly determinate of whether they would allow certain activities. Though participants in the current study made no reference of "maturity", they did describe trust, as well as the temperament and personality of their child as a contributing factor. If there wasn't trust in the child, there

was another added layer of unpredictability in a situation. Thus, having children demonstrate accurate self-risk assessments is incredibly important for creating trusting and meaningful relationships, but also for increasing the opportunity for risky play by the parent.

This need for trust was made especially clear when examining the perspective of a participant with a child with autism. Though we cannot make broad conclusions about how parents of children with autism respond to risk, Blair described her son as having "no fear". Without proper risk assessment or appreciation of boundaries, Blair admitted sometimes needing to provide continual surveillance, and remain close to her son. Sentiments regarding difficulties of unsupervised play for children with autism have been noted in the literature, as supervising a child with a diagnosis may require more constant attention. An intervention by Stahmer and Schreibman (1992) found a self-management treatment package as an effective tool to learn to play appropriately in the absence of a treatment provider. The participant in the current study referenced her child loving to jump because it was stimulatory (he liked the sensory feeling on the bottoms of his feet). Stimulatory play can lead to hazardous play, however, self-management has been shown to decrease this behaviour while increasing appropriate play (Stahmer & Schreibman, 1992). In this sense, developing appropriate risk assessment techniques may be even more important for this population. Though this was an unintentional finding of this study, it may be of importance to note that some children require assistance in developing riskassessment skills.

**Taking Action.** Participants in the current study referenced various types of supervision, and behaviours that they engaged in to either encourage or discourage risky play. The number one action taken by parents to encourage or discourage risky play was

proximity to their child. Participants often described that they would be close, sometimes right underneath or within catching distance when their child was attempting a skill or activity for the first time. As the child's confidence grew, most participants felt that they could take a step back. Interestingly, some parents used closeness as encouragement, and some parents used distance as encouragement. For example, Evelyn (somewhat risk-tolerant) noted feeling uncomfortable when her child was climbing a play structure for the first time, yet when he looked at her and smiled, she relaxed and reassured herself not to intervene. Here, Evelyn felt trust in her son's ability to assess his own skills, and she communicated that by staying at a distance. Candice (risk-averse) described that she almost always stood below her son on a climbing structure, so that if he fell he would be caught, and that she could motivate and help him along. Candice felt confident in her son's ability but remained close as a safety net, verbally encouraging him.

This is an interesting dynamic because one participant was somewhat risk-tolerant and the other was risk-averse, and both encouraged the same activity in completely opposite ways. It could be argued that Evelyn's son was more likely to be experiencing feelings of thrill, because if his risk appraisal was inaccurate he would actually fall.

Candice's son was very aware that there would be no danger if he made an inaccurate risk assessment, therefore he may not have been experiencing any feelings of fear or exhilaration, which has been noted in the literature as an important component of risky play. Interestingly, both parents allowed their child to engage in the same "risky" activity, but only the child of the risk-tolerant parent may have gained emotional benefits by experiencing true feelings of fear or exhilaration. Additionally, though Candice was verbally demonstrating trust in her son's ability to climb, standing below may have communicated to him that she did not fully trust his abilities.

Participants also regularly encouraged or discouraged risky play through verbal cuing. However, participants noted that they did not want to simply say "no" to an activity. Redirection was sometimes used when an activity was deemed too hazardous, such as "Let's throw the rocks over here instead". When the child was doing something risky, guiding phrases were sometimes used to help make the child aware of dangers, while still leaving the choice of whether to participate up to the child, such as "Oh, you're really high!".

Most participants felt that they were able to verbally communicate effectively to their child when to stop an activity when it became too risky. However, Debra repeatedly described that her son would just "do it anyway". This contributed to a lack of trust explained previously, and that Debra sometimes had to physically remove her child from a situation when it became too hazardous. Blair expressed similar difficulties with her child with autism. She referenced that at points she needed make direct eye-contact, and be very firm because he didn't fully understand when an activity had become hazardous.

## **Interpreting Risk**

The Influence of Education. In the previous chapter, it was described that each participant directly noted how their occupation or schooling had altered or framed their parenting in regard to risk. Notably, this speaks to the Social-Ecological Model used as the framework for this study. Not only are parents influencing their children's risky play directly, but they in turn are being influenced by organizational spheres. Most participants mentioned that their schooling or occupation had influenced their encouragement of risky play, often raising it. This is contradictory to a study that was done in Turkey by Cevher-Kalburan & Ivrendi (2015), which indicated that higher educated parents scored less on their approval of risky play. This incongruence may be attributed to cultural differences

(between participants in the current study and those in the Cevher-Kalburan & Ivrendi (2015) study), or the fact that several participants in the current study held positions related to children. This means that their occupation involved understanding childhood development.

An intervention conducted by Cevher-Kalburan (2015) positively altered preservice teachers' perception of risky play after a six-week course. Though none of the participants in the current study had been given specific perception-altering courses, they were swayed by their educational and occupational experiences. Not all parents will work in a child-centred career, however if a six-week course has been proven effective at improving attitudes towards risky play, it may be an important resource for new parents.

Parenting styles. Several participants from this study noted that their male partners were more risk-tolerant than them. We cannot make assumptions about partner risk-tolerances, though there may be some truth to these perceptions. Men have been shown to be more comfortable with risk than women in children's play (Sandseter, 2014). Furthermore, fathers have been found to participate in more rough and tumble play than mothers (Lindsey & Mize, 2001). When asked about whether participants felt pressured when either encouraging or discouraging risk in their child's play, no participants mentioned altering their behaviour. This is contrary to other studies noting that mothers often feel societal pressure to conform to "best" mothering practices (Allin, West & Curry, 2014). This concept was mentioned once in regard to one participant regularly allowing her child to use technology as a first-time parent. However, she said that after educating herself and becoming a more informed parent she grew a thicker skin and resisted judgment from other parents. This has implications within the social-ecological framework, indicating that particular spheres may have strong influence but can be

buffered through intervention. In other words, this participant was strongly influenced by social norms as a first-time parent. However, after returning to school she felt confident enough to resist social pressures in regard to parenting.

*Benefits.* Research regarding risky play is often centred around physical development. Skill development and gross motor learning are key components highlighted by most of the literature regarding risk (Brussoni et al., 2015). As described in Chapter 2 of this document, much of the promotion of risky play is to enhance opportunity for risk appraisal, as well as physical literacy. Though these are key elements to healthy childhood development, participants in the current study described confidence as the most important benefit to risky play for their child. Participants described their children's pride in attempting new skills, as well as even experiencing confidence boosts when other children were engaging in risky play.

Parents in this study alluded to self-esteem boosts due to their child accomplishing new or difficult physical tasks. An intervention involving a three-month training program for three- to eight- year olds was proven effective at improving risk perception and competence skills (Lavrysen et al., 2017). As risk perception improved, so did concentration, conflict sensitivity and self-esteem. Whether it is the risky play itself that improves confidence or the risk perception, the mechanism is unclear. However, we can conclude that confidence, risk perception, and physical literacy are all important benefits of risky play.

One participant also noted that having fun and creating positive childhood memories were her main reasons for encouraging risky play. These findings may be beneficial for dissemination strategies, in that risky play should by framed differently depending on the target market. For policy makers, risky play leads to more physical

activity, which improves health. For educators, risky play leads to conflict sensitivity and risk perception, which may reduce the incidence of injury. For parents, risky play improves a child's confidence and self-esteem. And for kids, risky play is just **fun**.

# **Strengths**

The current study was novel in framing the qualitative findings of participants within their own risk-tolerances. If, as described below, parents who are more risk-tolerant are more likely to participate in a study on risky play, previous literature may be favouring the opinions and perspectives of parents and caregivers who are pro-risk. The current study added to our understanding of parents who are risk-averse, and challenged the notion that risk-tolerance is the only construct of influence in allowances for risky play.

In alignment with this, using the Social-Ecological Model as a framework, the current study exposed several unique dynamics that influence childhood risky play.

Discussing particular variables with participants to determine when an activity was risky and when it was hazardous, highlighted the importance of the organizational sphere.

Participants referenced their own educational and occupational backgrounds as strongly framing their perceptions of risk in their child's play. Therefore, having safe equipment, adequate outdoor space for children to explore while remaining in sight, and educational or occupational experiences may alter a parent's choice to allow risky play. Furthermore, as previously mentioned in a study by Ohri-Vachaspati et al. (2014), the interpersonal sphere is arguably the most influential sphere in the Social-Ecological Model. The current study noted how a positive reciprocal relationship between parent and child, provided more comfort with risky play. Parents who felt trust in their children's abilities, and

children who responded to parental feedback, often lead parents be more accepting of risky play activities.

Using this social-ecological lens, the current study brought to light some of the higher contextual circumstances influencing children's risky play. Previous encounters with various types of risk throughout one's life, appears to influence a parent's approach to incorporating or exposing their child to similar types of risk. This indicates that the way in which risk is perceived by children now, may affect the way they allow their future children to engage with risk many years down the line. Understanding societal perceptions of risk could have long term repercussions on how risky play is approached in the future.

Lastly, the current study gained meaningful perspective of a parent with a child with autism. Challenges faced by this participant referenced a heightened need for supervision, as she felt her child was unable to recognize hazards, or interpret when to stop an activity. Risky play for children with autism may require more attention, or require more feedback to help the child develop accurate risk appraisals. This study shed light on underrepresented population, exposing a direction for future research.

### Limitations

As mentioned in Chapter 3, the methods used to answer the three research questions of the current study were amended from the original design. In order to fully understand how parents interact with their child to either promote or discourage risky play it is important to collect observational data. Though the current study had to remove that portion of the data collection to improve recruitment, it would be beneficial for future studies to attempt to fill that gap in the literature.

Due to the limited sample size of this study, I cannot conclude that data saturation was met. Additionally, there appears to be a response bias; all participants were women discussing risk regarding their sons. This may be due to a higher proportion of mothers than fathers having the time to participate in the study. Gender stereotypes have been shown to affect how parents interact and encourage risk with their children (Kindleberger-Hagan & Kuebli, 2007; Morrongiello & Hogg, 2004). If parents of boys are exposed to more risky play, they may have more positive feelings regarding risk, making them more inclined to participate in a study on risky play. It has been found that fathers are more approving of risk than mothers, who are less likely to endorse and encourage risky play (Cevher-Kalburan & Ivrendi, 2015). Therefore, it is unclear whether the fathers of these boys would respond differently, or if the mothers would view risk differently if their children were female. Fathers have been shown to be more risk-averse in regard to their daughters' play, as opposed to their sons' (Kindleberger-Hagan & Kuebli, 2007; Sandseter, 2014). Thus, the homogeneity of the sample may have provided skewed perceptions or opinions regarding risky play.

Another limitation of this study was the cultural diversity of participants; all mothers appeared to be Caucasian. The County of Brant is located in close proximity to the Six Nations Reserve. Bauer and Giles (2018) comment that there is a need for Indigenous perspectives on risky play, particularly Inuit parents. Research regarding risky play is careful to note that cultural influences impact parenting priorities. Risky play for one demographic may not be representative of risky play for all demographics. Therefore, we cannot conclude that this study fully captured all parental perspectives from Brantford and Brant County (although this was not the intent of this qualitative study).

## **Future Research**

Findings from this study indicate that parents who are supportive of their preschool-aged children taking risks in play feel the benefits far outweigh the consequences. Even parents who are risk-averse can support and promote risky play for their young children, and successfully mitigate their discomfort with risk. Findings from this study suggest that there is a need to understand activities that involve the opportunity for a child to get lost or disappear. Sandseter (2007) noted that children experience feelings of exhilaration when they think they are not under parental supervision, yet parents of this study noted that this concept had not occurred to them as beneficial for their child. Future studies should consider focussing more closely on this category which appears to be the most ambiguous. Understanding how to incorporate this type of play for pre-school aged children, whether it be supervising at farther distances or encouraging more hide-and-seek type games may be beneficial.

The fields of injury prevention and health promotion appear to be at odds, offering conflicting advice regarding whether safety or healthy risk should be prioritized during child's play. The current study poses that the construct that may actually be up for debate is hazard. If both fields place improving the health of children as the goal, there should be consensus on what is appropriate and acceptable to encourage optimal development. It would be beneficial to further dissect the meanings of both risk and hazard, as this study proposes these constructs are still unclear for parents. The Canadian Public Health Association defines hazard as a danger in the environment that could seriously endanger or harm a child, that is beyond the child's capacity to recognize (CPHA, 2019). Whereas, risk is a challenge or uncertainty that a child chooses to encounter. However, for parents in this study, the line between risk and hazard appears to be less clearly defined.

Encapsulating the thoughts, perceptions and beliefs of participants on extreme ends of the risk-tolerance scale, would continue to bring light to where the disconnect between theory and practice lies. As discussed, the qualitative results of this study largely represent parents who are risk-tolerant. Future studies should look to not only collect rich data on risk-averse parents, but also on the perceptions of fathers of boys and girls, of diverse children (e.g. healthy/able bodied, those children with physical disabilities, chronic illnesses, learning disorders, etc.) and a range of cultures, all underrepresented populations in the domain of childhood development.

As mentioned, there is a particular need for Indigenous perspectives on risky play, especially when considering the promotion of play in the outdoors (Bauer & Giles, 2018). In a critique of the *Position Statement on Active Outdoor Play*, Giles, Bauer and Darroch (2019) comment that the position statement fails to consider children of Aboriginal status, those living in remote and rural communities, as well as children who regularly interact with at-risk environments. Recommending to parents that they introduce risk in their child's play, is a proposition that was formed without input from the populations listed above, who are already exposed to risky and hazardous environments on a daily basis. This further supports research into the constructs of both risk and hazard, and what those terms may mean to different populations. Future studies should aim to uncover the appropriateness of the term 'risky', which was mentioned by some participants in the current study as being unnecessary. If children have a natural propensity towards risk in their play and anything active is inherently risky to some degree, then perhaps risky play is in fact, just play. Instead of parents *introducing* risky play, it may just be that there is a need for parents to stop *inhibiting* play.

### **Implications for Health Promotion and Policy**

Health Promotion as a field works to improve the overall health of populations across the globe. Healthy childhood development is an important social determinant of health that has implications for the health of an individual throughout the course of their life (PHAC, 2013). Furthermore, active play is a health behaviour that is beneficial for all ages across the lifespan, regardless of gender, race, social status, ability or sexuality. Additionally, habits and perceptions of active play are formed early in life, which may have a dramatic effect on the overall health of the general population (Reilly & Kelly, 2011).

As health promoters, it is important to make health accessible to all individuals. Knowing that risky play is beneficial is not enough to improve the health of young children, if there is a gap between theory and practice. Evidence regarding parental perceptions indicate that at this time, parents are aware that their own children are engaging in less outdoor play than they did as children (Neihues et al., 2013; Valentine & McKendrick, 1997). However, they are sometimes unable to reduce their anxieties regarding safety to allow their children to adopt risky-play behaviours. Parents in the current study support this claim, indicating that parental perspectives do affect which risky activities they allow their child to engage in. Participants in this study note that they make attempts to support their child through risky play and the development of new skills, yet one's risk-tolerance does seem to affect how an individual supervises risky play.

Health promotion should seek to educate parents of the benefits of risky play, and how to incorporate healthy risk into their child's play at a young age. This may be done by providing resources and educational materials to early childhood centres and daycares

such as those provided by the Canadian Public Health Association (CPHA, 2019). As one participant in this study noted, the amount of information provided to new parents can be very overwhelming and informative pamphlets often "end up at the bottom of your purse". Using early childhood centres and areas accessed by parents to disseminate information regarding risky play, as well as provide opportunities for parents to witness risky play in action, may be beneficial. Additionally, community interventions can assist in education and exposure to resources and research regarding this topic; the City of Brantford is currently planning a park crawl to bring awareness to all the outdoor play spaces available to members of the community and their children.

If injury is a large concern for parents, policy should also push for playgrounds and outdoor play opportunities that promote risk-taking activities, while simultaneously optimizing safety. A study by Donna Thompson (1991) examining which playground surfaces are the safest, noted that 60% of 200,000 annual playground injuries in the United States are due to falls to hard surfaces. The study demonstrated that wood and sand are the most optimal materials, if replenished regularly. Additionally, a study by Flannigan and Dietze (2017) found that the introduction of loose parts (play tools without a distinct use, such as sticks) to outdoor environments provided positive opportunity for several types of risky play, and supported participation in physical activity. Utilizing this knowledge in community playground design may not only provide parents with more confidence in their child's safety, but also provide opportunity to engage in risk with their children.

Studies are beginning to emerge to assist in reframing parental views of risky play, to create more opportunities for children (Brussoni et al., 2018). If these tools are found to be effective at increasing opportunities for risky play, these resources can be

made accessible to parents online as self-driven interventions, again assisting in affordances for risky play.

### Conclusion

This study set out to understand how parents in Brant County defined, understood, and integrated risk into their child's play. Research has demonstrated that risky play is beneficial for childhood development, though definitions and themes regarding what risk actually is remain unclear. It is evident from this study that context is the most important factor in determining whether an activity is risky, or whether it is also considered hazardous. Parents remain indispensable resources to the understanding of childhood development, and should be considered as assets when disseminating and implementing new knowledge.

If as a society we can reduce hazards in locations where children play, parents may be more at ease when encouraging their children to try new activities and learn new skills. Trust that an environment will be as safe as possible will allow parents and early childhood educators to be comfortable when endorsing motor learning and physical literacy without the undue fear of the unknown. Physically active children grow up to be physically active adults, who age into physically active seniors. Providing space and support for risk and adventure not only allows kids to be kids, but also fosters development that will benefit children throughout their lives.

### References

- Adamo, B., Wilson, S., Harvey, A., Grattan, K., Naylor, P., Temple, V., & Goldfield, G. (2016). Does intervening in childcare settings impact fundamental movement skill development? *Medicine and Science in Sports and Exercise*, 48(5), 926-932. doi:10.1249/MSS.0000000000000838
- Allin, L., West, A., & Curry, S. (2014). Mother and child constructions of risk in outdoor play. *Leisure Studies*, *33*(6), 644-657. doi:10.1080/02614367.2013.841746
- Arnott, L. (2018). Children's negotiation tactics and socio-emotional self-regulation in child-led play experiences: the influence of the preschool pedagogic culture. *Early Child Development and Care, 188*(7), 951-965.
- Barnett, L., Van Beurden, E., Morgan, P., Brooks, L., & Beard, J. (2009). Childhood motor skill proficiency as a predictor of adolescent physical activity. *Journal of Adolescent Health*, 44(3), 252-259. doi:10.1016/j.jadohealth.2008.07.004
- Bauer, M., & Giles, A. (2018). The need for Inuit parents' perspectives on outdoor risky play. *Polar Record*, *54*, 234-240. doi:10.1017/S0032247418000360
- Bauer, P., Larkina, M., & Deocampo, J. (2010). Early memory development. In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development (2<sup>nd</sup> Edition)*, (pp. 153-179). Oxford, UK: Wiley-Blackwell.
- Berghanel, A., Schulke, O., & Ostner, J. (2015). Locomotor play drives motor skill acquisition at the expense of growth: A life history trade-off. *Science Advances*, *1*(7), e1500451. doi:10.1126/sciadv.1500451
- Bond, T. & Fox, C. (2007). *Applying the Rasch Model: Fundamental Measurement in the Human Sciences*, 2nd edn. Lawrence Erlbaum Associates, Mahwah, NJ, USA.
- Boufous, S., Finch, C., & Bauman, A. (2007). Parental safety concerns A barrier to sport and physical activity in children? *Australian and New Zealand Journal of Public Health*, 28(5), 482-486.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531.

- Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E., Bienenstock, A., Chabot, G., et al. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, *12*(6), 6423-6454. doi:10.3390/ijerph120606423
- Brussoni, M., Ishikawa, T., Han, C., Pike, I., Bundy, A., Faulkner, G., & Mâsse, L. (2018). Go play outside! Effects of a risk-reframing tool on mothers' tolerance for, and parenting practices associated with, children's risky play: study protocol for a randomized controlled trial. *Trials*, 19(173).
- Brussoni, M., Olsen, L., Pike, I., & Sleet, D. (2012). Risky play and children's safety: balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, *9*(9), 3134-3148. doi:10.3390/ijerph9093134
- Bunker, L. (1991). The role of play and motor skill development in building children's self-confidence and self-esteem. *The Elementary School Journal*, *91*(5), 467-471.
- Burriss, K., & Tsao, L. (2002). How much do we know about the importance of play in child development? *Childhood Education*, 78(4), 230-233. doi:10.1080/00094056.2002.10522188
- International Physical Literacy Association. (2014). *Canada's Physical Literacy Consensus Statement*. Retrieved from http://physicalliteracy.ca/wp-content/uploads/2016/08/Consensus-Handout-EN-WEB\_1.pdf
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada and Social Sciences and Humanities Research Council of Canada, *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, December 2010.
- Canadian Public Health Association. (2019). *Risk, hazard, and play: What are risks and hazards?* Retrieved from https://www.cpha.ca/risk-hazard-and-play-what-are-risks-and-hazards
- Canadian Society for Exercise Physiology. (2017). Canadian 24-hour movement guidelines for the early years (0-4 years): An integration of physical activity, sedentary behaviour and sleep. Retrieved from https://csepguidelines.ca/wp-content/themes/csep2017/pdf/PAR7972 24Hour Guidelines EY En-4.pdf
- Cantell, M., Crawford, S., & Doyle-Baker, P. (2008). Physical fitness and health indices in children, adolescents and adults with high or low motor competence. *Human Movement Science*, *27*(2), 344-362. doi:10.1016/j.humov.2008.02.007

- Caplin, D., & Cooper, M. (2007). Child development for inpatient medicine. In L. Zaoutis & V. Chiang (Eds.), *Comprehensive pediatric hospital medicine*, (pp. 1285-1292). doi: https://doi.org/10.1016/B978-0-323-03004-5.X5001-7
- Cavanaugh, D., Clemence, K., Teale, M., Rule, A., & Montgomery, S. (2017). Kindergarten scores, storytelling, executive function, and motivation improved through literacy-rich guided play. *Early Childhood Education Journal*, *45* (6), 831-843. doi:10.1007/s10643-016-0832-8
- Cevher-Kalburan, N. (2015). Developing pre-service teachers' understanding of children's risky play. *Journal of Adventure Education and Outdoor Learning*, 15(3), 239-260.
- Cevher-Kalburan, N., & Ivrendi, A. (2015). Risky play and parenting styles. *Journal of Child and Family Studies*, 25(2), 355-366.
- Clements, R. (2004). An investigation of the status of outdoor play. *Contemporary Issues in Early Childhood*, *5*(1), 68-80.
- Cliff, D., et al. (2017). Adherence to 24-Hour Movement Guidelines for the Early Years and associations with social-cognitive development among Australian Preschool children. *BMC Public Health*, 17(5), 207-215. doi:10.1186/s12889-017-4858-7
- Cohen, K., Morgan, P., Plotnikoff, R., Callister, R., & Lubans, D. (2014). Fundamental movement skills and physical activity among children living in low-income communities: A cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 11, 1–12.
- Covell, C., Sidani, S., Ritchie, J. (2012). Does the sequence of data collection influence participants' responses to closed and open-ended questions? A methodological study. *International Journal of Nursing Studies*, 49(6), 664-671. doi:doi.org/10.1016/j.ijnurstu.2011.12.002
- Darling-Churchill, K., & Lippman, L. (2016). Early childhood social and emotional development: Advancing the field of measurement. *Journal of Applied Developmental Psychology*, 45, 1-7. doi: 10.1016/j.appdev.2016.02.002
- Denham, S., (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development, 17*(1), 57-89.
- Denham, S., & Brown, C. (2010). "Plays nice with others": Social-emtoional learning and academic success. *Early Education and Development*, 21(5), 652-680.

- Dowda, M., Pfeiffer, K., & Brown, W. (2011). Parental and environmental correlates of physical activity of children attending preschool. *Archives of Pediatrics & Adolescent Medicine*, 165(10), 939-944. doi:10.1001/archpediatrics.2011.84
- Elo, S., & Kyngas, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 68(1), 107-115. doi:10.1111/j.1365-2648.2007.04569.x
- Engelen, L., Bundy, A., Naughton, G., Simpson, J., Bauman, A., Ragen, J., Baur, L., et al. (2013). Increasing physical activity in young primary school children it's child's play: A cluster randomized controlled trial. *Preventive Medicine*, *56*(5), 319-325. doi:10.1016/j.ypmed.2013.02.007
- Engward, H. (2013). Understanding grounded theory. *Nursing Standard*, 28(7), 37-41. doi:10.7748/ns2013.10.28.7.37.e7806
- Flannigan, C. & Dietze, B. (2017). Children, outdoor play, and loose parts. *Journal of Childhood Studies*, 42(4), 53-60. doi:dx.doi.org/10/18357/jcs.v42i4.18103
- Gallahue, D., Ozmun, J. (2006). Understanding motor development: Infants, children, adolescents, adults. *McGraw-Hill*, Boston.
- Giles, A., Bauer, M., & Darroch, F. (2019). Risky statement?: A critique of the *Position Statement on Active Outdoor Play. World Leisure Journal*, 61(1), 58-66.
- Ginsburg, K. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.
- Glaser, B., & Strauss, A. (1965). Awareness of dying. Chicago, IL: Aldine Publishing.
- Gray, P. (2011). The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play 3*(4), 443-463.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. doi:10.1177/1525822X05279903
- Heck, A., Collins, J., & Peterson, L. (2001). Decreasing children's risk taking on the playground. *Journal of Applied Behavior Analysis*, 34(3), 349-352.
- Hennink, M., Kaiser, B., & Marconi, V. (2016). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 1-18. doi:10.1177/1049732316665344

- Hill, A., & Bundy, A. (2012). Reliability and validity of a new instrument to measure tolerance of everyday risk for children. *Child: Care, Health and Development,* 40(1), 68-76. doi:10.1111/j.1365-2214.2012.01414.x
- Hsieh, H-F., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. doi:10.1177/1049732305276687
- Kindleberger-Hagan, L., & Kuebli, J. (2007). Mothers' and fathers' socialization of preschoolers' physical risk taking. *Journal of Applied Developmental Psychology*, 28(1), 2-14.
- Lavrysen, A., et al. (2017). Risky-play at school. Facilitating risk perception and competence in young children. *European Early Childhood Education Research Journal*, 25(1), 89-105. doi:10.1080/1350293X.2015.1102412
- Lin, Y., & Bratton, S. (2015). A meta-analytic review of child-centered play therapy approaches. *Journal of Counseling and Development*, 93(1), 45-58.
- Lindsey, E., & Mize, J. (2001). Contextual differences in parent-child play: Implications for children's gender role development. *Sex Roles*, *44*(3), 155-176. doi:10.1023/A:1010950919451
- Little, H. (2010). Relationship between parents' beliefs and their responses to children's risk-taking behaviour during outdoor play. *Journal of Early Childhood Research*, 8(3), 315-330. doi:10.1177/1476718X10368587
- Little, H., Sandseter, B., & Wyver, S. (2012). Early childhood teachers' beliefs about children's risky play in Australia and Norway. *Contemporary Issues in Early Childhood*, 13(4), 300-316.
- Lloyd, M., Saunders, T., Bremer, E., & Tremblay, M. (2014). Long-term importance of fundamental motor skills: A 20-year follow-up study. *Adapted Physical Activity Quarterly*, 31(1), 67-78. doi:10.1123/apaq.2013-0048
- Loprinzi, P., Davis, R., & Fu, Y. (2015) Early motor skill competence as a mediator of child and adult physical activity. *Preventive Medicine reports*, *2*, 833-838. doi:10.1016/j.pmedr.2015.09.015
- Loprinzi, P., & Trost, S. (2010). Parental influences on physical activity behavior in preschool children. *Preventive Medicine*, *50*(3), 129-133. doi:10.1016/j.ypmed.2009.11.010

- Lubans, D., Morgan, P., Cliff, D., Barnett, L., & Okely, A. (2010). *Sports Medicine*, 40(12), 1019-1035. doi:10.2165/11536850-0000000000-00000
- McCurdy, L., Winterbottom, K., Mehta, S., & Roberts, J. (2010). Using nature and outdoor activity to improve children's health. *Current Problems in Pediatric and Adolescent Health Care*, 40(5), 102-117.
- McFarland, L., & Laird, S. (2018). Parents' and early childhood educators' attitudes and practices in relation to children's outdoor risky play. *Early Childhood Education Journal*, 46(2), 159-168. doi: 10.1007/s10643-017-0856-8
- McLaren, L., & Hawe, P. (2005). Ecological perspectives in health research. *Journal of Epidemiology and Community Health*, 59(1), 6-14. doi:10.1136/jech.2003.018044
- Milteer, R., Ginsburg, K., The Council on Communications and Media, & The Committee on Psychosocial Aspects of Child and Family Health. (2012). The importance of play in promoting healthy child development and maintaining strong parent-child bond: Focus on children in poverty. *American Academy of Pediatrics*, 129(1), doi:10.1542/peds.2011-2953
- Moffitt, T., et al. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *National Academy of Sciences*, 108(7), 2693-2698.
- Moore, A., & Lynch, H. (2018). Understanding a child's conceptualisation of well-being through an exploration of happiness: The centrality of play, people and place. *Journal of Occupational Science*, 25(1), 124-141.
- Morrongiello, B., & Hogg, K. (2004). Mothers' reactions to children misbehaving in ways that can lead to injury: Implications for gender differences in children's risk taking and injuries. *Sex Roles*, 50(1-2), 103-118.
- Morrongiello, B., & Mark, L. (2001) "Practice what you preach": Induced hypocrisy as an intervention strategy to reduce children's intentions to risk take on playgrounds. *Journal of Applied Behavior Analysis*, 34(3), 349-352.
- Morrongiello, B., Zdzieborski, D., & Normad, J. (2010). Understanding gender differences in children's risk taking and injury: A comparison of mothers' and fathers' reactions to sons and daughters misbehaving in ways that lead to injury. *Journal of Applied Developmental Psychology*, 31(4), 322-329.
- Nicaise, V., Kahan, D., & Sallis, J. (2011). Correlates of moderate-to-vigorous physical activity among preschoolers during unstructured outdoor play periods. *Preventive Medicine*, *53*(4), 309-315. doi:10.1016/j.ypmed.2011.08.018

- Niehues, A., Bundy, A., Broom, A., Tranter, P., Ragen, J., & Engelen, L. (2013). Everyday uncertainties: Reframing perceptions of risk in outdoor free play. *Journal of Adventure Education and Outdoor Learning*, 13(3), 223-237. doi:10.1080/14729679.2013.798588
- Ohri-Vachaspati, P., DeLia, D., DeWeese, R., Crespo, N., Todd, M., & Yedidia, M. (2014). The relative contribution of layers of the Social Ecological Model to childhood obesity. *Public Health Nutrition*, *18*(11), 2055-2066. doi:10.1017/S1368980014002365
- ParticiPACTION Report Card on Physical Activity for Children & Youth. (2018a). Canadian kids need to move more to boost their brain health. Retrieved from https://participaction.cdn.prismic.io/participaction%2F5e923384-b01a-4680-a353-60b45c271811\_2018\_participaction\_report\_card\_- highlight\_report\_0.pdf
- ParticiPACTION Report Card on Physical Activity for Children & Youth. (2018b). Expert statement on physical activity and brain health in children and youth. Retrieved from https://participaction.cdn.prismic.io/participaction%2Fe6cb2b35-2d29-4539-80ee-515a0ae9dfb3\_2018\_expert\_statement\_on\_physical\_activity \_and\_brain\_health\_in\_children\_and\_youth.pdf
- Pellegrini, A., & Smith, P. (1998a). The development of play during childhood: Forms and possible functions. *Child Psychology and Psychiatry Review*, *3*(2), 51-57. doi:10.1017/S1360641798001476
- Pellegrini, A., & Smith, P. (1998b). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, 69(3), 577-598. doi:10.1207/S15374424JCCP3203 02
- Public Health Agency of Canada. (2013). *Determinants of Health*. Retrieved from http://www.publichealth.gc.ca
- Ramstetter, C., Murray, R., & Garner, A. (2010). The crucial role of recess in schools. *Journal of School Health*, 80(10), 517-526.
- Reilly, J., & Kelly, J. (2011). Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature morality in adulthood: systematic review. *International Journal of Obesity*, 35(7), 891-898.
- Sandseter, E. (2007) Categorising risky play how can we identify risk-taking in children's play? *European Early Childhood Education Research Journal*, 15(2), 1350-293.

- Sandseter, E. (2009). Children's expressions of exhilaration and fear in risky play. *Contemporary Issues in Early Childhood, 10*(2), 92-106.
- Sandseter, E. (2014). Early childhood education and care practitioners' perceptions of children's risky play; examining the influence of personality and gender. *Early Childhood Development and Care*, 184(3), 434-449. doi: 10.1080/03004430.2013.794797
- Sandseter, E., & Kennair, L. (2011). Children's risky play from an evolutionary perspective: The anti-phobic effects of thrilling experiences. *Evolutionary Psychology*, 9(2), 257-284.
- Schwebel, D. (2006). Safety on the playground: Mechanisms through which adult supervision might prevent child playground injury. *Journal of Clinical Psychology in Medical Settings*, 13(2), 135-143.
- Siddiqi, A., Irwin, L., & Hertzman, C. (2007). Total environment assessment model for early child development: Evidence report for the World Health Organization's Commission on the Social Determinants of Health. Vancouver, BC: Human Early Learning Partnership (HELP).
- Solmon, M. (2015). Optimizing the role of physical education in promoting physical activity: A social ecological approach. *Research Quarterly for Exercise and Sport*, 86(4), 329-337. doi:10.1080/02701367.2015.1091712
- Stahmer, A., & Schreibman, L. (1992). Teaching children with autism appropriate play in unsupervised environments using a self-management treatment package. *Journal of Applied Behavior Analysis*, 25(2), 447-459. doi:10.1901/jaba.1992.25-447
- Stephenson, A. (2003). Physical risk-taking: Dangerous or endangered? *Early Years*, 23(1), 35-43.
- Stodden, D., Goodway, J., Langendorfer, S., Roberton, M., Rudisill, M., Garcia, C., & Garcia, L. (2008). A developmental perspective on the role of motor skill competence in physical activity: An emergent relationship. *Quest*, 60(2), 290-306. doi:10.1080/00336297.2008.10483582
- Strauss, A., & Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Thousand Oaks, CA: Sage.
- Thompson, D. (1991). Safe playground surfaces: What should be used under playground equipment? *Journal of Physical Education, Recreation & Dance*, 62(9), 74-75.

- Tomasello, M. (2010). Language development. In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development (2<sup>nd</sup> Edition)*, (pp. 153-179). Oxford, UK: Wiley-Blackwell.
- Tremblay, M., Gray, C., Babcock, S., Barnes, J., Bradstreet, C., Carr, D., Chabot, G., et al. (2015). Position statement on active outdoor play. *International Journal of Environmental Research and Public Health*, 12(6), 6475-6505.
- Valentine, G., & McKendrick, J. (1997). Children's outdoor play: Exploring parental concerns about children's safety and the changing nature of childhood. *Geoforum*, 28(2), 219-235.
- Veitch, J., Bagley, S., Ball, K., & Salmon, J. (2006). Where do children usually play? A qualitative study of parents' perceptions of influences on children's active free-play. *Health and Place*, 12(4), 383-393.
- Waters, J., & Begley, S. (2007). Supporting the development of risk-taking behaviours in the early years: An exploratory study. *Education 3-13, 35*(4). 365-377.
- Wen, L., Kite, J., Merom, D., & Rissel, C. (2009). Time spend playing outdoors after school and its relationship with independent mobility: A cross-sectional survey of children aged 10-12 years in Sydney, Australia. *International Journal of Behavioural Nutrition and Physical Activity*, 6(1), 15.
- WHO. (2010). *Global recommendations on physical activity for health*. World Health Organization, Geneva, Switzerland.
- WHO. (2019). *Early child development*. World Health Organization, Geneva, Switzerland. Retrieved from https://www.who.int/social\_determinants/themes/earlychilddevelopment/en/
- Yates, T., Ostrosky, M., Cheatham, G., Fettig, A., Shaffer, L., & Santos, R. (2008). Research synthesis on screening and assessing social-emotional competence. *The Center on the Social Emotional Foundations for Early Learning*, Retrieved from http://csefel.vanderbilt.edu/documents/rs\_screening\_assessment.pdf
- Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., Golinkoff, R., Committee on Psychosocial Aspects of Child and Family Health, & Council on Communications and Media. (2018). The power of play: A pediatric role in enhancing development in young children. *American Academy of Pediatrics*, 142(3).

Zeng, N., Ayyub, M., Sun, H., Wen, X., & Xiang, P., et al. (2017). Effects of physical activity on motor skills and cognitive development in early childhood: A systematic review. *BioMed Research International*, 2017, 1-14. doi:10.1155/2017/2760716

### **APPENDIX A: Recruitment Poster**



Exploring perspectives of parents in Ontario

RECEIVE A \$20 GIFT CERTIFICATE TO SPORT CHEK

Denver Hilland, MA Candidate School of Health and Human Performance Dalhousie University

### What is risky play?

Risky play is a term used to describe activity that involves a child testing her or his physical abilities through play. Risk comes in many forms, such as playing at great speeds, heights, with different objects, rough and tumble, or the potential of getting lost. It can also mean trying a new activity, or attempting something in the absence of parent supervision. An appropriate amount of risk differs depending on the age and development of a child. Part of this project is to help define what risky play means for children aged 3-5.



### What is this research about?

In the early stages of a child's development, parent's are often the sole supervisor of a child's activity. Your kids learn how to behave from you! We'd like to learn more about how you as a parent balance between your concerns for your child's safety, while still allowing them to explore their natural environment.

### **Project Goals**

By observing and interviewing parents, this study aims to better understand:

- 1. How parents define "risky play"?
  - 2. What are the perceived benefits or consequences to children engaging in risky, outdoor play?
- 3. What actions do parents take to balance risk and safety in their child's activity?

### Why is this study important?

A healthy amount of risk is important for a child's physical, social and emotional development. In recent years, growing concerns regarding safety have contributed in a decline of activities that are considered "risky", especially in the outdoors. In some cases this has shown to negatively affect a child's physical literacy, development and ability to negotiate risk taking behaviours. Before we can promote healthy risky play, it is important to understand how parents feel, react and behave, so that we can help our kids develop to their fullest potential. A child's safety is just as important as their development, which is why it is important to promote both.

Research has not uncovered the best way to incorporate risk, while maintaining safety as a priority. Supervision and parenting techniques vary widely from person to person, and we'd like to better understand how one's relationship with risk contributes to what a child chooses to engage in. This study will add to our understanding of risky play as it relates to parents.

We want to hear from you!

### **Participants**

### Do you have a child aged 3-5?

We'd love for you to participate in this study!

You will be given a questionnaire and participate in an interview. We want to know how you feel about risk in your child's play, and how you, as a parent, promote safety in the outdoors.



Contact the lead researcher: Denver Hilland at Dhilland@dal.ca



If you or someone you know might be interested in participating, please sign up!

Want to contribute to a growing body of research?



For more information, send us an email or call: 416-302-6638



This study has been granted ethical approval from the Dalhousie University Social Sciences and Humanities Research Ethics Board



### **APPENDIX B: Information Sheet**

**Project title**: Risky Play: Exploring Perspectives of Parents in Ontario

### Lead researcher:

Denver Hilland

MA Health Promotion Candidate Dalhousie University, Health and Human Performance (416)-302-6638 Dhilland@dal.ca

**Supervisor:** Dr. Sara Kirk

Healthy Populations Institute, Dalhousie University, Health and Human Performance (902) 494-8440 sara.kirk@dal.ca

### Introduction

We invite you to take part in a research study being conducted by a Masters student named Denver Hilland from Dalhousie University. The study is called "Risky Play: Exploring Perspectives of Parents in Ontario". Through this research, we hope to get a better understanding of how a parent's tolerance of risk in their child's play, relates to how they interact with their child during play. Furthermore, we'd like to better understand what the term "risky play" really means, and what an appropriate level of risk is for children aged 3-5. Your participation in the study is voluntary and you may withdraw from the study at any time. The information below tells you about what is involved in the research, what you will be asked to do and about any benefit, risk, inconvenience or discomfort that you might experience. You should discuss any questions you have about this study with Denver Hilland. Please ask as many questions as you like.

### **Purpose and Outline of the Research Study**

Many children in Canada are not getting enough physical activity. Being active is important to prevent chronic diseases. Encouraging children to be active in the early years can help them to stay active for life. Current research shows that "risky" play is an important part of a child's physical, emotional and social development. However, growing concerns regarding safety have caused a societal shift to limit opportunities for children to engage in risky play. In the early years, children learn most of their behaviours from their parents, looking to their parent to know what is safe or unsafe, allowed or not allowed. The term "risky play" still has many definitions, and can mean different things depending on the age or developmental maturity of the child. The objectives of this research are to contribute to the knowledge regarding risky play. Specifically, we want to hear from parents to help answer the following research questions: 1) How do parents of define risky play? 2) What are the perceived benefits and consequences of children engaging in risky, outdoor play? 3) What actions, and behaviours do parents engage in during their children's play that promote both risky play and safety?

To answer these questions, this study will collect two types of data. Before participation, the lead researcher invites the potential participant to ask as many questions as they need for clarification, and to sign consent forms if they wish to participate. The first type of data is a questionnaire to assess the participant's tolerance of risk in play. Following this, there will be an interview to collect more in-depth data on how the parent feels about risky play.

### Who Can Take Part in the Research Study

Parents who have a child between the ages of 3 and 5 years, will be able to participate in the project.

### What You Will Be Asked To Do

As a parent, you will be asked to complete both portions of the study. At the beginning of the meeting, you will be asked to provide consent to your participation in the study. If you do not wish to participate, or you do not consent to all types of data collection, you will not be eligible. This meeting should take about 20 minutes. You will begin the first portion of the study by filling out a questionnaire called the Tolerance of Risk in Play Scale. There are 31 yes or no questions, and one question answered on a scale of 1-10, it should take you 5-10 minutes. You will then participate in a semi-structured interview. Topics of discussion will include how you supervise your child, your comfort with risk in your child's play and what risk means to you. We will ask you open-ended questions about how you feel about risky play, and what you do as a parent to negotiate a balance between safety and risk. The interview will last between 60-90 minutes.

### Possible Benefits, Risks and Discomforts

For participating in our study, you will receive a \$20 gift certificate to Sport Chek. You may withdraw at any time without penalty to this compensation. You may also feel positive about contributing to the literature regarding risky play, and giving parents a voice regarding this subject.

Filling out the questionnaire and participating in an interview may make you feel uncomfortable sharing specific information about your thoughts on outdoor play, physical activity and risk. In order to minimize the risk associated, informed consent will be required for you to participate. The questionnaire and interview will be conducted in an environment comfortable to you. You are not obligated to respond to any questions that you are not comfortable answering and you may withdraw from the study at any time up to the point that data are analyzed. All identifying information will be removed and replaced with a code number. Any quotes from interviews used in reports, publications, or presentations will not contain identifiers.

### How your Information will be Protected

The researcher will be completing data collection and interviews face-to-face. Therefore, you cannot remain completely anonymous. However, any identifying data collected from you (e.g., name, age, phone number etc.), will be removed from data before it is included within any written report of the research and will remain private. Hard copies will be carefully stored in a locked filing cabinet while all electronic data will be encrypted on a password-protected USB ensuring confidentiality. All identifying information will be available solely to the research team.

It is expected that the final results will be described and shared through presentations and publications. The research team has an obligation to keep all information private and participant numbers, as opposed to names, will be used in our written and computer records.

Hard copy data (i.e., questionnaires) will be stored in a locked and secure area within the Healthy Populations Institute at Dalhousie University.

### If You Decide to Stop Participating

Your data can be withdrawn from the study at any time up to a week following the final interview. After this time, transcription will begin and it will not be possible to remove your data from the study. If you do decide to withdraw from the study, we ask that you inform the researcher as soon as possible by contacting Denver Hilland at 416-302-6638 or dhilland@dal.ca. Once we have received notice of this, all of your data collected up to this point will be destroyed immediately and will not contribute to final results. However, once you have completed the study and analysis has taken place, no data can be removed.

### **How to Obtain Results**

Results of the Tolerance of Risk in Play Questionnaire can be sent to you, if you wish to know your level of risk tolerance. A research summary will be written in plain language and will provide an overview of the results of the intervention, with no identifying information of specific participant results. This summary will be shared as part of a Risky Play Campaign through the City of Brantford.

### Questions

We are happy to talk with you about any questions or concerns you may have about your participation in this research study. Please contact Denver Hilland (416-302-6638, dhilland@dal.ca) at any time with questions, comments, or concerns about the research study (if you are calling long distance, please call collect). We will also tell you if any new information comes up that could affect your decision to participate.

If you have any ethical concerns about your participation in this research, you may also contact Research Ethics, Dalhousie University at (902) 494-1462, or email: ethics@dal.ca (and reference REB file # 2017- 4380).

### APPENDIX C: Signature Page

### **Signature Page**

<b>Project Title</b> : Risky Play:	Exploring Perspectives of Pare	ents in Ontario
Lead Researcher: Denver	r Hilland, Dalhousie University	v, dhilland@dal.ca, (416) 302-6638
Supervisor: Dr. Sara Kirk	, Dalhousie University, sara.kii	rk@dal.ca, (902) 494-8440
PARENT PARTICIPATIO	ON:	
my questions have been ar voluntary and that I am fre	nswered to my satisfaction. I un be to withdraw from the study a and that I will receive compensar	given the opportunity to discuss it and aderstand that my participation is at any time, up to one week following my tion in the form of a \$20 gift certificate
	pate in the above study.  participate in the above study.	(check one of the above sentences to
Do not give consent to Give consent that direct	lio-recorded during my intervie be audio-recorded during my i ct quotes from my interview ma	
I agree to participate in all	stages of this study.	
Name	Signature	Date

### APPENDIX D: Tolerance of Risk in Play Scale

1.	On a scale of 0-10 (0 meaning I don't encourage risk at all, 10 meaning I encourage risk		
	whenever possible) how much do you encourage your child to take everyday risks?		
2.	Would you let your child jump down from a height of 3–4 m?	Yes / No	
3.	Would you allow your child to play chase with other children?	Yes / No	
4.	Would you trust your child to play by themselves without constant		
	supervision?	Yes / No	
5.	Would you let your child go down head first down a slippery dip?	Yes / No	
6.	Would during you allow your child to continue playing if they get a		
	few scrapes during play?	Yes / No	
7.	Would you let your child have lots of challenges when they play at		
	home?	Yes / No	
8.	Would you let your child use a hammer and nail unsupervised?	Yes / No	
9.	Would you let your child climb up a tree within your reach?	Yes / No	
10.	Would you let your child walk barefoot across a floor after broken glass		
	had been swept up?	Yes / No	
11.	Would you let your child walk on slippery rocks close to water?	Yes / No	
12.	Would you allow your child to play-fight other children with sticks?	Yes / No	
13.	Would you encourage your child to try new things that involve		
	some risk?	Yes / No	
14.	Would you allow your child to engage in rough and tumble play?	Yes / No	
15.	Would you let your child play near the edge of steep cliffs?	Yes / No	
16.	Would you allow your child to play in the bush out of your sight?	Yes / No	
17.	Would you let your child experience minor mishaps if what they are		
	doing is lots of fun?	Yes / No	

18.	Would you let your child run close to an open fire?	Yes / No
19.	Would you let your child swim in the ocean close to the shore while you	
	were watching from the beach?	Yes / No
20.	Would you allow your child to continue playing if there is the potential	
	they may break a bone?	Yes / No
21.	Would you let your child play in a backyard unsupervised?	Yes / No
22.	Would you allow your child to play-fight, testing who is strongest?	Yes / No
23.	Would you allow your child to climb a rock wall that goes straight down	
	to the water?	Yes / No
24.	Would you wait to see if your child could manage challenges on their	
	own before getting involved?	Yes / No
25.	Would you let your child climb as high as they want to in trees?	Yes / No
26.	Would you allow your child to ride a bicycle down a steep hill at	
	full speed?	Yes / No
27.	Would you trust your child to play safely?	Yes / No
28.	Would you allow your child to use a sharp knife?	Yes / No
29.	Would you let your child play in a backyard supervised?	Yes / No
30.	Would you let your child balance on a fallen tree more than 2 m above the	e
	ground?	Yes / No
31.	Would you encourage your child to take some risks if it means having fur	n
	during play?	Yes / No
32.	Would you allow your child to climb up a tree beyond your reach?	Yes / No

### **APPENDIX E: Interview Script**

### PARENT INTERVIEW QUESTIONS INTRODUCTORY COMMENTS

Hello, my name is Denver Hilland, I'll be facilitating this interview today. I'd like to thank you for taking the time to participate in this interview regarding risky play. Before we begin, I'd like you to please fill out the Tolerance of Risk in Play Scale.

The purpose of this interview is to understand your thoughts, beliefs and feelings regarding risk in your child's play. The information we learn from you will be used in a thesis document, contributing to the literature regarding risky play.

Participation in this interview is voluntary and you can stop participating at any point in time, all the information provided in this interview will be kept confidential. Answers will not be connected with any names in any reports or presentations. To help with the analysis of the information, with your permission, I would like to audio-record our conversation. The recordings will be transcribed word for word by me, all identifying information will be removed (i.e., names, place, etc.). The responses provided will be reported all together, and although individual responses may be used to highlight ideas in the overall report, you will not be personally identified. You can skip any questions or part of the discussion that you aren't comfortable in responding to.

Do you have any questions on this so far?
Do you consent to participate in the interview
□Yes □No

### **INTERVIEW GUIDE**

(Note, these are example questions that may change depending on the direction of the interview)

- 1. How old is your child? Gender? How many kids do you have?
- 2. Tell me about the sorts of things your child likes to do for play
  - ⇒ Prompts: Who chooses what you do? Do you and your child do things together?
- 3. Do you have any places where you can go to play outside?
  - ⇒ Prompts: What does your child like to do outside? Can you give me an example? Does your child have a favourite outside play space? A favourite toy or activity? What do you do when your child is playing outside?
- 4. How active is your child when they are outside? Is this more or less active that when they play inside?
- 5. How would you describe risky play? Describe some activities that involves risk-taking for children. How do you feel about your child engaging in risky play?
- 6. Is there a role for risk-taking in a play setting for children? How comfortable would you be with your child being involved in risky play when you are not there?
- 7. Are there times when your child is doing something risky, but you allow them to do it anyway?
- 8. What actions do you take when your child engages in risk?
  - ⇒ Prompts: Do you encourage or discourage them? How close are you to your child when they are doing something risky?
- 9. Do you think that your comfort or discomfort with risk is clear to your child? Prompts: Are there activities that they do or don't do, because of your feelings towards risk?
- 10. Some other studies in the literature break down risky play into six categories, the first is play at great heights (speed, etc.). Does that play a role in your child's play?
  - ⇒ How often does your child play at heights? How comfortable are you when they are playing at a height? What are some things you do to encourage or discourage this type of play?

### **APPENDIX F: Dalhousie Research Ethics Board Approval Letter**



### Social Sciences & Humanities Research Ethics Board Letter of Approval

January 22, 2018

Denver Hilland Health\Health & Human Performance

Dear Denver,

**REB #:** 2017-4380

**Project Title:** Risky Play: Exploring Perspectives of Parents in Ontario

Effective Date: January 22, 2018
Expiry Date: January 22, 2019

The Social Sciences & Humanities Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Sincerely,

Dr. Karen Beazley, Chair

### RESEARCH ETHICS PANEL ON

## TCPS 2: CORE

# Certificate of Completion

This document certifies that

## **Denver Hilland**

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

25 October, 2016 Date of Issue:

### **APPENDIX H: Request for Study Information**

Request for Study Information	
I would like a copy of the thesis report	
Yes (by email) Yes (mailed to address listed below)	No
I would like a copy of the full thesis	
Yes (by email) Yes (mailed to address listed below)	No
Mailing Address:	
Email Address:	