

UNIVERSITY OF SOUTHERN QUEENSLAND

**The new frontier: A social ecological exploration of factors
impacting on parental support for the active play of young children
within the micro-environment of the family home**

A Dissertation submitted by

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Abstract

Raising children is a collective undertaking, one that is integrally linked to multiple places and networks of people, yet families and their domestic spaces are still at the heart of this endeavour. They are understood to be a critical leverage point for the establishment of early health behaviours and values. Currently, there is a paucity of qualitative research that investigates individuals within the domestic space of the family home. Forging a new path in terms of getting ‘inside’ the problem, this research was motivated to explore active play within this environment and the pervasive influence that multiple factors exert on parental practices, understandings and values.

Intrinsic and instrumental case study provided an opportunity to gain a contextual understanding of the idiosyncratic experiences and motivations of three families. The conceptualisation of the micro-environment and development of a Parental and Micro-Environmental Model inspired by a social ecological framework enabled research to be directed at considering the contextual nuances that operate on and are embedded in the lives of individuals and give meaning to their thoughts and actions.

Findings expand on current understandings about the idiosyncratic nature of parents and families and highlight the pervasiveness of factors that impact on their efforts to support the active play experiences of young children. The study also confirmed that a range of factors that sit both inside and outside the micro-environment of the family home can skew determinants into becoming either a barrier or an enabler, depending on context.

We can only truly understand individuals within these places by appreciating their context located within multiple environments and the wider social milieu. Such research needs to be underscored by valuing the contextual nuances that exist in these spaces. Exploring phenomena of health and their effect on individuals, environments and organisations are best explored through multiple fields and disciplines in order to “better manage multiple sources of environmental change and to collaborate effectively toward reducing their negative impacts on population health and societal cohesion” (Stokols, Misra, Runnerstrom, & Hipp, 2009, p. 181). Future research endeavours should seek to better understand the experiences and perspectives of children and parents in this legitimate space. A space where much research still needs to be done in order to advance our understandings, yet has the potential of being an untapped resource that in many respects could still be defined as the ‘New Frontier’.

Certificate of Dissertation

I certify that the ideas, experimental work, results, analyses and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted, either in whole or in part, for any other award, except where otherwise acknowledged.

Signature of Candidate

Date

ENDORSEMENT

Professor Patrick Danaher

Date

Dr David Cleaver

Date

Acknowledgements

Although writing a thesis is very much an individual pursuit, and one full of personal struggles and accomplishments as John Donne so aptly puts it,

“No man is an island, entire of itself; every man is a piece of the continent”.

There are many and varied individuals and groups who have provided invaluable assistance in the writing of this thesis. The collaborative relationship between student and supervisor is imperative and necessary. To Professor Patrick Danaher (my principal supervisor), I will be forever grateful for your words of encouragement and for helping to make the thought of this journey reachable. Your innate ability to listen and respect my thoughts, while weaving pearls of wisdom and insight into my writings was treasured. Your eloquence with words and mastery of the English language was a benchmark that inspired me to constantly challenge my own efforts.

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All of you were critical to the success of this study and contributed significantly to my understandings of *‘The New Frontier’*.

Dedication

This body of work is dedicated to my loving father. I am grateful to him for his belief in me and his ongoing encouragement of me during this very long learning journey. His life lesson of working hard towards a goal that you truly believe in has stood me in good stead during the last 6 years of my life, thank you pops! To my beautiful son Johl, who has travelled and watched this journey unfold around him, thanks for allowing mum to be distracted many, many times and for your understanding and encouragement.

TABLE OF CONTENTS

ABSTRACT	I
CERTIFICATE OF DISSERTATION	III
ACKNOWLEDGEMENTS	V
DEDICATION	VII
LIST OF FIGURES	XI
LIST OF IMAGES	XII
LIST OF GRANTS, PUBLICATIONS AND CONFERENCES RELATED TO THIS DOCTORAL RESEARCH	XIV
FORWARD	1
THE VALUE OF STORYING.....	4
THE JOURNEY TOWARDS A ‘NEW FRONTIER’	4
CHAPTER 1: THE FOCUS OF THE STUDY	7
1.1 THE DREAM OF DISCOVERING UNEXPLORED TERRITORY	7
1.2 SURVEYING THE TERRAIN – THE BACKGROUND TO THE STUDY	8
1.3 PAEDIATRIC HEALTH - DETERMINANTS, ENVIRONMENTS AND CONTEXTS	10
1.4 VENTURING BEYOND A REDUCTIONIST PARADIGM IN HEALTH RESEARCH.....	14
1.5 EMERGING REDEFINITIONS OF AND INFLUENCES ON CHILD HEALTH.....	16
1.6 THE RESEARCH GOALS	19
1.7 THE RESEARCH QUESTIONS	20
1.8 THE OUTLINE OF THE THESIS	21
CHAPTER 2 – THE REVIEW OF THE LITERATURE	25
2.1 OVERVIEW OF CHILDREN’S HEALTH, POLICY AND DIRECTION	25
2.2 THE POWER OF THE ENVIRONMENT	36
2.3 THE PIVOTAL ROLE OF PARENTS IN SUPPORTING HEALTH BEHAVIOURS	42
2.4 PARENTAL BEHAVIOURS THAT INFLUENCE CHILDREN’S PARTICIPATION IN ACTIVE PLAY	45
2.5 OTHER FAMILIAL DETERMINANTS	51
2.6 THE CRITICAL ROLE OF THE CHILD	58
2.7 SUMMARY OF THE CHAPTER.....	62
CHAPTER 3 – THE CONCEPTUAL FRAMEWORK	65
3.1 PARADIGMS AND FRAMEWORKS FOR MAKING SENSE OF HEALTH.....	65
3.2 THE THEORETICAL VALUING OF CONTEXT SPECIFIC BEHAVIOURS	69
3.3 THE EMERGENCE OF ECOLOGICAL MODELS	75
3.4 MAKING SENSE OF MULTIPLE INFLUENCES: THE EMERGENCE OF A NEW MODEL	88
3.5 SUMMARY OF THE CHAPTER.....	100
CHAPTER 4 – THE METHODOLOGY	103
4.1 SETTING THE SCENE - THE POSITIONING OF THIS STUDY	104
4.2 THE EPISTEMOLOGICAL POSITIONING OF THE RESEARCHER	107
4.3 AN ONTOLOGICAL EXPLORATION.....	108
4.4 UNFOLDING THE STORIES AND ‘LIVED EXPERIENCES’ OF OTHERS	110
4.5 AXIOLOGICAL PERSPECTIVES: ASSUMING TWO LENSES.....	113
4.6 A CASE FOR CASE STUDY	116
4.7 THE DESIGN OF THE STUDY.....	120
4.8 SOURCES OF EVIDENCE	122
4.9 ANALYSING THE DATA: A READING OF DIFFERENT DOMESTIC SPACES	132

4.10	TRUSTWORTHINESS AS A MEASURE OF RIGOUR	139
4.12	THE FOCUS OF THE STUDY	151
4.13	LOOKING FORWARD, CHAPTERS 5, 6 & 7 - INTRODUCING THE FAMILIES.....	153
4.14	SUMMARY OF THE CHAPTER.....	154
CHAPTER 5 MEET THE MASONS		156
5.1	OVERVIEW OF THE CHAPTER.....	157
5.2	THE MASONS' CONTEXT	160
5.3	ACTIVE PLAY EXPERIENCES, OPPORTUNITIES AND ENVIRONMENTS	164
5.4	CONTEXTUAL FACTORS IMPACTING ON PARENT BELIEFS, CHOICES, KNOWLEDGE AND UNDERSTANDINGS OF ACTIVE PLAY	184
5.5	DETERMINANTS SKEWED BY CONTEXT	197
5.6	SUMMARY OF THE CHAPTER.....	208
CHAPTER 6 MEET THE HAMPTONS		210
6.1	OVERVIEW OF THE CHAPTER.....	211
6.2	THE HAMPTONS' CONTEXT	212
6.3	ACTIVE PLAY EXPERIENCES, OPPORTUNITIES AND ENVIRONMENTS	217
6.4	CONTEXTUAL FACTORS IMPACTING ON PARENTS' BELIEFS, CHOICES, KNOWLEDGE AND UNDERSTANDINGS OF ACTIVE PLAY	242
6.5	DETERMINANTS SKEWED BY CONTEXT	251
6.6	SUMMARY OF THE CHAPTER.....	260
CHAPTER 7 MEET THE CALMINGS		263
7.1	OVERVIEW OF THE CHAPTER.....	264
7.2	THE CALMINGS' CONTEXT	265
7.3	ACTIVE PLAY EXPERIENCES, OPPORTUNITIES AND ENVIRONMENTS	268
7.4	CONTEXTUAL FACTORS IMPACTING ON PARENTS' BELIEFS, CHOICES, KNOWLEDGE AND UNDERSTANDINGS OF ACTIVE PLAY	282
7.5	DETERMINANTS SKEWED BY CONTEXT	292
7.6	SUMMARY OF THE CHAPTER.....	297
CHAPTER 8: STAKING ONE'S CLAIM ON NEW TERRITORY		300
8.1	INTRODUCTION	300
8.2	FINDINGS: ADDRESSING THE RESEARCH QUESTIONS	302
8.3	SIGNIFICANCE AND IMPLICATIONS.....	317
8.4	SUMMARY OF THE CHAPTER.....	335
REFERENCES		340
APPENDIX 1 – GLOSSARY OF TERMS.....		367
APPENDIX 2 – PHYSICAL ACTIVITY CLASSIFICATIONS FOR YOUNG CHILDREN (BIRTH TO FOUR)		376
APPENDIX 3 – THE CONTEXTUAL AUDIT TEMPLATE (CAT).....		377
APPENDIX 4 – PARENTAL CONSENT LETTER		381
APPENDIX 5 – ETHICS CLEARANCE		382

List of Figures

Figure 0-1.	A visual representation of context	3
Figure 1.1.	A visual representation of contextual influences	9
Figure 1.2.	A visual representation of contextual nuances	15
Figure 2.1.	Physical activity classifications for young children (birth to four)	32
Figure 3.1.	Barton & Grant's conceptual framework of determinants of health in neighbourhoods	66
Figure 3.2.	Bowes & Hayes adaption of Bronfenbrenner's model of the ecology of human development	72
Figure 3.3.	McLeroy's multiple levels of influence on health behavior	78
Figure 3.4.	Core principles of social ecological theory adopted from Stokols (1996)	79
Figure 3.5.	Publications using social ecological science	81
Figure 3.6.	Four core principles of ecological models of health behavior	82
Figure 3.7.	Dwyers, et al.s' (2008) adaption of Welk's social ecological model	87
Figure 3.8.	Components 1 & 2 of the PMEM model outlining examples of factors sitting within the micro-environment of the family home	92
Figure 3.9.	The PMEM Model - Parental and Micro-Environmental Model	102
Figure 4.1.	The foundational positioning of the study	105
Figure 4.2.	Key case study considerations for this study	117
Figure 4.3.	Thematic categories of data analysis (Style 1)	137
Figure 5.1.	The Masons' PMEM Model	209
Figure 6.1.	The Hamptons' PMEM Model	262
Figure 7.1.	The Calmings' PMEM Model	
Figure 8.1.	Q1 – A summary of active play experiences, opportunities & environments	303
Figure 8.2.	Q2 – Influences on parental values, behaviours & practices	309
Figure 8.3.	'The family home' – an example of a micro-environment	319

List of Images

Image 2.1.	‘The family home’ – an example of a micro-environment	40
Image 4.1.	The plastic cubby: An example of photo-documentation that stimulated conversation.	131
Image 5.1.	The Mason family (including Millie & Maxie)	155
Image 5.2.	The Masons’ streetscape showing a major tree-lined street	161
Image 5.3.	View of front yard with close access to busy street (Note, yard surrounded by bushes and high fence)	161
Image 5.4.	Neighbourhood playground which includes a range of quality equipment	161
Image 5.5.	Helen demonstrating her magical fairy-dance	163
Image 5.6.	Helen’s fine-motor bathtub toys	165
Image 5.7.	Indoor mat and play space area near kitchen (primarily used for fine motor play)	165
Image 5.8.	Backyard area showing swing set, grassed area and Maxi	167
Image 5.9.	A collection of outdoor play toys including a mower, push car and gardening set	169
Image 5.10.	Helen’s display of Russian dolls	171
Image 5.11.	The cubby? Or Storage shed?	173
Image 6.1.	The Hampton family (Lucy & George with their children Susan, Simon and Howard)	210
Image 6.2.	The streetscape	213
Image 6.3.	The front-yard	213
Image 6.4.	The large grassed area in the backyard	214
Image 6.5.	The Hamptons’ paved driveway	214
Image 6.6.	A collection of dramatic play toys	218
Image 6.7.	Collection of fine motor toys	218
Image 6.8.	The mattress – a great place to sleep or do somersaults!	219
Image 6.9.	Sally’s dollhouse for fine motor and imaginative play	219
Image 6.10.	The television room with large L-shaped lounge	220
Image 6.11.	Susan’s big pink bike	223
Image 6.12.	The reindeer head used for running and galloping	223
Image 6.13.	A collection of gross-motor toys pull/push toys	224

Image 6.14.	Another example of a gross motor push toy	224
Image 6.15.	Susan standing on the large netted trampoline in the Hamptons' backyard	225
Image 6.16.	The Elmo play-station used by Susan and Simon in very different ways	231
Image 6.17.	A very serious pram for keeping fit!	235
Image 7.1.	The Calming family (Patricia and Matthew and their children Tiffany and Jeffery)	263
Image 7.2.	An afternoon scene at the Calmings - Tiffany and Jeffery watching the DVD of a movie called 'Boudin'	263
Image 7.3.	A picture of front of the Calmings' house	265
Image 7.4.	The Calming house located on the corner where several streets converge	265
Image 7.5.	The magical jellyfish created by Tiffany, using chalk on concrete	267
Image 7.6.	The play mat and the toy boxes arranged around the lounge/TV area	268
Image 7.7.	Collection of materials stored in boxes near the dining room table for arts and craft creations	269
Image 7.8.	An extensive collection of toys in the 'toy room	269
Image 7.9.	One of the spaces in the back garden where children enjoyed playing and creating	271
Image 7.10.	A special nook ready for the addition of one of Patricia's sculpture creations	272
Image 7.11	An image of the toy cubby, climbing frame and slide and the sandpit	273
Image 7.12	Jeffery enjoying a spot of gardening on the concrete veranda	273
Image 7.13	The hand-sewn bilby that Patricia created for Tiffany	279

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Grants and associated research

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FORWARD

All research is based on epistemological assumptions that are posed not only by the research questions but also by the researcher (Higgs & Cant, 1998). In this study, an engagement with the social constructivist paradigm meant that my life experiences and view of the world influenced what I saw as problems and the path chosen in solving them (Brown & Packham, 1999).

It is apt and in line with the theme of ‘new frontiers and exploration’ that interspersed throughout this thesis I share my thoughts and journey in the form of journal entries. At times poignant and evocative, the purpose of these is to reveal where I was positioned and are designed to ‘set the scene’ at various points and provide insight into context. These passages mark my struggles, steps travelled, achievements and repositioning of consciousness throughout the research journey. The first journal entry entitled, ‘Discovering Context’ highlights how a life experience led to developing a deeper connection with the importance of understanding the idiosyncratic perspectives of individuals and the influence of ‘context’. This heightened appreciation of ‘context’ permeates all aspects of my research journey and has become a talisman, something that I carry with me, both professionally and personally. These sections have been delineated from the main text through a transition to italics to purposely highlight my personal story.

Journal Entry 1: Discovering context

Today I started a four week contract teaching a Grade 2 class at a local state school. I was very confident in going into this position as I was an experienced early childhood educator who had recently completed a Master’s degree – and I rocked as a teacher! I knew this age group and understood them well because Johl (my son) was also in Grade 2 at another school in town

at the same time. I had collaborated with the previous teacher and knew what content, curriculum area and work the children were required to complete.

The day began with an early start in order to set up the room. All my planning was ready for what I anticipated to be a brilliant day of fun and learning. I opened the doors and welcomed the children as they made their way in. All cautiously smiled and moved about their room, wondering what the day would bring and whether this teacher would last the distance.

The bell rang and several of the children made their way to their desks. Others busied themselves engaged with displays and objects scattered around the room, while some were still huddled in small groups avidly engrossed in conversations.

By morning tea I was disheartened and overwhelmed. Things had gone pear shaped. I realised very early in the day that this class was challenging but I couldn't really put my finger on the reason why. An undercurrent of tension filled the air with a high percentage of the children displaying dysfunctional behaviour - constantly poking, touching, prodding and disturbing other students around them. The children couldn't sit still or concentrate for any period longer than several minutes and the prospect of sitting on the floor together as a group or sharing a collaborative conversation became quickly out of the question. I decided, that in order to survive the day and ensure the children were in a safe learning environment, I was going to need to throw all my planning and creative teaching out the window and revert to a 'teacher-directed', 'chalk and talk' style of teaching.

By lunch time I was exhausted and wondered whether this social-emotional climate was the cause of several teachers presently being on leave after having taught this class. I couldn't understand why this class was so different from the class Johl was in at another school only 15 kilometres away. Why were the children so different? At lunch in the staffroom I voiced my

concerns and one of my colleagues suggested I talk to the school counsellor. I sought her out and, after I had explained the difficulties I had been experiencing, this is what she shared:

Your class is not dissimilar to many other classes in the schools around here. Let me share some background with you about the children in your class. There's a set of twins in your class – a boy and a girl. Their parents have recently split up and both have new partners. The brother lives during the week with the father and the sister with the mother. They swap on the weekends. This has devastated the two siblings as they are very close. There is a girl in your class who we have just found out has been sexually abused over a period of time by her older brother. There is a boy in your class who has just been diagnosed with cancer of the knee. The family is waiting on news on whether he will need to have his leg amputated. Another one of your students, Jane, and her mother, who works in the army, have moved a minimum of 10 times and this is her 6th school. Several children in your class are on high doses of Ritalin. A number of children are working through issues with me on family separation and divorce. And Sally's grandma has just died and she had been the primary carer as both parents worked two jobs for a minimum of 60 hour weeks. This is a little bit of the context of your Grade 2 class.

After lunch I went back into my classroom somewhat transformed. The conversation with the school counsellor had caused me to reflect on and alter my teaching approach. Subsequently, it altered the way I viewed and sought to understand the children I taught. I came to appreciate that, in order to make a difference for or connect with others, it was important to understand their contexts, their history and their stories. Context came to be understood as a “unique set of conditions or circumstances that operate on or are embedded in the life of an individual, a group, a situation or an event, which gives meaning to its interpretation” (Brown & Reushle, 2010, p. 37; Oers, 1997) (See Figure 0.1 – A visual representation of context).

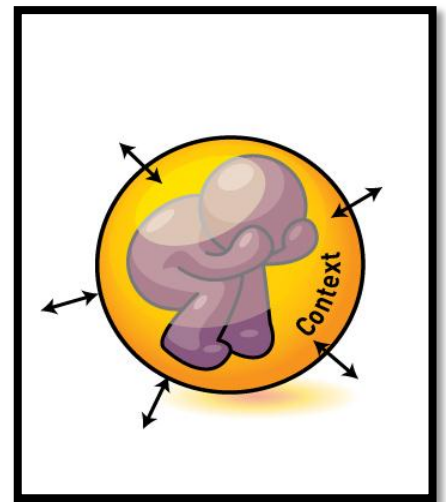


Figure 0-1. A visual representation of context

The value of storying

The act of storying communicates meaning similar to that of messages passed on by fire sticks - from person to person, tribe to tribe and generation to generation. Stories are the central tenet of what makes up and sustains cultures (Freeman, 2004; Sykes Wylie & Simon, 2002). ‘Storying’ includes sharing of our own and others’ stories to make sense of our experiences but also open up the possibility of new realities and new ways of thinking (Bruner, 1986, p. 11; 1996). Stories can reveal, empower, educate, guide and support people as they navigate through social territory and “make sense of life” (Daiute & Lightfoot, 2004, p.ix). Listening to stories helps reveal what stands at the heart of an individual, their context, values, thoughts, fears and beliefs.

Apart from the inclusion of several of my own journal entries, ‘storying’ in this thesis refers to intentionally illuminating the ‘lived experiences’ of parents that include direct accounts of their experiences and views of the world. ‘Lived experiences’ are defined as the way an individual interprets and describes experiences which occur within particular contexts of their everyday lives (Cohen & Omery, 1994; Grbich, 2007; Hitzler & Eberle, 2004; Van Manen, 1990). As the lived experiences of others unfold, I am moved to adopt the role of ‘storyteller’ as well as interpreter; the plot for these stories constantly change and unfold as new events, new characters and new settings are introduced.

The journey towards a ‘new frontier’

At timely junctures on my research journey I felt cause to pause, to review, to question the problems that were presented and to reconsider the direction I was taking. These pursuits offered an opportunity to refine the focus of my research, identify more clearly its value (the ‘so what’ of the study) and to appreciate the idiosyncratic nature of the families I met.

This is not at all unusual for one venturing into new territory in the pursuit of better ways to understand a research problem (Higgs & Cant, 1998). During these moments, I found myself pursuing paths that often led to rugged peaks offering clearer glimpses of my destination, whilst at other times I was confronted with obstructions that masked the view or diverted me away from my path. This diverging and converging led to self-transformation, to refocussing on ways to best investigate the problem and in the later stages of this journey, even being able to contribute to refining and building on existing theory (Bruner, 1986; Stake, 2005).

Although often a solo endeavour, this journey had many parallels to that of an active agent or an explorer who is also required to take risks and negotiate paths through uncharted territory towards a destination. The intentional inclusion of active exploration metaphors and verbs at timely junctures is a literary style employed to provide the reader with a sense of the feelings experienced, and the road traversed, on a journey through terrain towards a place referred to as ‘the new frontier’. It is anticipated, that perhaps in the reading of this thesis, others may also identify with this adventure and make connections with examples from their own research that may have caused them to confront adversity or traverse risky and unsettling terrain.

“And so she forges towards the new frontier, although confident, she steps tentatively, for little does she know what is to become of her” (Brown, 2008, p.152).

“Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love” (World Health Organisation, 1986, n.p).

Chapter 1: The Focus of the Study

1.1 The dream of discovering unexplored territory

As with many great explorers, the dream to discover unexplored territory, or to reveal insight into a phenomenon, is one sought out with both excitement and trepidation. On the cusp of embarking on my doctoral study, I understood that writing at a desk, under a tree or on the back veranda of my house may not have been as physically challenging as say traversing the high cliffs of Everest, but the journey was equally as hazardous and rewarding. As I surveyed the landscape in front of me, and reviewed the field of health and physical activity research, I noticed a history of it being trapped in a discourse dominated by positivists where measurable variables were used to define and understand phenomena of health (O'Connor, 2008). This was identified as being the basis of the research problem for this study, where this privileged position was ignoring the complex lives of individuals, families and communities. This discourse overlooked how a unique set of factors can impact on individual practices and values. This missing link, referred to in this thesis as ‘The new frontier’, limited the ability for interventions and health promotion truly to understand and target the specific factors influencing childhood and family health (Jamner & Stokols, 2000).

The journey prior to and throughout this doctoral thesis has led to making a number of contributions to theoretical knowledge. A significant aspect of this has been to raise for critical consideration a more idiosyncratic approach to understanding families. By ‘walking in their shoes’ and to seeing these domestic spaces ‘through their eyes’, this approach has helped shed light on the complexities and subtleties of the everyday and the pervasive influence that

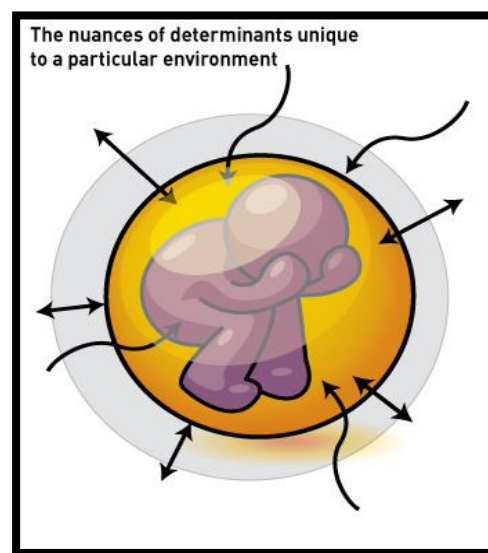
multiple factors exert on parental practices, understandings and values in supporting active play experiences with young children within the family home. This required adopting a social ecological approach that would help unravel the contextual nuances that operate on and are embedded in the lives of individuals and give meaning to their thoughts and actions within this domestic space. What emerged from this understanding was that in order to truly understand individuals within these places, one needs to value the contextual nuances that exist in these environments. The journey of this dissertation ends by recommending that phenomena of health and their effect on individuals, environments and organisations are best explored through multiple fields and disciplines in order to “better manage multiple sources of environmental change and to collaborate effectively toward reducing their negative impacts on population health and societal cohesion” (Stokols et al., 2009, p. 181). It is suggested that in many ways the ‘New Frontier’ is still an untapped resource that has the potential to be more fully explored in terms of research necessary to better understand the experiences and perspectives of children and parents in this legitimate space.

1.2 Surveying the terrain – The background to the study

This research journey began with several observations whilst out teaching in education and care settings. An overcrowded curriculum and the lack of priority given to physical activity meant that limited time was allocated to these types of experiences. Practice primarily consisted of adult-controlled and sports-focussed lessons, where competitive games were turning children away from the enjoyment of playing and being active. At the same time, as part of an Education Queensland initiative called “Smart Moves” (2007) the state government had just mandated the inclusion of 30 minutes of physical activity per day in the curriculum. Unfortunately, limited attention was invested in addressing teachers’ skill levels or their capacities to harbour a love of movement and share this in a way that promoted positive habits

for children's lifelong health and well-being. Even with the initiative in place, there were noticeable restrictions and limitations (environmental and social) being placed on children's active play. In this thesis 'active play' is understood to be those planned or incidental, often intrinsically motivated, gross motor experiences that usually include a cardiovascular benefit (discussed in more detail in Chapter 2).

Also disturbing was evidence of an emerging trend of the increasing number of children who preferred to spend their leisure time stimulated by computers, television and screen games, rather than playing outside (Australian Bureau of Statistics, 2006; Rideout, Foehr, & Roberts, 2010; Rideout & Hammel, 2006). It became evident that, in order for current interventions and health promotion efforts to be effective, they required a deeper understanding of the contextual influences



on childhood inactivity (these being the nuances of **Figure 1. 1. A visual representation of contextual influences** determinants unique to a particular environment, location, community, group of people or individual) (See Figure 1.1 – A visual representation of contextual influences). As I held a commitment for the value of active play, these observations placed me in 'unsettling terrain'.

1.2.1 Journal Entry 2: Remember the days

I remember the days when the world was one big long play and the only care in the world was "How long till the sun went down?" There weren't too many restrictions, limits or boundaries, and most of the playing took place in trees, backyards a few blocks away, sidewalks, streets, vacant blocks or any spare mud puddle to be found. Television was something that might be watched at night if eyes could stay open long enough! And the adults? Well, they stood at windows looking out at their tireless children wondering where they got their energy from and

reminiscing about the times they too had spent playing, transported into magical worlds of dreaming and pretending. Yet, with all my childhood experiences and passion for being active, I was left wondering how it was that my teenage son was drawn to spending so much of his leisure time in front of a screen rather than seeking more active pursuits. These observations caused me to question and explore the factors influencing the changing physical activity patterns of children and the influence of environments and adults on this phenomenon.

The next sections of Chapter 1 outline contemporary research on the state of children's physical health, factors impacting on their ability to participate in active play and the influence that adults and environments have on these experiences. Chapter 1 concludes by raising a number of points for consideration in terms of the research problem, a suggested direction and the research questions chosen for proactively addressing this issue.

1.3 Paediatric health - determinants, environments and contexts

Declines in perinatal mortality, increased awareness of hygiene and sanitation requirements and hand washing, immunisation from childhood illnesses and diseases (such as whooping cough, mumps and chickenpox) and the invention of antibiotics are all significant indicators of the progress in children's healthcare. Paradoxically, despite advances in medicine and modern technology, variations in measurements and analytic methods make it difficult to ascertain the current status of the health and well-being of our youngest generation. The result is literature that is contested and full of mixed meanings, contradictions and interpretations (Okely, Booth, Hardy, Dobbins, & Denney-Wilson, 2008).

Relative to years gone by, most indicators of the prevalence of childhood physical activity and active play participation would suggest that today's children are less active. Studies have documented that one in five children undertake moderate-to-vigorous exercise regularly

(Organisation for Economic Co-operation and Development, 2009). Other studies note that preschool-aged children accumulate limited, moderate-to vigorous physical activity (Fisher et al., 2005; Trost & Loprinzi, 2010), with global declines in fitness levels of children over the last fifty years (Tomkinson & Olds, 2007). According to the World Health Organisation (2008) nearly a third of younger children, ages 4-8, don't meet physical activity guidelines. Finally, Australian research points to a significant number of young children not active enough to maintain beneficial fitness levels (Olds et al., 2004; Spinks, Macpherson, Bain, & McClure, 2007). Some would say that a crisis discourse has developed which argues that participation in active play and physical activity is declining (Zubrick et al., 2010). The phrase, global pandemic, is often referred to when describing the urgency of addressing this phenomenon (Ball, Timperio, & Crawford, 2006; Hills, King, & Armstrong, 2007; National Preventative Health Taskforce, 2009). There are also claims that for the first time in history, children in places such as America, will have a shorter life expectancy than that of the previous generation due to weight-related problems at an early age (Ludwig, 2007; Queensland Health, 2008), yet other statistics refute this (Australian Bureau of Statistics, 2011).

Whilst most of us in Australia consider that we live in a 'lucky country, where we enjoy a great climate, relaxed lifestyle, and where we have the capacity to enjoy outdoor living that predisposes our children to growing up healthy, there is no guarantee that this will be the case (Batch & Baur, 2005; Charles, Pan, & Britt, 2004). These sentiments are supported by Li, McMurray and Stanley (2008), who refers to Australian children living in what's termed "modernity's paradox" where, despite the increasing wealth and opportunity we are experiencing as a nation, statistics suggest that many children are still growing up experiencing a range of adverse health outcomes.

Personal, sociocultural, ecological and organisational factors are attributed to the health and well-being patterns of children (Australian Institute of Health and Welfare, 2008b, 2011; Ball et al., 2006; Halfon, Larson, & Russ, 2010; Stokols, Grzywacz, McMahan, & Phillips, 2003). In most modern, post-industrial countries these factors include environmental influences such as the presence of ‘concrete jungles’, smaller suburban blocks, trees being replaced by fake grass, increased ‘screen time’ (Australian Government Department of Health and Ageing, 2009) and social factors such as a parent’s income, culture, education, employment and child care arrangements (Halfon et al., 2010; World Health Organisation, 2011).

Even for very young children (under 4 years of age), active play experiences are said to be declining, controlled and restricted by X generation adults (adults from ‘baby boomer’ parents), labelled ‘the fear generation’ (Brown, 2009a; Garrard, 2009; Malone, 2007; Tilt, 2010; Veitch, Salmon, & Ball, 2010). Operating out of a ‘protectionist paradigm’, their fears include ‘stranger danger’, SIDS (sudden infant death syndrome), ‘accidental harm’, increased risk of sun cancer, litigation, environmental conditions and road safety. Rational or irrational, these perceived fears are weighed-up by adults when deciding whether to allow children freedom to pursue active play (Brown, 2009a; Carver, Timperio, & Crawford, 2008; Garrard, 2009; Malone, 2007; Timperio, Crawford, Telford, & Salmon, 2004; Trost & Loprinzi, 2010; Zubrick et al., 2010).

The ramifications of previous research and the current trends regarding factors impacting on young children’s active play opportunities are of utmost concern, particularly with respect to the implications these trends have on the optimum development of children. Just as worrying is the realisation that if the current status of children’s health is not addressed, it will place an enormous strain on current and future public health systems and have a flow on effect on productivity and an increased burden of disease (Australian Institute of Health and Welfare, 2009; Doyle, Harmon, Heckman, & Tremblay, 2009; Halfon, Du Plessis, & Inkelas, 2007).

The National Scientific Council on the Developing Child (2010, p. 2) state that “a vital and productive society with a prosperous and sustainable future is built on a foundation of healthy child development” (p. 2).

For this reason, it is vital that further research be conducted to explore the factors that affect access to active play opportunities. Two areas that are worthy of further investigation are: firstly, the role that active play in childhood has in establishing long - and short-term health outcomes for young children (Lawlor & Mishra, 2009); and secondly, the need to investigate the role that significant adults exert in supporting childhood experiences of, participation in and environments for active play and the social ecological factors that impact on parental behaviours and beliefs (Lindsay, Katarina, Sussner, & Steven, 2006; Spurrier, Magarey, Golley, Curnow, & Sawyer, 2008). These two issues signify a major shift in thinking. They move from dealing with the problem and a discourse of blame, to exploring more specific research about those affected and at the heart of these statistics.

This research aims to adopt a ‘strength-based perspective. This position draws attention away from focussing on the inadequacies of a situation (in this case referring to the problems impacting on childhood obesity and inactivity through a lens of deficiency) and instead taps into the resources and potential of individuals and communities (Dockett et al., 2009; McNeil, 2010; Rinaldi, 2005; Sanders & Munford, 2009; Weik, 1992). It appreciates the vital role that parents and other significant adults play as ‘gatekeepers’ in the formative stages of a young child’s development (Campbell et al., 2008; Hinkley, Crawford, Salmon, Okely, & Hesketh, 2008; The National Obesity Taskforce Secretariat, 2003; Trost & Loprinzi, 2010).

Adopting this position requires an investment in capital and a view of economic rationalism (a rational solution to policy based on sound economic principles) that supports perinatal

intervention, early education and prevention strategies. This focus on the early years repositions health education and the promotion of active play as a positive trajectory for future health and national prosperity (Doyle et al., 2009; Heckman, 2006a; Heckman & Masterov, 2007; Lynch, 2004; McCain, Mustard, & Shanker, 2007; Pratt, Macera, & Wang, 2000; Van der Gaag, 2002). These imperatives are not only validated by research and reflected in the growing attention given to this matter by government agencies (Australian Institute of Health and Welfare; Australian Institute of Family Studies), health organisations and environmental researchers, but are also supported by a number of leading early childhood advocacy groups, including National Investment for the Early Years (NIFTeY), Early Childhood Australia and the Australian Alliance for Children and Youth (ARACY). Just as importantly, this shift acknowledges the necessity for investigating the multiple contextual factors impacting on social health issues, a significant one of these being paediatric activity levels. It is appreciated that findings from larger studies and more general health knowledge may not necessarily be as applicable to individual children, their families and contexts (Franks et al., 2005; Stokols, 2000).

1.4 Venturing beyond a reductionist paradigm in health research

1.4.1 Journal Entry 3: The new frontier

My concerns over terms like ‘global epidemic’ and ‘the bubble-wrapped generation’, often used to describe the state of our youngest generation’s health, have significantly influenced my initial investigation of this topic (Malone, 2007; World Health Organisation, 2000). What is becoming obvious is the desire by many in the field to adopt a reductionist paradigm where measurable variables are used to define and understand phenomena of health (Bar-Or et al., 1998; Brett et al., 2004; Freedman, Khan, Dietz, Srinivasan, & Berenson, 2001; Livingstone, Robson, Wallace, & McKinley, 2003; Magarey, Daniels, & Boulton, 2001; Reilly, Jackson, &

Paton, 2004). This approach appears to be silencing other types of discourse, concerned with addressing the complex and idiosyncratic nature of individuals, families and communities.

Through these silences, I am starting to identify gaps and areas where attention has not been focussed. I have a growing interest in reviewing literature on parent behaviours and how these influence and support active play with young children, particularly within the home context. The home being the primary place of care where a child lives, but possibly also encompassing the environments in which the child may play as part of his or her home experience – including the backyard, park, sporting clubs and neighbours).

I liken my pursuit of these topics, and my experience as a researcher, to that of an explorer, meticulously planning to embark on a journey into unknown territory or venturing to a 'new frontier' (Brown, 2008). With each step closer to a destination, I am both excited and apprehensive about what might lie ahead, yet drawn towards what this discovery may yield. At the same time I am struggling to find my feet or any sort of validation for pursuing an approach that uses a range of naturalistic strategies in order to explore the socio-ecological aspects of this phenomenon.

I have decided to express my frustrations about the process of moving through this critical research juncture by writing a chapter and calling it 'The New Frontier' in the book "Troubling Terrains" (Brown, 2008). In it, I describe similarities between myself and an explorer, with the dangers of the journey outweighed by the reward of the discovery. The

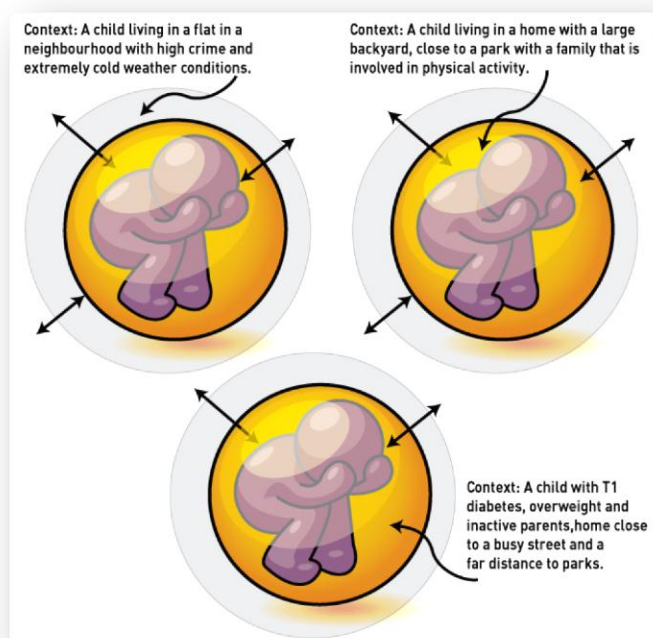


Figure 1.2. A visual representation of contextual nuances

intention of this journey is to get 'inside' the problem and investigate the subtleties and nuances, these being conditions that are altered owing to being located in a particular context of the lived realities of parents and children (See Figure 1.2 – A visual representation of contextual nuances).

I am determined to advance my understandings in this unexplored territory of research. I find myself planning a refocussed course of action, as meticulously as Douglas Mawson and his team planned for their Australasian expedition to the mysterious frozen continent at the bottom of the world (the Antarctic, December 2, 1911). I embark on my journey, determined to discover answers to a topic that required further investigation, and questions still unexplored.

1.5 Emerging redefinitions of and influences on child health

1.5.1 The pervasiveness of context and the environment

Historically a biomedical model has been the primary way of understanding and supporting child health. More recently, the emergence of a body of early childhood and health literature has realised the pervasiveness of a child's "cultural, political and social landscape" on his or her health, learning and development (Bronfenbrenner, 1979, 1992, 2004; Press, 2006, p. 4; Stokols, 2000; Stokols et al., 2003). Researchers who were adopting this discourse were motivated by the desire to explore the extent to which the environment and determinants impact on a range of population health issues, including trends of obesity and inactivity in older children, teenagers and adults (Corti, Donovan, & Holman, 1997; Davison & Lawson, 2006; Duncan, Spence, & Mummery, 2005; Egger, Pearson, Pal, & Swinburn, 2007; Giles-Corti, 2006; Handy, Boarnet, Ewing, & Killingsworth, 2002; Hills et al., 2007; King, Stokols, Talen, Brassington, & Killingsworth, 2002; Lindquist, Reynolds, & Goran, 1999; Stokols et al., 2003; Trost, 2005). An *environment* is understood in this case to mean a particular location or boundary, either physical or possessing a particular place or space in time, including built

environments, neighbourhoods, buildings, roads and recreational facilities. The environment also includes places where people work and play and non-physical considerations such as the human and temporal environment (Ball et al., 2006; Sallis & Glanz, 2006).

Findings (Gordon-Larsen, McMurray, & Popkin, 2000) were suggesting that in order to help to elucidate specific health and behavioural conditions it was important to identify the relationship between single and multiple determinants. This view appreciated that the ‘environment’ and ‘context’ were both significant contributors to health behaviours (Halfon et al., 2010; Hallal, Wells, Reichert, Anselmi, & Victora, 2006; Hills et al., 2007; Müller, Danielzi, & Pust, 2005; Sallis & Glanz, 2006). This reflected progress towards a broader health model that considered the direct or indirect influences on individuals by intrapersonal, interpersonal, physical, environmental and sociocultural factors which in turn influence behaviour (Glass & McAtee, 2006; Owen, Leslie, Salmon, & Fotheringham, 2000; Sallis, Owen, & Fisher, 2008; Stokols, 2000; Stokols et al., 2003; Trost, Owen, Bauman, Sallis, & Brown, 2002). It was understood that investigating these contextual influences on, and the key determinants of health phenomena, was important for ensuring optimal and “effective leverage points for intervention” and proactive strategies for targeting these issues and sustaining efforts (Ball et al., 2006; Franks et al., 2005; Jamner & Stokols, 2000, p. 2; Liu & Hannon, 2005; Stokols, 2000; Welk, Wood, & Morss, 2003).

Of particular interest was new research attesting to the fact that a range of complex and interconnecting systems collide within environments and impact on a child’s ability to participate in active play opportunities even from infancy (Ball et al., 2006; Campbell et al., 2008; Koplan, Liverman, Vivica, & Wisham, 2007; Lawlor & Mishra, 2009). These emerging redefinitions of child health and development have led to a greater focus by health professionals on understanding the family and other significant adults and the role they play in

influencing the practices and behaviours of young children (Brady, Gibb, Henshall, & Lewis, 2008; Lindsay et al., 2006).

1.5.2 Parents: Major gatekeepers of health behaviours and values

Contemporary research in the area of child health and well-being asserts that the family, (Campbell et al., 2008; Hardy et al., 2006; Jamner & Stokols, 2000; Salmon, Timperio, Telford, Carver, & Crawford, 2005; Taylor, Baranowski, & Sallis, 1994; Trost et al., 2003), primary caregivers (Campbell, Crawford, & Hesketh, 2006), educational settings (Evans, Roy, Geiger, Werner, & Burnett, 2008; Stewart-Brown, 2006), and the complexity of these environments are a significant influence on health behaviours. For young children, the home environment is understood to be a critical leverage point for implementing intervention strategies and developing positive health and social support practices (Brown, 2009b; Campbell et al., 2008; Duncan et al., 2005; McNeil, 2010; Stanley et al., 2009; Trost et al., 2003; Welk et al., 2003).

Socially patterned exposure (attitudes and behaviours established early in life) is increasingly being recognised as a powerful trajectory for the development of a child's values and experiences in cognition, language, social emotional development and health (Campbell et al., 2008; Hertzman & Williams, 2009; McNeil, 2010; Siegel & Hartzell, 2003). These signs of a 'tipping point' reinforce a growing interest in the early life events of young children significantly impacting on their behaviours and practices later in life (Center on the Developing Child at Harvard University, 2010; Halfon et al., 2010; Merlo, 2011). Further, these initial health behaviours and experiences are being linked to parent engagement in and proactive support for these practices in the home (Booth et al., 2001; Department of Health, 2011; Karsten, 2005; Lawlor & Mishra, 2009; Merlo, 2011; Robinson & Borzekowski, 2006; Trost & Loprinzi, 2010). Parents are understood as engendering either opportunities for or resistance to messages, values, and health behaviours such as active play (Brett et al., 2004; Dietz &

Robinson, 2005; Koplan et al., 2007; Lindsay et al., 2006; Tinsey, 2003; Woodhead, 2002). In this study, parents are referred to as the primary carer(s) of a child and although this most often refers to biological parents, it could also include a close family relative such as a grandparent, legal guardian or foster parent.

Despite this infusion of interest in early childhood health and the critical role of parents, there is still a paucity of research which explores “the mechanisms of parental influence” or the parental understandings of and support for active play in the home (Troost et al., 2003, p. 277). To date there has also been limited qualitative research that has sought to explore the ecological factors that influence parental values, practices and support for active play (Pearce, 2009).

1.6 The Research Goals

The intention of this study was to explore “the complexities and richness” of the lived experiences of parents (MacNaughton & Hughes, 2009, p. 156). It was appreciated that their stories would provide an insider’s perspective of the subtleties of individual parent thoughts and interactions and reveal the factors that impacted on their beliefs, choices, abilities and behaviours for supporting or deterring opportunities for active play with their young children in the ‘home context’. With these intentions in mind, the research focussed on three goals.

Goal 1 – To explore parental support for active play experiences, opportunities and environments

Given that a child’s environment exerts an enormous influence on the establishment of his or her health and well-being patterns (Müller et al., 2005), the aim of *the first goal was to better understand the types of active play experiences, opportunities and environments that parents were providing for young children (birth to four) within the home environment*. A particular focus of this goal was to observe the family within the home, to collect and interpret data and illuminate the stories parents shared. Further, the intention of discussion around this topic

would stimulate further questions and help to gain a richer understanding, particularly around the topic of the resources (physical, social, educational) that parents utilised in providing opportunities and experiences for active play with children.

Goal 2 – To explore the influence of multiple factors on parental beliefs, understandings, choices and knowledge of and about active play

The intention of the second goal was to more specifically focus on *understanding the precursors, precipitating factors and systems of influence on parental thoughts, behaviours and practices regarding active play for their young children*. Investigating the nuances of these factors and how they were enacted within the micro-system (a pattern of experiences, activities and relations that exist for a person in one particular setting) reinforced the reciprocal nature of the environment. Information gathered was intended to demonstrate the pervasiveness of social ecological factors and their impact on parents' practices, values and understandings in supporting active play opportunities and behaviours with young children.

Goal 3 – To understand how multiple factors skew the way parents are influenced by various determinants for supporting active play opportunities in the home environment

The final intention of this study was to better understand the extent to which ecological factors, such as parent values, backgrounds and extended family and friends, impact on the way that determinants, such as time, perceived risk and the physical environment, are skewed to become barriers or enablers of their support of active play.

1.7 The Research Questions

With the intentions and goals of this study now highlighted, three research questions are outlined below that were formulated to guide this investigation.

Question 1: How do parents support the active play experiences, and environments of their children (birth to four)? (Aligned with Goal 1)

Question 2: How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children? (Aligned with Goal 2)

Question 3 –How do ecological factors influence the way that determinants are skewed to become barriers or enablers of parental support for active play experiences and environments? (Aligned with Goal 3)

1.8 The Outline of the Thesis

This thesis is outlined eight chapters. It shares my research journey, motivations, excitement, choices, questions asked, hesitations and struggles, as part of the trek through unsettling terrain with the quest of (re)creating and engaging in educational research. It shares the pursuit of searching for answers to questions surrounding factors influencing parental support for active play within the home environment. The Forward has outlined the two types of storying that are shared throughout this research - my own and the stories of participants. The Forward also helped capture the value of context and its significance in giving meaning and direction to this study.

Chapter 1 starts with a journal entry that reveals a recollection of days when physical activity and active play were more widely pervasive and the ‘rite of passage’ through childhood was uninhibited and free. A detailed overview highlighted the specific problems that exist in the area of children’s inactivity in modern, post-industrial countries. This led to highlighting limited evidence of, or validation for, a more naturalistic approach to this area of research, one that allowed for the socio-ecological aspects of this phenomenon to be pursued. Finally, the goals and research questions for this study were presented.

Chapter 2 reviews key literature and research that have informed the topic of early childhood health, physical activity, active play and the power of the environment. An overview of children’s health, policy and directions is shared as well as difficulties faced in classifying

young children's activity patterns and recommendations. The chapter concludes by highlighting for consideration the power of the environment and its impact on individual behaviour. It then focuses discussion on the influence of the family, the pivotal role of parents and the impact of the home environment on the health behaviours and attitudes of children. The aim of this chapter is to highlight more specifically, the idiosyncratic nature of individuals, their contexts and the ways that determinants are skewed by a range of ecological influences.

Chapter 3 details the history and emergence of a number of approaches to understanding the determinants and influences on health and health behaviours. Of particular significance are models that have adopted a social ecological approach and a range of multidimensional frameworks. Chapter 3 then outlines the rationale for and the workings of the conceptual framework (the PMEM model) developed to help interpret data collected from this research.

Research design and methodology are addressed in Chapter 4. The value of intrinsic and instrumental case study is discussed and an explanation of how it aligns with the epistemological, ontological and axiological positioning of the research. Details are provided about the necessity of utilising various sources of evidence. This chapter shares how the methodological approach was driven by the valuing of context and inspired by a desire to explore a range of factors that influence individual families and impact on parents supporting active play behaviours with young children in the home. Underpinning this approach was the need to dig below the surface to generate a more detailed understanding of the subtleties of the 'lived experiences' of parental support for active play with their young children. This required adopting an idiographic study (Allport, 1962; Barlow, Nock, & Hersen, 2008), where, with generous support by a number of families, stories were shared and data collected. This information provided insight into how these experiences were understood by parents and their children within the micro-environment of the family home.

Chapters 5, 6, and 7 introduce the three families that were the focus of this research. They detail their contexts and capture aspects of their lives and unique stories through themed and ‘heartfelt moments’. At timely junctures throughout these chapters, theory is used to help make sense of and interpret these data in terms of addressing the three research questions. The first section of each chapter highlights the environments and the ways that parents support active play within the home. The second part of each chapter uses an ecological framework to graphically represent data and theoretically understand the influence on parental beliefs, values and actions. The final part of each of these three chapters more specifically explores a number of significant determinants that impact on parental support for active play and the unique ways that each of these determinants are skewed by social ecological factors.

The final chapter (Chapter 8) focusses on the synthesis and distillation of key findings and understandings from this study and is divided into three parts. The first section revisits the intentions of this research and rather than summarising or discussing the idiosyncratic details of each family (that are clearly addressed in Chapters 5, 6 and 7) a number of significant findings that emerged from reflection and analysis of data are presented. The second section turns attention to significant methodological and conceptual knowledge that has emerged during the process of conducting this research. The chapter concludes by making a number of recommendations on ways in which future work could build upon the research done to date and provides suggestions for parents and families in optimising opportunities and environments for supporting active play with young children in the home context.

1.9 Summary of the chapter

This research applied a number of sound pedagogical and theoretical principles which pertained to acknowledging the idiosyncratic nature of parenting and understanding the home context.

The study was underpinned by the ontological perspective that acknowledged the capacity of parents and reinforced the integral role that parents play in instilling essential habits necessary for long-term wellness, eating habits and physically active behaviours (Hills et al., 2007; Pill, 2006; Shilton & Naughton, 2001). Finally, this research was based on the premise that, in order to instigate informed strategies and collective decision making in terms of supporting active play in young children, it was necessary to target and understand clearly the role of parents and the contextual influences impacting on their attitudes, values and choices of experiences and environments provided within the home.

No knowledge is more crucial than knowledge of health. Without it no other life goal can be successfully achieved (Boyer, 1983, p. 304).

Chapter 2 – The Review of the Literature

This chapter details a comprehensive picture of research pertaining to children's health with a particular focus on young children and their engagement in active play. Key areas where research has focussed its energy will be discussed as well as aspects overlooked. The role of parents in supporting young children's engagement in active play will be addressed as well as literature that addresses the power of the environment on the health status of individuals and populations. As information on these topics is constantly evolving and new research and trends emerge, this chapter does not propose to present definitive conclusions. It does, however, raise important points about factors influencing young children's participation in active play: i) the impact of the environment; ii) the critical leverage point of the home context and the pivotal role of parents; iii) the impact that determinants have on parental support of young children in the micro-environment of the family home.

2.1 Overview of children's health, policy and direction

2.1.1 Recognition of the benefits of physical activity

Physical activity and active play are increasingly recognised as key components for the successful development and ongoing health of children (Janssen & LeBlanc, 2010; Janz et al., 2009; Torin & Fisher, 2010; World Health Organisation, 2010). These benefits include: a reduction in cardiovascular risk factors such as those attributed to obesity and being overweight, a reduction in risk of Type 2 diabetes and high blood pressure; protection against some forms of cancer; and increased strength and core stability of the musculoskeletal system (Australian Institute of Health and Welfare, 2008a). Broader developmental benefits include: supporting a child's psychosocial well-being by helping to alleviate stress and anxiety, improving the ability

to concentrate, additional production of endorphins leading to feelings of wellness, better sleep quality and positive experiences improving self confidence and self-esteem (Hills et al., 2007).

Over the last decade, biologists, social scientists, and others from a range of disciplines, have recognised the benefits of children to engage in structured and unstructured active play, particularly younger children (five years and under) (Burdette & Whitaker, 2005; Trawick-Smith, 2010). The reasons behind this include enabling children to master a range of skills (such as those that support imagination, curiosity and empowerment), as well as significantly contributing to motor development, cognitive function and social emotional development (Fox, Levitt, & Nelson, 2010; McCain, Mustard, & McCuaig, 2011). Research is also affirming that young children who participate in these types of experiences in early life, benefit from more positive levels of cardiovascular and core physiological and psychological well-being and an increased likelihood of proactively determining their future health behaviours and disease prevention (Janssen & LeBlanc, 2010; National Preventative Health Taskforce, 2009; Okely, Salmon, Trost, & Hinkley, 2008).

2.1.2 Changing trends impacting on health behaviours

In Chapter 1 (Section 1.3) a number of points were raised highlighting the complexity of interrelated environmental factors that impact on a child's ability to access active play opportunities. This has motivated research focussed on understanding children's behaviours and attitudes as a precursor to future lifestyle habits and health trends (Dollman & Norton, 2005; Franks et al., 2005; Hills et al., 2007). Spurrier and his team (2008) reinforce concern over the pervasiveness of a child's environment and its influence on their health behaviours, pointing out that it is the characteristics of such environments that are "hypothesised to be direct determinants of children's physical activity and dietary patterns" (2008, p.2).

2.1.3 The positioning of children's health and physical activity

Parents, the home environment and primary caregivers, are all identified as 'critical leverage points' in terms of impacting on child health, and in particular, the attitudes and behaviours of children towards active play and physical activity (Halfon et al., 2010; Spurrier et al., 2008). Researchers and health authorities are recognising the public health priority and importance of physical activity, active play, positive health behaviours and early intervention integrated into daily routines and behaviours (Campbell et al., 2008; Hertzman & Williams, 2009; Trawick-Smith, 2010). The National Preventative Health Taskforce (2009) suggest that, "early childhood experiences may place children on health and developmental pathways that are costly and difficult to change. Therefore, children necessarily form the cornerstone of any prevention agenda" (p. 44).

The economic benefit of investing in young children is also being seen as a proactive step in developing strong and more sustainable societies (Heckman & Masterov, 2007; McCain et al., 2007). Findings from key organisations and groups such as the ABS National health survey (2008), Australian Institute of Health and Welfare (2007) and the National Preventative Health Taskforce (2009) all affirm the importance of addressing the state of population health during the earliest developmental years to help mitigate the impact and associated health costs of preventable lifestyle diseases later in life.

2.1.4 Physical activity guidelines and recommendations

Motivated by the potential that early childhood experiences have on future health and development and concerned over rising levels of obesity and inactivity, a number of leading authorities have, over the last two decades, endorsed physical activity guidelines (Australian Government Department of Health and Ageing, 2004b, 2010; Egger, Donovan, Giles-Corti, Bull, & Swinburn, 2001; 2005; Trost, 2005; 2006, 2010). Initially, these guidelines were directed primarily at older children (5-12 year olds), adolescents and adults (Australian

Government Department of Health and Ageing, 2004a; Shilton & Naughton, 2001). More recently, guidelines and recommendations have also addressed the specific needs and movement patterns of three to five year olds as well as infants and toddlers (Department of Health, 2011; Okely, Salmon, et al., 2008).

2.1.5 A paucity of research and difficulty ascertaining active patterns of young children

“The phrase physical activity conjures up notions of highly physiologic research, with a more quantitative bent than qualitative focus” (Pearce, 2009, p. 879).

The delay in guidelines for infants and toddlers has been credited to the lack of consensus and difficulties in accurately measuring the frequency and types of active movement patterns of this age group (Dwyer, Baur, & Hardy, 2009). In previous decades, research into the phenomenon of childhood obesity and inactivity has been based on biological and physiological indicators (Duncan, Al-Nakeeb, Woodfield, & Lyons, 2007; McKenzie, 1991; Moore et al., 2003; Reilly, Jackson, Montgomery, et al., 2004). This model of inquiry was founded on causal laws, randomly controlled trials and empirical judgment, all excellent methods for judging levels of evidence, measurement, experiments and hypothesis-testing with older children and adults (Buchanan, 2004). Unfortunately these techniques for measuring and assessing the frequency and distribution of physical activity in children varied substantially with many perceived to be highly objective (Pearce, 2009). These measurement tools are augmented in paediatric research with recommendations highlighting that for more reliable results a range of tools were required in combination to permit more comprehensive findings (Malina, Bouchard, & Bar-Or, 2004; Welk, Corbin, & Dale, 2000).

Despite the plethora of research available measuring factors related to paediatric obesity and inactivity (Bar-Or et al., 1998; Brett et al., 2004; Freedman et al., 2001; Reilly, Jackson,

Montgomery, et al., 2004), significant gaps exist pertaining to understanding very young children's activity levels (birth to four) and the factors influencing activity patterns, key locations and conducive environments for active play (Brady et al., 2008; Dwyer, Higgs, Hardy, & Baur, 2008). In fact, considerable amounts of literature highlight the importance of children moving to sustain a healthy lifestyle and maintain a healthy weight range, yet most conclusions are inferential, having been extrapolated from data and findings with older children (Kohl & Hobbs, 1998; Sallis, Berry, Boyles, McKenzie, & Nader, 1995).

Hands and Larkin (2006), undertook a substantial bibliographic study on Australian children's physical activity patterns and concluded that acquiring information on children's physical activity patterns, especially those of children under four, was limited. Reasons for this include: i) difficulties in acquiring accurate empirical data; ii) the multidimensional and sporadic types of movement that young children are engaged in; and iii) the unique qualities of the ways infant and toddlers move that are quite different from even those of preschool and lower primary school children (Ridley, Olds, Hands, Larkin, & Parker, 2009). Other factors include, inconsistency and inappropriateness of the measurement tools and protocols, an absence of reliable baseline data for comparing activity levels in young children (Janz et al., 2001; Trost, 2005), and the developmentally inappropriate methods for collecting data about activity levels (such as self-reports). These factors have made it very difficult to accurately establish young children's activity levels. Additionally, the nature of children's physical activity (intermittent - short bouts and quick spurts) has also limited the amount or validity of research and baseline data that currently exists on paediatric physical activity patterns (Fox & Riddoch, 2007; Hills et al., 2007).

Moreover, there is also a significant gap in the research on the contextual factors which influence young children's abilities to move and the unique qualities of physical activity of

young children (Hands & Larkin, 2006). A young child's micro and macro environment is also unique and quite different from those of older children. These gaps in empirical data limit key stakeholders 'getting inside' the problem of paediatric obesity and inactivity to investigate the potential influences of contextual factors and the determinants that impede or facilitate the amount, type and quality of physical activity that occurs with children in a range of settings including the family home (Hills et al., 2007; Müller et al., 2005). Limited data also hinders intervention programs from accurately targeting factors that impact on the physical activity patterns of children and the effective support of parents and families.

2.1.6 Physical activity (classifications for young children)

Another difficulty with assessing young children's physical activity status is the lack of consensus of an operational definition for physical activity (Brady et al., 2008). For the purpose of this study, focussing on very young children (birth to four), physical activity is generally referred to in terms of 'active play' and is understood to be those incidental, unstructured or planned gross motor body movements and experiences, often experienced in the context of play, general routines and conducive environments that results in the expenditure of energy (above the basal level) and or predisposing the body for future physical skills and development (Bellew, Schoeppe, Bull, & Bauman, 2008; Casperson, Powell, & Christenson, 1985; Malina et al., 2004; Murdoch Children's Research Institute, n.d; Timmons, 2005) (See Figure 2.1 – Physical activity classifications for young children).

For very young children, activity patterns and the nature of movement are quite unique, often unstructured, occur in short frequent bursts and are often not sustained for long periods (Dwyer et al., 2009; Ridley et al., 2009). In the first few years of life the type of physical activity and active play experiences of children differ dramatically due to the rapid progress in a child's physical development (Department of Health, 2011; Hands, Parker, & Larkin, 2001). A

significant amount of time for young children is spent engaged in play experiences. If these play experiences are ‘active’, play not only provides a vehicle through which children learn about their world but can also be a mechanism for cardiovascular activity (Australian Government Department of Health and Ageing, 2009, 2010; Burdette & Whitaker, 2005). As a natural course of daily routines, children can also expend a huge amount of energy. In fact, active play experiences are regularly supported as part of the ‘connection’ that occurs between parents and children when they are engaged in bonding and attachment experiences. These experiences can include baby massage, play at the nappy change mat, bath time play and rough and tumble play¹ (Brown, 2009b; Fox, 2004).

2.1.7 Physical activity and active play patterns and guidelines

Currently, most physical activity recommendations for younger children are framed around an accumulation of structured and unstructured physical activity spread throughout the day with limitations on the amount of screen time deemed to be sedentary (Brady et al., 2008; Department of Health, 2011; Murdoch Children's Research Institute, n.d). Examples of active play and physical activity for infants would include floor play, tummy time, the manipulation of objects to support grasping, reaching, pulling and supervised water play. Recommendations for toddlers are characterised by a wide range of locomotor skills including cruising, walking, running, hopping, and manipulative skills such as kicking, throwing and climbing (See Figure 2.1. Physical activity classifications for young children, birth to four).

More recently, countries like the UK (Department of Health, 2011), Australia and the USA, are leading the way in providing public health guidelines for the early years of childhood (Department of Health, 2011; National Association for Sport and Physical Education, 2009; Timmons, Naylor, & Pfeiffer, 2007). These guidelines suggest that active play experiences

¹ A form of child/child or child/adult ‘big body’ or gross motor play that usually includes rousing, chasing, tagging, play wrestling, acrobatic actions or rolling on the ground (Carlson, 2009).

should occur for at least 180 minutes (3 hours) spread throughout the day, whilst also recommending limitations be placed on screen time, particularly in the first years of childhood, on the basis that screen time is a barrier to active play.

A - Active play experiences: Explorative, child-initiated and unstructured movements	B - Proactive or planned play:
<p>Very young children: Foot kicking, body rocking, crawling, rolling, reaching, pushing/pulling toys and movements, floor based play.</p> <p>Toddlers/Preschool: Cruising, walking, running, jumping, building with blocks, building a cubby, exploring the physical environment, climbing, chasing, water-based play (supervised).</p>	<p>Routines – helping to ‘clean the house’, gardening, washing the car, walking to the shop, shopping etc.</p> <p>‘Connecting with kids’ experiences – baby massage, dancing with baby, active play at the nappy change mat, ‘rough and tumble play’ (active tickling, playful tussling and wrestling and chasey games).</p> <p>Formalised active play experiences cross lateral movements, sensory experiences, creating conducive physical activity environments; gymbaroo or infant/toddler movement classes, learn to swim classes, playing in the park, playing with peers, walks to park, bike riding to park, playing ball in the backyard, rough and tumble play.</p>

Figure 2.1. Physical activity classifications for young children (birth to four)

2.1.8 Advocating a life-course (life span) perspective

Endorsement for active play and physical activity are predicated on a number of assumptions related to notions of ‘tracking’ and life-course epidemiology (Glass & McAtee, 2006). A life-course perspective is understood to be the social and environmental processes that occur and progress throughout the lifespan that can shape behaviour. This perspective believes that exposure to biological, environmental and social influences, at critical stages in life (including gestation, infancy, childhood, adolescence, adulthood), can have greater effects on inducing or

modifying behaviours of individuals (Hutchinson, 2011; Kuh & Ben-Shlomo, 1997; Lawlor & Mishra, 2009). Many scholars interpret the application of this perspective by suggesting that the well-being, diet and physical activity habits initiated in childhood will track and have a cumulative effects on future development, behaviours and practices into midlife and beyond (Conroy, Sandel, & Zuckerman, 2010; Department of Health, 2011; McCain et al., 2007).

A life-course reinforces the developmental period of early childhood as a critical time for establishing positive experiences, health behaviours and patterns in order to protect against possible health determinants in the future (Campbell et al., 2008; Kjonniksen, Torsheim, & Wold, 2008). Additionally, this information reinforces that once poor habits are established, they are often more difficult and costly to change (Duderstadt, 2007; Heckman, 2006a). This perspective views children as being at the cornerstone of any intervention or prevention agenda; as they sit within multiple social systems which expose them to factors that can benefit or adversely affect their health and well-being. From this information, we can assume that positive experiences with choices and patterns of health, eating and physical activity as well as habitual movement in childhood, have a high probability of continuing into lifelong behaviours for active and healthy lifestyles.

Although addressing tracking in a broader context and not specifically in relation to children's health, a very convincing case has been established by educators and scientists working in the area of early childhood and neurobiology. Researchers such as Heckman (2006a) and Press (2006) reinforce the importance of quality experiences and environments in establishing the architecture of the brain and trajectory for future learning and development. A major document, titled 'A picture of our children's health' (Australian Institute of Health and Welfare, 2009, Forward) reinforces this position and commented, "The importance of the early

childhood years in laying the foundations for future health and well-being is indisputable (Australian Institute of Health and Welfare, 2009, Forward).

Economists and social scientists use a life-course perspective to reinforce the economic value of investing in young children as a proactive step in community capacity building and building strong and more sustainable societies (Heckman, 2006a; McCain et al., 2007). These early intervention strategies are not only seen as being cost-effective but are a necessary alternative to the heavy economic burden currently being faced both nationally and internationally to deal with the effects of associated health and developmental concerns (Hills et al., 2007; Lindsay et al., 2006; Watson & Tully, 2008).

Some researchers, like Trost (2005), contest the validity and limitations of most ‘tracking’ research to date, particularly concerned with the high degree of variation in the literature and few studies successfully examining the tracking properties of physical activity from childhood through to adulthood. The results of those who have researched this phenomenon (Mattocks et al., 2008), vary considerably in relation to the age group studied, the types of measurements used and the length of time tracked. Others, like Wise (2009), contest the use of metaphors associated with the life-course framework such as ‘trajectory’, ‘embedding’ and ‘programming’ in terms of the highly deterministic path set from the over-reliance and reference to early-life interactions. He suggests that this view oversimplifies the impact of ‘early-life exposures’ and points out that “these early-life interactions are themselves subject to considerable later influences and therefore, may not be highly predictive of later outcomes” (p. S203).

The implications of this deterministic perspective is that it undermines the relevance of implementing a constructive framework or comprehensive policy that seeks to address effective intervention approaches after the critical period of early life. Other researchers are more

optimistic confirming the significance of tracking (Nader et al., 2006) and validating a life-course perspective for the prevention of a range of health issues and preventable diseases, as a significant reason for early health intervention (National Preventative Health Taskforce, 2009; Reynolds et al., 2007).

Previous findings have significance to this study, as they confirm that the experience, groundwork and examples set by primary caregivers and parents are pivotal in the process of promoting and then sustaining positive or negative behaviours in young children (Rolnick & Grunewald, 2003; Siegel & Hartzell, 2003). Intervention programs are now being underscored by the need to start education and intervention early. These programs target environments where caregivers (the adults with whom a child spends the majority of their time and may consist of parents, care facilities, and extended family and friends) are located (Müller et al., 2005). Recommendations also highlight that in order for intervention strategies to have greater success, they need to be initiated in early childhood when eating and physical activity patterns have not yet been consolidated (Campbell et al., 2008; The National Obesity Taskforce Secretariat, 2003 Reynolds, 2007 #507).

This section of Chapter 2 has discussed an increased recognition for active play as a key component for the successful development and ongoing health status of children. Recent guidelines are starting to recognise the uniqueness of very young children's movement patterns, as being unstructured, occurring in short frequent bursts and often not sustained for long periods. Although the life-course perspective has its critics, it does reveal that interactions and environments are complex and can shape future health behaviours. The theory of environments and the emergence and escalation of this important area of research will now be examined. Of particular interest will be the place that the physical or built environment has on the active play of young children.

2.2 *The power of the environment*

“There are many positive changes that individuals and families can make, but if the environment in which they exist – where they work, live and play, interact and experience life – is not conducive to health, the impact of individual behaviours may be severely limited” (National Preventative Health Taskforce, 2009, p. 11).

In recent years, the physical or built environment has increasingly become the focus of urban planning and community health research to help understand structures and environments that influence or are conducive to the health of populations (Davison & Lawson, 2006; Giles-Corti, 2006; Sallis & Glanz, 2006; Stokols et al., 2003). While it may seem intuitive to envisage or define ‘an environment’, over the years researchers have debated or found it difficult to agree on the parameters around what constitutes or is classified as ‘an environment’. This ambiguity relates not so much to what constitutes ‘an environment’, rather it is in relation to the fact that rarely does any single environment impact on or affect an individual or group of people in isolation. People and individuals move in between, among and are therefore influenced by multiple environments that might include sociocultural, organisational, physical and interpersonal dimensions (Bartlett & Palisano, 2000; Stokols et al., 2003). Each of these layers reciprocally impact on and in turn are impacted by each other at any one point.

For this study a number of definitions have been combined. Therefore, ‘an environment’ was defined as an objective or perceived context or boundary (either physical or possessing a particular place or space in time) and can include built environments, neighbourhoods, buildings, roads, recreational facilities including places where people work, play and live (Ball et al., 2006; Davison & Lawson, 2006; Sallis & Glanz, 2006) (See also definition in the Glossary of terms). The influence of physical and sociocultural environments on human health and the reasons for their inclusion in ecological frameworks, as well as how these environments are considered an integral component of the multidimensional framework for understanding the

data collected for this research, will be discussed in greater detail in Chapter 3. For now, discussion will continue in relation to environmental impacts on health behaviours with a particular focus on the links between key locations where children spend significant amounts of time and the implications for their physical activity.

2.2.1 Environmental impacts on health behaviours

Investigations into the impact of the physical environment and spatial geographies on health and physical activity have captured such topics as: recreational infrastructure (private and public); neighbourhood infrastructure and street planning (Duncan et al., 2005; Tilt, 2010); geographical locations and the impact that urban or rural settings have on an individual's ability to access or participate in physical activity (Bauman, Smith, Stoker, Bellew, & Booth, 2008); play spaces and proportion of park area in neighbourhoods (Roemmich et al., 2006); educational settings; the home environment (Salmon, Timperio, Telford, et al., 2005) and backyards and the way they either support or hinder health outcomes including physically activity; child-friendly cities (Malone, 2009) and independent mobility (Garrard, 2009).

Over recent years, extensive literature reviews have been conducted by researchers such as Sallis and his team at the Active Living Research Centre (2011) to identify quantitative studies (observational or experimental) notably in the area of the built environment, physical activity and obesity. Davison and Lawson (2006), identified thirty-three cross-sectional quantitative studies on the environment that assessed associations between physical activity and the physical environment. Ferreira's team (2007), reviewed over one hundred and fifty studies on environmental correlates of youth physical activity published in the past twenty-five years. These searches have identified the rapid expansion and the multidisciplinary embracing of the influence of the environment as a field of study.

To date, most of this research has been quantitative, observational and experimental, aimed at assessing associations between environmental factors and their impact on the health behaviours and physical activity patterns of adults (Duncan et al., 2005; Sallis, Johnson, Calfas, Caparosa, & Nichols, 1997; Tilt, 2010). Significantly less research, until recently, has been qualitative or interested in investigating the environments that impact on child health and physical activity practices (Cutumisu & Spence, 2008; Franzini et al., 2009; Malone, 2007; Sallis & Glanz, 2006; Spurrier et al., 2008). As children spend large amounts of their day in a range of places and spaces (care, school, outdoor play, neighbourhoods and the home), growing recognition and attention is concerned with investigating the impact these environments have on influencing childhood activity levels and health behaviours (National Preventative Health Taskforce, 2009).

An example of this surge of attention on the environment is evidenced in research focussed on children's active commuting and independent mobility, for example "children's freedom to move about unaccompanied within their neighbourhood or community" (Timperio et al., 2006; Zubrick et al., 2010, p. 6). Such studies not only explore the frequency of walking and cycling to and from school (Salmon, Timperio, Cleland, & Venn, 2005), but are interested in understanding the specific environmental support structures such as safe sidewalks, pedestrian-friendly crossings and lighting that can either deter or enable the independent commuting patterns of children (Hume et al., 2009). This interest is also reflected in research being undertaken by the Australian Healthy Spaces and Places initiative (2011) which draws on interdisciplinary expertise and advocates a number of principles to encourage activity which include: active transport, aesthetics, connectivity, parks and open space, safety and surveillance and social inclusion.

Other areas of investigations have focussed on understanding and measuring neighbourhood food and physical activity environments, longitudinal studies examining individual, social and

environmental influences on behaviour, as well as the availability and proximity of playgrounds and public open spaces and their effects on activity levels of children (Timperio et al., 2008; Veitch et al., 2011). Current findings suggest that there is great complexity in urban planning and the need for further research on age- and context-specific studies.

Issues relating to the physical environment are key factors in parental decision making regarding active transport for their children. These include decisions on whether to allow children to ride or walk to school, based on enabling factors such as access to footpaths and road system zoning, effective lighting and crossings, as well as deterrents including perceived stranger danger and heavy traffic (Zubrick et al., 2010). A study by Corpuz, Hay & Merom (2005) confirms that these types of factors have led to a decrease in active walking in Sydney, with the biggest decrease being among school age children. This sort of information highlights the significance of environmental factors on a phenomenon and in turn helps to inform proactive intervention strategies.

2.2.2 Home: A significant micro-environment

Only recently has attention focussed on the domestic space of the family home. This environment is increasingly being recognised as a critical leverage point for facilitating or hindering the health and health behaviours of children, including opportunities to participate in physical activity, active play and independent mobility (Australian Government Department of Health and Ageing, 2009; Campbell et al., 2008; Trost & Loprinzi, 2010). Home contexts are identified as exerting the greatest influence on an individual's health and well-being patterns (Jamner & Stokols, 2000).

In this study, the term 'micro-environment' was created to describe the ecological niche defined by a specific location or physical boundary where a person is most heavily influenced or spends a large amount of time. The definition draws on behavioural and social ecological

theory discussed in more detail in Chapter 3. For young children, a significant micro-environment would include the family home (Tucker, van Zandvoort, Burke, & Irwin, 2011; Veitch et al., 2010). In this space the construct of family ecology could include: family demographics, accessibility to play spaces, the dynamics and family make-up, family rules, the beliefs and values of each of its members, culture, accessibility of play spaces and occupation of parents and the socio-economic status of the family (See Figure 2.2. ‘The family home’ – an example of a micro-environment). All these characteristics and more can influence a child’s sedentary behaviour, activity levels and health behaviours (Salmon, Timperio, Telford, et al., 2005; Veitch et al., 2010).

Whilst there may be other micro-environments such as that of the extended family, the local neighbourhood, extra-curricular facilities, playgroups and peers, as well as care and education services, the home environment is deemed to be of more importance than other environments in influencing the physical activity experiences of young children (Crawford et al., 2010). Yet all of these environments are recognised as being spaces where behaviours are established, whilst appreciating their complexity (Australian Government Department of Health and Ageing, 2009; Dwyer, Higgs, et al., 2008).



Image 2. 1. ‘The family home’ – an example of a micro-environment

This complexity is illustrated in a study conducted by Salmon and his colleagues (2005) who explored whether there was any

correlation or relationship between the amount of children's television viewing and low activity levels. Their findings identified that the relationship between television viewing and activity levels were not linear or one dimensional but were complex and very distinct in nature. Therefore, overlapping the impact that 'an environment' or several environments have on influencing a phenomenon, is the intrinsic range of determinants also present which influence the same phenomenon (Ball et al., 2006). Determinants are defined as a range of factors that significantly contribute to or impact on a phenomenon or complex set of behaviours (Bracco, Colugnati, Pratt, & Taddei, 2006; Hands et al., 2001; Sallis, Prochaska, & Taylor, 2000). Determinants can influence opportunities for children to participate in physical activity and could include: access to and types of outdoor play spaces; parental concerns, means of transport to and from school; a range of socioeconomic and sociocultural determinants and lifestyle related factors (including leisure time pursuits such as television viewing and video games).

In this study, it is suggested that determinants move within various microsystems and environments (See glossary of terms for definition), with one of these specifically being the family home. The conceptual model created for this study (and outlined in Chapter 3) acknowledges the powerful force that determinants play in influencing what motivates or inhibits parents' attitudes, dispositions and practices for supporting opportunities for their children to engage in active play at home. However, due to the overwhelming number of potential determinants that are present within and amongst an environment and their influence on a phenomenon like that of active play behaviours, careful consideration is needed to ascertain those determinants that should be analysed as the primary focus of an investigation. Even if this were possible, not all environments and determinants may be applicable to each

individual, micro-environment or context. A number of these will be discussed later in this chapter and in detail in Chapters 5, 6 and 7.

What has become evident is the need to move beyond assuming that all people are affected by similar environmental factors and determinants. The uniqueness of each context can alter the power and the way environmental determinants influence individual health, physical activity behaviours and attitudes (Ball et al., 2006; Hertzman & Williams, 2009). Community health and medical specialists highlight that the family home is a critical leverage point for intervention strategies and for developing positive health practices with children (Australian Government Department of Health and Ageing, 2009; Campbell et al., 2008; The National Obesity Taskforce Secretariat, 2003; Trost & Loprinzi, 2010).

This study is informed by this line of thinking and suggests that, as well as investigating a range of environments and determinants that influence a particular phenomenon, it is also important to understand that there are a range of contextual factors unique to each site (Stokols, 2000). For example, television viewing is a common determinant assessed as influencing the amount of activity, or lack thereof, which children participate in. However, a range of factors such as a parents' culture, predisposition and background in sport and value of physical activity, can impact just as significantly as determinants in a particular home or micro-environment (Dwyer, Higgs, et al., 2008).

2.3 The pivotal role of parents in supporting health behaviours

2.3.1 Journal Entry 4: An amazing individual navigates his world

Our beautiful son enters the world and lays claim on the family home. Every breath we take, every waking hour and last bit of energy is focussed on this amazing individual. Each action centred on ensuring his happiness, safety and development. With cries of delight, nervousness and anticipation my husband and I and our extended family and

friends learn to communicate, accommodate and navigate our life to support and love our new baby.

As Johl grows, his movements and energy are not only exhausting to watch but a wonder to observe as he discovers new ways to move and explore his world. Kicking, tasting, reaching, rolling, grasping and touching – every smell, taste, and object that he makes contact with is new. As he grows and develops he makes his first steps to the amazement and gasps of delight from onlookers who hover nearby. What a miracle? How incredible and celebrated this moment is. But as I look back on these fond memories of my child's exploration and negotiation of himself in space, I wonder just how much of it was controlled, constrained or engendered by those most dear to him?

2.3.2 The influence of parents on the health behaviours of children

From conception a child's environment impacts on their immediate and future health. The intrauterine environment is understood to be a critical time for development, nutritional and biochemical engineering. Accumulating evidence supports the foetal origin of a number of non-communicable diseases in adulthood (Barker, 1993). For example a study of the effects of maternal starvation of mothers who experienced the Dutch famine in 1945 found that infants who had been exposed to the famine during the first two trimesters had approximately double the prevalence of obesity at the age of 18 (Ravelli, Stem, & Susser, 1976).

The life of an individual is understood as one that develops both longitudinally and within a complex set of socio-geographical systems (Lawlor & Mishra, 2009). Although the threads of caregiving may be woven into the fabric of our society, where in many cultures (including contemporary Australia) multiple caregivers are the norm rather than the exception, at the heart of this system is the family (Sims, 2009; Tinsey, 2003). In the critical window of the first three years parents are seen as significant gatekeepers in supporting the child, and are in a

position of great influence to their development (Campbell et al., 2008; Lindsay et al., 2006; Spurrier et al., 2008). This period of a child's life is understood to be a time when parents play a number of key roles in supporting childhood health behaviours, beliefs and attitudes (Pearson, Timperio, Salmon, Crawford, & Biddle, 2009). These factors are particularly associated with parental practices, lifestyle and the environments they move and work within (Kolar & Soriano, 2000; Trost & Loprinzi, 2010; Tucker et al., 2011).

Research suggests that family intervention is implemented on the premise that the home environment, parental support and the way families function are all key determinants of paediatric obesity and inactivity (De Bock, Fischer, Hoffmann, & Renz-Polster, 2010; Koplan et al., 2007). Practices such as the eating and activity habits of parents, their ability to overcome obstacles or barriers (such as accessibility to resources, finance, weather and time), even the way the physical environment is designed, can all have a marked effect on attitudes and actions that support the healthy habits of children (Dietz & Robinson, 2005; Dwyer, Needham, Simpson, & Heeney, 2008).

Factors that influence parenting and the home context are complex and dynamic. They are a web of inherent and explicit factors arrived at from multiple sources embedded in parent choices, behaviours, own life experiences, beliefs and actions (Jamner & Stokols, 2000). These elements and their relationship in supporting active play opportunities for young children are constantly impacted by the micro-environment, microsystems and other influencing systems such as the meso and macrosystem (Bronfenbrenner, 1979). These systems will be explicated further in Chapter 3.

Within the micro-environment of the family home, parents navigate their way through the parenting process using a mixture of understandings, past experiences, help from extended

family, trends, the media, books and experts (including doctors, early childhood educators, paediatricians and psychologists). While many of their decisions and choices will be intentional, others will be influenced by subtle and even unconscious forces (Dwyer, Higgs, et al., 2008; National Preventative Health Taskforce, 2009). These forces impact on and send multiple and even contradictory messages about their parenting choices and behaviours (Kolar & Soriano, 2000; Lightburn & Sessions, 2005). The final sections of Chapter 2 explore the types of parental practices that can influence childhood participation in active play, as well as addressing a number of familial determinants that impact on parental support and behaviour. Chapter 2 concludes with discussion around the role that the child plays in their own physical development and behaviours, as, even at a very young age, children are not only affected by, but also impact on, parents, siblings, extended family and various micro-environments and systems.

2.4 Parental behaviours that influence children's participation in active play

Although we know and understand that young children are keen to explore their environment and are inherently 'pre-programmed to do so' (Dwyer, Needham, et al., 2008), parents are in a position of influencing these behaviours. Parents of young children can either provide environments that encourage or inhibit a child's participation in active play (Giles-Corti & Donovan, 2003a; Trost & Loprinzi, 2010). Parental support may include positive actions like walking children to the park to play or ride their bike, driving them to kinder-gym or ballet, positively reinforcing them when they try to kick a ball or deterrents such as imposing too many rules like 'no balls inside', 'no playing on the sofa' or over-scheduling children so that children have limited time for play.

Parental influences on the physical activity experiences of children can impact on their ability to take risks and explore their world. The influence of parental support and behaviours on a

child's active play opportunities and experiences can have a cumulative effect on their self-esteem and on their perceived confidence in mobility experiences (Emck, Bosscher, Beek, & Doreleijers, 2009; Langer, 2004). Some researchers link the influence of childhood experiences and behaviour to parental support and the modelling of behaviours and healthy habits on examples and attitudes 'lived' by their parents (Brett et al., 2004; Woodhead, 2002). Parents are understood as being a 'direct' influence (e.g. verbal encouragement or providing resources and spaces for children to play) or 'indirect' influence (e.g. a parent voicing their concern at a child care centre for the lack of active play opportunities – prompting new policy, or a parent modelling their own enjoyment or personal motivation for being active) (Dowda et al., 2011; Thompson et al., 2009; Veitch, Bagley, Ball, & Salmon, 2006).

In a study of 102 preschool aged children, those with parents who provided greater support and who valued physical activity, had a higher probability of engaging in physical activity for one hour or more a day (Zecevic, Tremblay, Lovsin, & Michel, 2010). Unfortunately, there is a paucity of research with very young children that has scrutinised parental support for or influence on childhood practices (Zecevic et al., 2010). Additionally, factors that may influence a young child's health and active play behaviours within the micro-environment of the family home are not neatly defined and parental role modelling of physical activity is only one of these determinants. Welk, Wood, and Morss (2003) talk about two types of socialisation types, these include parental support for physical activity (parental encouragement and facilitation) and parent interest in physical activity (involvement and role modelling).

2.4.1 Parental Encouragement

Verbal and nonverbal forms of parental encouragement are attributed to influencing childhood activity patterns (Adkins, Sherwood, Story, & Davis, 2004; Bauer, Nelson, Boutelle, & Neumark-Sztainer, 2008). Particularly in the early years, a parents' indirect encouragement

and positive affirmations can help to instill a love of active play, levels of confidence, competency and motivation towards active play. This in turn leads to persistence in these types of behaviours (Spurrier et al., 2008).

Trost (2010) and his team confirm this thinking, suggesting that even a parents' perceptions about the competency levels of their children's physical activity can influence the way they respond or reinforce these behaviours. Cleland et al. (2009) suggest that these types of actions can particularly impact on girls spending time outdoors. A father's praise of their son's participation in physical activity is also noted as an effective strategy (Veitch et al., 2006). Others suggest that parental involvement in physical activity and play experiences with young children can be even more influential (Bauer et al., 2008; Trost et al., 2003).

2.4.2 Parent Involvement (shared physical activity)

Unlike parental encouragement, parental involvement refers to a parent's direct participation in healthy behaviours (Pearson et al., 2009). This includes involvement in experiences like dancing whilst watching 'The Wiggles' on television or parental involvement in building sand castles together, rough and tumble play, playing in big boxes, playing in a cubby, pretending to be superheroes or fairies, participating in swimming or active play classes, infant massage or involving children in household routines like washing the car, doing the dusting, raking up leaves and gardening (Brown, 2009b; Hinkley et al., 2008). Whilst instilling positive messages about health and physical activity, these experiences also send a range of other social messages, in above example reinforcing that activity is fun and valued as part of everyday life. These experiences can also be a time for building relationships (bonding) and an opportunity to reinforce that a child is loved (Dzewaltowski, Ryan, & Rosenkranz, 2008; Ginsburg, 2007; Trost et al., 2003).

2.4.3 Parental Facilitation

Facilitation refers to parental scaffolding, and providing resources (physical, personal, financial or accessibility) and support for children's accessing active play opportunities and is suggested to be one of the greatest levels of influences on the child (Welk et al., 2003). Examples include parents transporting children to a park, to a children's activity class, to learn to swim classes or providing access to resources and play materials. It could also include allocating a particular space or place to play (Dwyer, Higgs, et al., 2008). Whilst findings by Davison and Lawson (2006) on a review of 33 quantitative studies highlight the mixed results between efforts of facilitation and associations to a child's physical activity levels, others suggest that the parental role of facilitation is a strong factor to consider and may become more prevalent as a child increases in age (Jago, Fox, Page, Brockman, & Thompson, 2010).

A wide range of determinants can inhibit parental facilitation of active play experiences including their real or perceived concerns, socio-economic factors, limited time, work-related reasons, level of education and even inter and intra personal child characteristics (Dwyer, Higgs, et al., 2008). Due to a range of factors of modernity, the role of parental facilitation seems to be increasingly important. Parental facilitation is understood to be particularly important for infants and toddlers due to their limited ability to proactively choose their resources and play spaces. They also tend to spend more time inside the family home than their older counterparts. Parents can help facilitate active movement by practices such as modifications to the house to ensure 'safe zones', restricting television viewing, or creating stimulating spaces and places in lounge rooms and outdoor areas where children are free to explore and take risks. Even parental scheduling of a child's time and the type of clothing and footwear a child has on (including fancy sandals or bulky shoes) can restrict their movement and their ability to explore and participate in active play (Zecevic et al., 2010).

2.4.4 Role Modelling

Parental role modelling has been the most frequently studied and observed behaviour. It refers to efforts by parents to demonstrate or model an active lifestyle or active behaviours for their child. Predominant sources of research have focussed on social-cognitive (Taylor et al., 1994) and social ecological theory (Welk et al., 2003). According to Taylor, Baranowski and Sallis (1994) in their discussion of social cognitive theory (SCT), parent enjoyment of physical activity and being physically active can serve as a reinforcement or way to promote observational learning and serve as a prompt to newly learnt behaviours for children. The underlying premise in most of these studies is that parent activity levels are associated with childhood activity patterns and that children who see parents engaged in active lifestyle choices and behaviours may want to emulate these behaviours. This could include a parent regularly walking a dog, choosing to walk up stairs at the supermarket instead of using the escalator, parking a little bit further from the shops to facilitate an opportunity to walk, or showing enjoyment in spending a few hours on the week-end gardening, washing the car or enthusiastically house cleaning (Spurrier et al., 2008).

Previous studies pertaining to parental influence on children's physical activity have focussed primarily on the direct modelling hypothesis concerned with tracking the relationship between parental role modelling and children's activity levels (Welk et al., 2003). This type of research has found mixed results, with a systematic review of 29 studies that explored association between parental activity and children's activity showing 11 examples of positive association with the remainder of studies concluding mixed or less convincing associations (Sallis et al., 2000). More recently, research has consistently identified positive associations between these behaviours. These studies point to parents being an appropriate or inappropriate role model, depending on their attitude and ability to participate in sport or active leisure pursuits or by

their choice of sedentary behaviours. For example Welk's team (2003) identified parental participation in regular activity as a benchmark for role modelling.

To date most research has focussed on role modelling and older children's physical activity patterns (Dempsey, Kimiecik, & Horn, 1993; Freedson & Evenson, 1991; Trost et al., 2003). Few have investigated the influence of parental modelling with younger children (birth to four) (Mattocks et al., 2008). Due to the trend for older children to spend large amounts of their day out of the care of parents in multiple caregiver arrangements and school setting as well as being heavily influenced by their peers, the impact of parental modelling within the home is understood to be less significant (Jago et al., 2010; Welk et al., 2003). However, for younger children this may be quite different.

While parental modelling is understood to be a contributing factor in a child's behaviour towards physical activity, when considered in relation to other constructs this factor is believed to diminish (Trost et al., 2003). For example, parental modelling of physical activity does not remove the barrier of a child being containerised or their inability to access resources or active play spaces (Brown & Williams, 2008). An example of this is the case of a mother participating in her own workout in a park; although she may be pushing a pram while she is running, her child is still restrained during this session and therefore inactive. Although it is difficult to determine direct links between parental physical activity levels and that of a child's participation in physical activity, emerging research raises for consideration the point that parents who model their own participation in physical activity will be more inclined to prioritise for their children's physical active participation and may in fact impact on their determination to overcome a range of barriers and promote a range of supportive behaviours (Dowda et al., 2011; Trost et al., 2003).

While research focussing on parental role modelling has predominantly used observation methods, others studies have highlighted that the role of parents and their level of influence may be much more complex and may not entirely explain childhood physical activity habits and behaviours (Brown, 2008; Brustad, 1996; Kimiecik & Horn, 1998). Factors such as parental values, socio-economic level, culture, education, the influence of other siblings and extended family as well as the physical environment, may all impact on a child's active play behaviours, attitudes and experiences. A number of these other familial characteristics that influence a child's active play experiences will now be discussed.

2.5 Other familial determinants

There are a range of factors that impact on parental support for childhood physical activity practices and influence parent' beliefs, values and understandings of the importance of active play. Amongst these familial determinants are: the education level of a parent, socio-economic status, perceived fears, time constraints and access to social capital (social support, networks and resources) (Ziersch, 2005). A number of these will now be briefly addressed.

2.5.1 Socio-economic and demographical influences

The socio-economic status, level of education, cultural background, as well as the context within which they seek social support and resources are just some of the factors that "directly influence how a particular individual will assimilate various influences" (Welk, 1999, p. 15). Although there may not be a direct relationship, McCain, Mustard and Shanker (2007) reinforce the pervasive and "interconnected manifestations of social and economic circumstances" on a range of areas of the health, development and welfare of a child (p. 32). Various sources of capital (economic, cultural and social) can also be key determinants influencing a family's propensity for physical activity.

Research identifies social disparities including women, the elderly, particular ethnic groups, those of indigenous descent and low socio-economic status as determinants of the increased chance of being inactive (Bracco et al., 2006; Sluijs, McMinn, & Griffin, 2008). Koplan (2005) reinforces this and suggests that although there are a range of physical activity opportunities available that are cost neutral or available at a low cost, often for those low socio-economic groups, safety concerns in low-income neighbourhoods as well as limited access to quality facilities (e.g. Community recreational areas and parks etc.) mean that these groups are more prone to “social and environmental adversity” (p. 105).

Socio-economic status can impact on such things as the affordability of extra-curricular pursuits as well as resources to support physical activity in the home (Ziviani et al., 2008). Another study indicates that adolescents from households with a greater family income predominantly fell into the category of having moderate to high activity levels (Gordon-Larsen, McMurray, & Popkin, 2000). Alternatively, a study that explored the socio-economic status in young Scottish children found that socio-economic status was not a significant factor in determining the amount of time engaged in habitual physical activity once a range of other determinants were accounted for (Kelly et al., 2006).

2.5.2 Parental background and access to social capital

There may be a false perception by some parents that because babies can be a bundle of energy and continually underfoot, their motor development and physical activity takes care of itself. Unfortunately, although this may have once been the case, for many young children this is no longer the reality. Parents and educators may spend countless hours teaching a child to read or speak, however many parents still view active play opportunities in more a relaxed fashion (Reilly, Jackson, Montgomery, et al., 2004).

Parenting is a highly complex endeavour where parents construct their own approaches and ideas about parenting by accessing a range of resources and a complex set of tools that include their own backgrounds and childhood experiences in physical activity, their education, social networks and parenting materials (Kolar & Soriano, 2000). Access to these tools and range of resources could be understood to be parent's 'social capital', this being defined as a complex network of relationships including social networks, social culture, information and resources that individuals have access to or can draw upon (Pugliese & Tinsley, 2007). Social capital for parents may include parenting information via the internet, regularly communicating and meeting with friends and other parents with children of the same age, communicating with staff at early childhood services and extended family (Dwyer, Higgs, et al., 2008; Jamrozik & Sweeney, 1996).

Some researchers in the health and education field are now exploring how parents are harnessing these implicit and explicit resources, referred to as a 'strength-based paradigm' (Brown, 2009b; Sanders & Munford, 2009). This view appreciates that the 'life experiences' of parents, and their ability to access various sources of social capital, can be a support from which they draw upon for their practices, decision making and in relation to providing early movement and physical activity experiences (Campbell et al., 2008; Ziersch, 2005). A parent's socio-economic status or inability to access this social capital can also severely limit these behaviours (Bracco et al., 2006) and can impact on such things as their perceived or real level of confidence and the priority they place on providing environments and support for health behaviours. For example, if parents have limited access to information on parenting they may not see the importance in supporting active play opportunities with their young children (Zecevic et al., 2010).

These findings are of significance to this study because if parents are confident and have knowledge of child development or are aware of the relationship between movement and brain development, or an understanding of the health benefits of movement, they may feel more inclined to prioritise or overcome barriers in order to provide effective movement environments and meaningful active play opportunities for children. Additionally, it needs to be highlighted that before parents can be proactive in any way regarding the education and support of developmental outcomes for their children, they first need to attend to a range of other commitments and ensure the fulfilment of their own basic needs (Berk, 2005). Food, shelter and their own personal safety would therefore take precedence or come before all other parenting practices such as bonding, time for playing and prioritising time for extracurricular experiences (Maslow, 1968).

2.5.3 Parenting styles and gender differences

There is evidence to suggest that the gender of a child can impact on the way a parent supports active play with them (this will be elaborated on in Section 2.6). However, the gender of a parent and their parenting styles are also said to impact on the behaviours and type of activity that they choose when supporting the active play opportunities of their children. (Beets, Vogel, Chapman, Pitetti, & Cardinal, 2007; Spurrier et al., 2008). For example in their study MacDonald and Parke (1986) observed that paternal play with male siblings usually occurred for greater amounts of time. Fathers were also more often involved with ‘rough and tumble play’. In another study, where mothers’ and fathers’ support of physical activity was explored. Fathers tended to adopt a ‘role-modelling’ behavior, whereas mothers took on a more facilitative role which included activities such as transporting their daughters to events like dancing and gymnastics, extra-curricular activities and watching at swimming lessons (Davison, Cutting, & Birch, 2003). Finally, another study identified mothers as being more likely to

become involved in object oriented play such as colouring in, fine motor experiences, doll play or dramatic play (Isley, O'Neil, Clafelter, & Parke, 1999).

In a more traditional role fathers would also spend less time with young children involved in active play experiences due to time at work. This is now changing in Western cultures in particular, where work-time and chores are more evenly shared. However, it is still a factor that needs to be acknowledged in this study. For example Yeung's team (2004; 2001) indicated that on a weekend day, fathers tended to spend over 3 hours with their child but this decreased to about one hour per day during the week. Of interest in these results are the various degrees to which parents spend time supporting physical activity and active play experiences between week days and week-ends. It was identified that week-ends were the primary time fathers spend engaged in active play. A systematic semi-quantitative review of 150 studies on environmental correlates of youth physical activity published in the past 25 years, identified that mothers had a stronger influence on the physical activity of younger children (Ferreira et al., 2007). This reinforces trends that suggest that in many families fathers are more likely to be the primary bread winner during a child's first 3 years of life which then reflects on the amount of time they can allocate to engaging in the support of active play with their children.

2.5.4 Beliefs, values and perceptions

Trost and his colleagues (2003) point out that there is a strong correlation between the level of parental support for physical activity and active play when parents value its importance. They propose that intervention programs need to consider educating parents on the importance of physical activity, as it is much more probable for informed parents to overcome barriers and facilitate physical activity opportunities and behaviours than those who purely model or engage in an active lifestyle. This point is a valid one and is a segue for briefly discussing the

influence that parental beliefs, values and perception can have on support for active play with young children.

Parental beliefs, values and perceptions are established and emerge from their backgrounds, culture and the multiple environments they move, work and live within (Outlined further in section 3.4 of Chapter 3). There is no disputing that substantial changes to the environment, society and family life linked to reasons such as parents having fewer children, multiple child care arrangements, advances in media, social networking, early education expectations, longer working hours and longer life expectancy, have influenced the decision making and values of parents. The implication of this bombardment of social messages and societal drivers has led to a genuine shift in the way that adults regulate children's movement and play spaces and their attitude towards risk regulation (Furedi, 2002; Karsten, 2005; Trost & Loprinzi, 2010; Zubrick et al., 2010). This is evidenced through increased concerns over litigation in the early childhood sector; road safety concerns; fears over injury; fears of skin cancer; fears of children drowning; fears of children getting diabetes; fears of germs; SIDS; strangers danger; just to name a few.

Generation X parents, those parents of baby boomers, are increasingly being labelled as the 'fear generation' or as 'helicopter parents' who are constantly seen hovering over their children in order to support and nurture them and keep them free from danger. Underpinning these actions is the conscious decisions to limit risk (Zubrick et al., 2010). Perceptions and concerns over child safety are a key determinant in parents supporting or hindering active free play opportunities and their independent mobility (Bagley, Salmon, & Crawford, 2006; Dwyer, Higgs, et al., 2008). Growing evidence reinforces the trend of adults encouraging children to play indoors so they can 'keep an eye on them', offering to drive children to school rather than

walk because of fear of strangers and concerns over dangerous intersections (Carver et al., 2008; Garrard, 2009; Malone, 2007; Timperio et al., 2004).

Even for very young children, parental beliefs and perceptions can influence their support for active play experiences in terms of them being more controlled and restricted (Tilt, 2010; Veitch et al., 2010). For example, a young child's active play opportunities may be restricted if a parent is over-protective. This could lead to a child spending large amounts of time 'containerised' (being placed in cots, high chairs play pens, car seats or bouncers) (Pica, 2000). The implications of this could mean a reduction in 'tummy time' opportunities and for a young child to engage and explore with their world through senses, all of which impact on a child's personality and their social/emotional development but also have serious consequences for a child's motor and cognitive development (Australian Government Department of Health and Ageing, 2009; Malone, 2007).

Because parents are regulators of children's behaviour, policy and communities tend to be driven by parent expectations and therefore these habits and behaviours are perpetuated in multiple contexts. For example, these same parental fears and perceptions can transfer to decisions for opportunities for older children to participate in physical activity, like in the case of a fear of strangers or road safety impacting on a parent's decision to drive their child to school rather than allowing them to walk or ride their bike. After interviewing 1,210 families with children aged 5–6 years and 919 families of children aged 10–12 years, Salmon, Telford and Crawford (2004) discovered that parents' perceived stranger danger and road safety to be barriers of children's physical activity. The parents who reported having concerns about road safety had a higher probability of having children with limited participation in physical activity. Another study conducted by Boufous, Finch and Bauman (2004) found that parents

discouraged or prevented children from participating in physical activity and particular sports due to fears over injury and safety concerns.

Parental values, perceptions and levels of gate-keeping can also differ depending on the age and even sometimes the gender of a child as well as the socio-economic status and location of the family home (Beets et al., 2007; Weir, Etelson, & Brand, 2006). Studies conducted by Valentine and McKendrick's (1997) study as well as Salmon et al. (Salmon et al., 2004) confirm that restrictions and safety concerns were often influenced by social class, geographic location and family composition. This information is relevant to this current study in terms of appreciating that parental beliefs, values and perceptions are a significant indicator of the level of support and the willingness to prioritise for a child's participation in physical activity. It also points to the surprisingly limited research conducted in relation to parents of young children under the age of four in regarding these issues (Dwyer, Needham, et al., 2008).

2.6 *The critical role of the child*

It would be remiss of me in coming to the conclusion of the literature review that has addressed factors that influence young children and their participation in active play experiences, to not include a section that addresses the agency of child and their impact on this process. Nor is the placement of this information at the end of this review any reflection on the priority given to this topic. The section that follows attempts to provide an overview of some of the current theory and research on this topic and points to the child, even from infancy, playing a pervasive role in their environment and their own learning (Ball et al., 2006).

A child should not be seen as innate, 'acted upon' or on a predetermined path of development (Dahlberg, Moss, & Pence, 2006). Although they are connected and influenced by significant others and the social environment around them, a child is competent, powerful and is capable

of impacting on the people and places they move and live within (Bronfenbrenner, 1979; Malaguzzi, 1993). (For further information on this and a diagram to illustrate this position, please refer to Section 3.4.2 of Chapter 3). A range of intrapersonal (physiological, cognitive and psychological factors) and interpersonal factors including formal and informal socialisation (e.g. opportunities to engage in social groups, membership in leisure or social activities) can determine the amount and type of active play and physical activity children engage in. A number of these factors have been addressed previously (Section 2.5.2) in terms of the social resources (social capital) that parents have access to including care and education facilities, church groups, extended family, extra-curricular activities for young children and parenting/social networks (Stanley et al., 2009).

A child's temperament, their personality, competency, agency and attitudes are all characteristics that can impact on the amount and type of physical activity a child engages in (Eaton, McKeen, & Campbell, 2001; Timmons, 2005). For example, in their research Buss and Plomin (1984) identified that social/emotional differences in children impact on a range of elements of physical activity including preference for the type of physical activity, duration and rate of movement. Bartlett (2000) explored the role of temperament and identified that different temperaments in children elicited variations in caregiver/ adult responses. It has also been suggested that children who came from supportive home backgrounds and developed the traits of being affectionate, good-natured and easy to deal with, were also most often active children (Bartlett & Palisano, 2000).

Inherent with the notion of childhood is movement (Pica, 2004). Not only is a child naturally inclined to do so, but movement provides a vehicle for children to engage with their environment and a range of sensory opportunities (Bailey & Burton, 1982). A child's age, physiological make-up, level of development and motor skill and their competency in

movement can impact on their physical activity level, types of active engagement and behaviours (Eaton et al., 2001; Gabbard, 2012). For example young infants (birth to 4 months) will often spend their time lying on their backs kicking and swiping at objects whilst developing their core stability as well as their back, leg and shoulder strength. An older toddler however may be more concerned with standing, learning how to walk, involved in sensory integration and negotiating their body in space. It has been suggested that a child's activity levels peak around six or seven years of age and drops off as they progress through formal schooling (Eaton et al., 2001) and that with age there is a decrease in the proportion of children meeting recommended daily physical activity guidelines (Tudor-Locke et al., 2004).

As children develop, as in the case of three year olds, they continue to refine their motor skills participating in such activities as running, dodging, zigzagging, hopping and even starting to learn to ride a bike, climb a tree or hit a moving object such as a ball. Smythe and Anderson (2000) suggest that a child who is confident with their level of motor skills will be more inclined to engage in vigorous or extended movement experiences. It is also important to point out that a child's motor skill acquisition and experiences not only impact on future physical activity opportunities, but research consistently reinforces that early motor experiences significantly impact on a child's ability to process sensory information and contributes to their ongoing cognitive development (Ayes, 2005; Thelen, 2004).

A child's participation, amount and type of physical activity can also be determined or influenced by their gender (Beets et al., 2007; Welk, 1999). It is not uncommon for parents to reinforce and accept gender-role stereotypes in reference to the types of toys, play environments and physically active play experiences they provide or engage in with children (Karraker, Vogel, & Lake, 1995; Wood, Desmarais, & Gugula, 2002). Parents may also be reluctant to allow their young toddler daughters to go outside and crawl around in the dirt and

grass. There may even be variation in the physical environment, depending on the gender of a child, with the rooms of female toddlers often containing more toys that include cooking utensils, dolls and soft fluffy toys that encourage sedentary play. Male toddler rooms, on the other hand, may contain a range of toys that include sporting equipment, toy vehicles, construction and building blocks. These sorts of practices can result in the social constructedness of gender stereotypes which may result in reinforcing patterns of gender in physical activity that have even been suggested to track into adult patterns of physical activity, inactivity and gendered roles (Giuliano, Popp, & Knight, 2000; Welk et al., 2003).

Gender also influences the way parents engage with their children. For example, parents often engaged in more ‘rough and tumble play’ with infant sons, whereas parents of infant girls were often more protected and encouraged them to play with soft toys and take fewer risks. In their study Beets, et al. (2007) identified a range of unique maternal and paternal support behaviours and how these influenced what was provided, who provided it, who it was provided for and when it was provided. Many of these observations are noted as being contextual with most studies measuring gender, play and activity levels in specific contexts.

Gender differences, as well as other factors such as motor development, body composition, socialisation and ‘gender constructedness’, often contribute to variations in the type of active play that children participate in (Giuliano et al., 2000; Hoffmann & Powlishta, 2001; Kohl & Hobbs, 1998). Gender, an unmodifiable characteristic, has been proposed by some researchers to influence males being more vigorous in gross motor activities and more likely to engage in risk-taking behaviours than their female counterparts (Castelli & Erwin, 2007; Pate, Pfeiffer, Trost, Ziegler, & Dowda, 2004). In their study Pellegini and Smith (1998) found that boys participated in rough and tumble play more often than girls. Several other studies identified that total activity counts for boys was significantly higher than girls (Boldermann et al., 2006;

Jackson et al., 2003). Pellegrini and Smith (1998) suggest that boys' predispositions to participate in more active play could in fact be due to differences in hormonal levels of androgens.

2.7 Summary of the chapter

This chapter presented an extensive review of current and historical literature to understand the issue of and influences on physical activity and active play of young children. On the basis of the findings presented, it is evident that consideration needs to be given to the role that determinants play in contributing to these behaviours. In the case of this research, it is important to understand the types of determinants that can influence parent support for active play within the micro-environment of the family home.

Currently, there is a trend towards adopting a 'life-course' perspective to intervention strategies based on acknowledging that lifelong habits and experiences initiated in early childhood track into adulthood. Not all of these views are commensurate, but early childhood experiences are increasingly understood to have a far-reaching and solidifying effect on the future of individuals (Center on the Developing Child at Harvard University, 2010; National Scientific Council on the Developing Child, 2007). Additionally, once these behaviours are established, they are often more difficult and costly to change (Doyle et al., 2009).

Parents are recognised as significant 'gatekeepers' in providing, among other things, a supportive and nurturing environment where childhood physical activity patterns, attitudes and active play behaviours are established. The family home is appreciated as a significant environment for supporting or restricting these behaviours. This micro-context is embedded in and influenced by multiple systems, determinants, environments and contexts. Just how much

these factors influence parent behaviours and decisions (how they think, value, are motivated and feel) is worthy of further investigation.

To say this, is not to ignore the monumental pervasiveness of a range of factors that sit within and among the various micro environments. Some of these determinants are more obviously biological and physiological indicators. To a large extent these determinants dictate how active play is accessed and supported within the domestic space of the family home and the extent to which parents may facilitate or hinder the physical activity, active play and independent mobility of children.

There is a significant gap in the research on the contextual factors which influence young children's abilities to move - particularly with respect to the role that parent's play and what influences their decision making and understandings. Experts suggest that a young child's micro and macro environments are unique and quite different from those of older children. These gaps in empirical data have limited the degree to which stakeholders have been able to understand the problem of paediatric obesity and inactivity. It has also impacted on the ability to investigate the potential influences of contextual factors and the determinants that impede or facilitate the amount, type and quality of physical activity that occurs with children in a range of settings including the family home. What has become evident is the need to move beyond assuming that all people are affected by similar environmental factors and determinants.

Ongoing research to pursue these points is of significance, particularly when the focus is on ensuring that comprehensive intervention strategies take place that target both very young children and parents with behaviours such as increasing physical activity and active play behaviours. It makes sense to explore this phenomenon further in order to provide a stronger, more empowering position, in which there is the potential to create new and more enabling

research terrain to further understand the determinants and enablers of paediatric inactivity. An ambitious quest, of (re)creating and engaging educational research that not only acknowledges the idiosyncratic nature of the families, but provides an understanding of the unique set of ecological factors that can impact on parent practices and values – the *New Frontier*.

“Regardless of what else we do during our time on this planet we do one thing fully and uniquely: we live our life. And we live it in context” (Ricci, 2003, p. 593).

Chapter 3 – The conceptual framework

3.1 Paradigms and frameworks for making sense of health

This study was framed within an interpretivist paradigm, concerned with elucidating factors influencing parental behaviours for supporting the active play of young children in the home (elaborated further in Chapter 4). Chapter 3 expounds on how a social ecological model facilitated making sense of the way that multiple environments impact on parent behaviours, values, and understandings (Giles-Corti, Timperio, Bull, & Pikora, 2005). The chapter will point out that just as context is important to acknowledge in relation to its impact on other areas of a child’s development and health, it is also invaluable in appreciating the idiosyncratic factors which influence parent behaviour and practice within the micro-environment of the family home.

In the first instance, the evolution of the historical valuing of context will be outlined. This is the underpinning premise that has evolved into an effective framework for understanding and investigating phenomena of health, referred to as the social ecological approach. Discussion will focus on the emergence of the approach, the values underpinning it, those who have found purpose in adopting it and paradigms that have deterred other disciplines from embracing it. Attention will then focus on the increased value placed on social ecological models in a number of fields including health promotion and intervention. This is reflected in authoritative documents that have guided public health programs nationally and internationally, and have enabled stakeholders to more comprehensively understand population health and appreciate multidimensional parameters of influence. Finally, an adapted social ecological model will be

outlined, particularly explicating its value in providing a framework for interpreting the data collected in this study as well as proving to be an invaluable tool for helping to understand the role social ecological factors played in influencing parent values, practices and decision making in supporting their young children's physically active behaviour within the home environment.

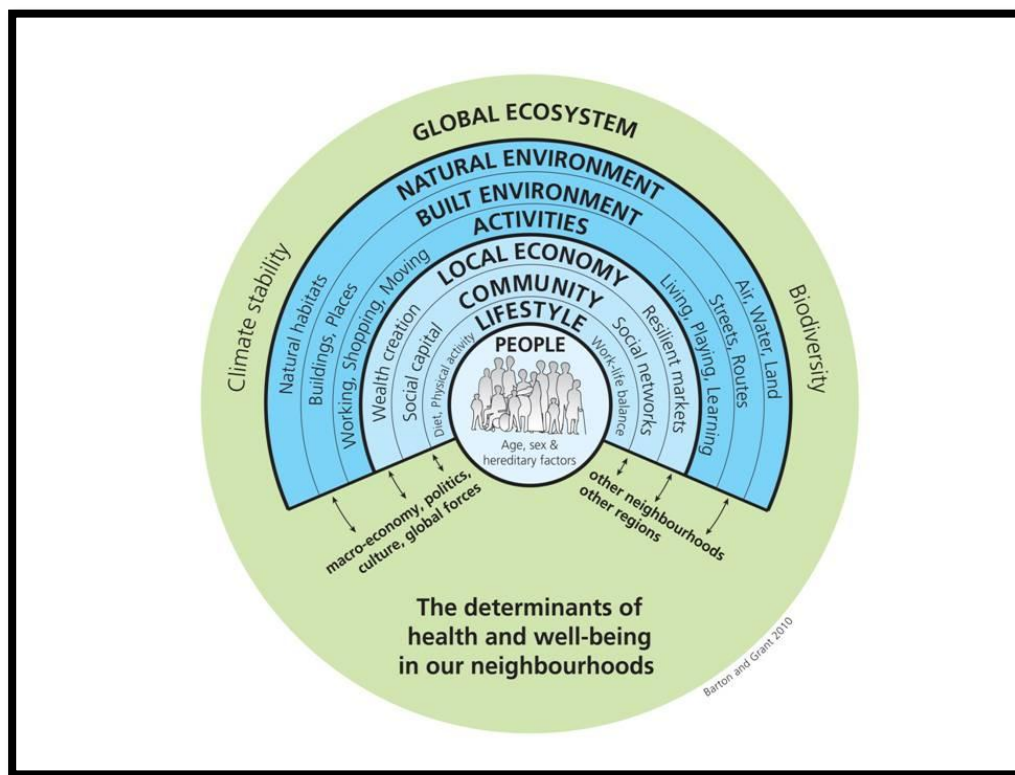


Figure 3.1. Barton & Grant's conceptual framework of determinants of health in neighbourhoods

Through the employment of a social ecological model for understanding phenomena of health it becomes quickly evident that our health does not occur in a vacuum. There is great complexity in relation to health issues, as human health is influenced by multiple systems. An example of this is illustrated in the conceptual framework included in Figure 3.1 (Barton & Grant, 2006). The conceptual framework developed by Barton and Grant (2006) and updated more recently (Barton, Grant, & Guise, 2010), illustrates a holistic perspective of human health that appreciates that health is influenced by multiple spheres that range from those closest to

individuals to those that are more far-reaching and extend to a global ecological perspective. All of these layers of influence can be understood as being either an asset or a barrier to health. These determinants impact on our practices and health behaviours as well as our ability to access health services, information, resources and the key people that support our health needs and behaviours (Australian Institute of Health and Welfare, 2011). Both the environment and the people that move and live within it are understood to greatly exacerbate or mitigate health behaviours and values. Finally, valuing the importance placed on developing various models and perspectives on health are underpinned by the premise that it is only when we truly appreciate the power of context and the multiple layers of influence, that we can effectively target the specific factors required to improve health outcomes and build capacity for the long-term health and well-being of children and adults (Brown, 2009b; Stokols et al., 2003).

3.1.1 Journal Entry 5: No longer a lone voice in the wilderness

I am so excited that I can't sleep. I want to ring my PhD supervisor and celebrate at I am in the morning that I have struck gold. I want to shout from the mountain top that I have found a lone voice in the wilderness. A powerful voice on the other side of the continent who shares the same views that I have regarding the importance of contextual considerations, his name is Bame Nsamenang (1994).

Here is a man that talks about his West African experiences and context in terms of raising the attention of the importance of recognising the social milieu. He compliments Bronfenbrenner's (1979) work regarding ecological treatise on human development, whose words still resound with me "...the understanding of human development demands more than the direct observation of behaviour... it requires examination of multi-person systems in interaction ...beyond the immediate situation containing the subject" (Bronfenbrenner, 1979, p. 21).

Tonight, after being impassioned by the writings of Nsamenang, I retraced my footsteps and reviewed material that I had overlooked or hadn't reviewed for a while. In particular, the work of Rogoff (1990), where she reaffirms the notion of a child being embedded in a social milieu. What is most inspirational about this discovery tonight is that Nsamenang dared to view the world through a different paradigm. A view that required a lens based on an ecological and social perspective.

Tonight I move forward with a renewed passion, energy and confidence. With a stronger conviction, affirmed by what I have termed 'my friends' espousing to the same sort of epistemological beliefs. I now understand that although my study may have initially been driven by a concern for 'factors impacting on young children's access to and participation in active play', in finding a solution or adding a different dimension to understanding this phenomenon, I realise that it is actually 'the importance and justification for the necessity of acknowledging and investigating the context of people's lives' that needs to be at the core of my research. I now realise that this is what truly underpins my ontology and axiology and in turn clearly guides my path towards the 'New Frontier'.

The discovery shared in Journal entry 5 helped illuminate the focus of my conceptual efforts and a greater appreciation of the pervasive influence that physical, sociocultural environments and contexts play in supporting or constraining a phenomenon, individual or groups of people. This position helped clarify the type of conceptual framework that was necessary to provide direction and to interpret the data that was to be collected.

3.2 The theoretical valuing of context specific behaviours

The word context has been referred to in many fields and disciplines, each of these assigning a slightly different interpretation to its meaning. “In linguistics, context refers to the text surrounding a word, which allows a reader to gain a better understanding of what the word means. In art, contextualism refers to the way a work of art may only be understood by knowing the historical, political, or cultural circumstances during which it was produced” (McLaren & Hawe, 2005p. 7-8). In the field of health and health promotion, context refers to a “unique set of conditions or circumstances that operate on or are embedded in the life of an individual, group, a situation, or an event that gives meaning to its interpretation” (Brown & Reushle, 2010, p. 37; Merlo, 2011; Oers, 1997).

3.2.1 Historical understandings of individual complexity and behaviours

For more than thirty years environmental and child psychologists and developmental ecologists have tried to make sense of the complexity of people’s lives and environments in terms of these being influenced by a range of determinants and contextual factors. In the late 50’s to the 1970’s Barker (1968), his associates Wright (1955) and past students like Wicker (1979), were lead figures in the new field of ecological psychology and foundational in raising consciousness in relation to individual complexity and the concept of behavioural settings as eco-behavioural units. An investigation of these settings was understood to help make sense of the interplay between the individual and their immediate environment. They also provided a general framework for understanding these transactions and the impact that these environments had on individual actions and decisions.

Noting that human behaviour is situated in a physical and social context, Barker and his colleagues provided a conceptual backdrop for others to draw upon and adapt to gain an insight of real people located in context. Experts such as Gustav and Lewis (1988) expressed the need to advance our understanding “to the manner in which children come to adopt the prevailing social categories, values and norms in the context of their widening social relationships” (p. 29). They continued by commenting that, “We want to know not merely how children grow up thinking, but also feeling and acting as members of a particular society” (p. 29).

Bandura’s concept of reciprocal determinism (1986) viewed individual behaviour as being influenced not only by a range of personal factors but also by their environment (Sternberg, 1988). The predominant line of thought outlined by theories such as Bandura’s social cognitive theory (SCT) was three multidimensional influences, personal, interpersonal and organisational dimensions of human behaviour. A little later Vosniadou (1991) built on this and suggested that in order for psychology to handle the complex task of understanding and analysing the relationship between learning and culture, it first needed to acknowledge and take reasonable account of “the circumstances in which learning takes place” (p. 283). Around the same time, Bruner (1996), a world renowned child psychologist and education theorist, commented that “the study of situated learning in pursuit of particular goals in a particular cultural setting constrained by biological limits is the stuff not only of good policy research but good psychological science” (p. 173).

Bronfenbrenner (1977, 1979, 1992), a world leader in the area of psychology, human ecology and child-rearing, classified various levels and degrees of intervening influence on a child’s development by introducing an ecological systems theory. He likened these influences on behaviour to a series of layers (he used an analogy of these layers being similar to a set of

matryoshka nesting dolls- “Russian dolls”) with the innermost layer being the individual, which is then surrounded by a number of other levels or systems of influence (Bronfenbrenner, 1979, p. 22). Very much ahead of his time, his perspective reinforced the vital role that the micro, meso and macro systems had on influencing an individual’s behaviour (his initial theory was in relation to ‘the child’). See Figure 3.2 for Bowes & Hawes adaption of Bronfenbrenner’s ecological model.

The microsystem was understood to be those interactions that occur closest to a child (face-to-face) such as those that occur with the family, multiple caregivers, and education and care staff. The microsystem referred to the most proximal level of influence to a child and the macrosystem (cultural beliefs, values and practices from the wider community that influence the individual) being more distal. Bronfenbrenner (1995) claimed that we experience “progressively more complex reciprocal interaction between an active evolved bio-psychological human organism and the persons, objects, and symbols in its immediate environment... this interaction must occur on a fairly regular basis.... Such enduring forms of interaction in the immediate environment are referred to as proximal processes” (Bronfenbrenner, 1995, p.621).

Over the years, Bowes and Hayes (1999) added several other elements to Bronfenbrenner’s model (See Figure 3.2. Bowes & Hayes adaption of Bronfenbrenner’s model of the ecology of human development). The first of these was the consideration of individual characteristics (such as temperament, gender and age) and the impact these had on an individual and on the various systems they interacts within. The second element was that of historical time and included the way that behaviours, attitudes and practices vary through time (the chronosystem). Since then Bronfenbrenner (Bronfenbrenner, 2004) has also continued to adopt this model.

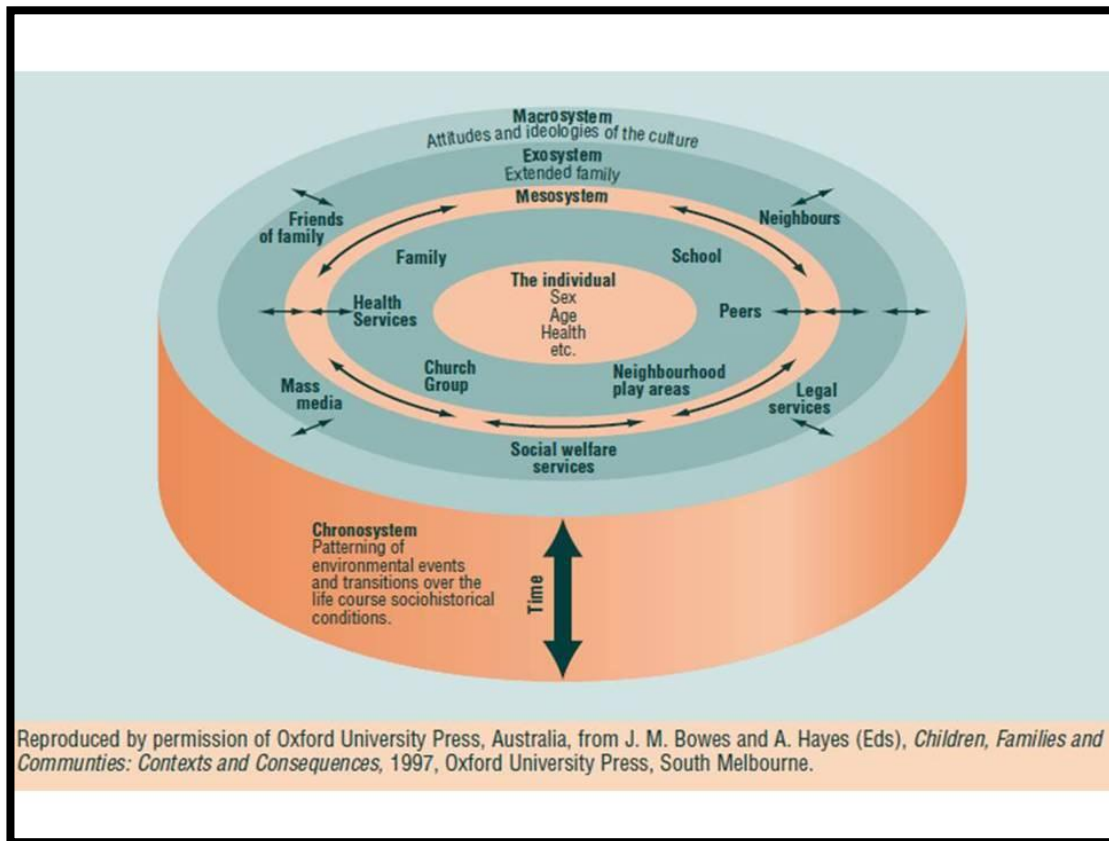


Figure 3. 2. Bowes & Hayes adaption of Bronfenbrenner’s model of the ecology of human development

The emergence and advances of these various theories were motivated by the need to understand the complex mix of contextual factors that influence the development and behaviours of individuals and how they change over time. Recently, Merlo (2011) reinforced these sentiments, commenting that from a “multilevel perspective it is assumed that individual health is affected not only by individual characteristics but also by the collective context in which individuals interact” (p. 110). Moreover, these understandings have increasingly drawn on multilevel processes and systems from a range of disciplines (Sameroff, 2010). This information was relevant to this study particularly in relation to the heightened appreciation of context and the need to develop a conceptual framework to help make sense of the influences of others and the environment on the perceptions, beliefs, values and behaviours of parents within the micro-environment of the family home.

3.2.2 Interpreting the pervasiveness of context

Advances in theories emphasising the influence of context and social practices on individual development, behaviours and experiences have been the focus of a number of disciplines including family studies, child psychology, environmental and social health (Bronfenbrenner & Morris, 2006; Franks et al., 2005; Heckman, 2006a; Katz, 2003; Lytton, 2000; Oers, 1997; Popkin, Duffey, & Gordon-Larsen, 2005; Press, 2006; Stokols, 2000). In the past researchers have focussed their attention on the macro² and meso³ systems of influence on a phenomenon, but have paid little attention on exploring the microsystem. This microsystem defined as the layer that is closest to an individual, and which contains bi-directional patterns of experiences, relationships, influences and interactions between the individual and those in their immediate surroundings (Ball et al., 2006; Ewing, Schmid, Killingsworth, Zlot, & Raudenbush, 2003).

The current popularity of understanding the power of context appears to be rooted in the way social practices, beliefs and values interconnect and move within and amongst the immediate microsystem and the broader milieu of people's everyday lives (Merlo, 2011; National Preventative Health Taskforce, 2009). Bartlett and Palisano's work (2000) reinforce this and highlight that it is not only important to consider the psychosocial aspects of a child's interaction, but necessary also to consider a range of elements and environmental factors such as the physical and social influences, in order to develop a more complete picture. These bi-directional systems, in the case of physical activity, work between and or amongst each other to either support or hinder an individuals' ability to engage in these experiences (King et al., 2002).

² **Macrosystem:** Those larger or external systems (subcultures and cultures) that exist as part of a whole, each being impacted on and in turn cascading upon other systems (including cultural values, socioeconomic issues, customs, political issues, physical environments, sociocultural status, and access to resources) (Koplan et al., 2005; Parke & Buriel, 1998).

³ **Meso-system:** comprises of the interrelations among two or more systems in which a person is actively involved (eg. in the case of a child, the relations among the care facility, home, and school; for an adult, the relations between their work, home, and social life) (Berk, 2000; Bronfenbrenner, 1979).

From my own extensive reading on the topic of contextualisation, it has become apparent that it is only over the last five to eight years that there has been an increasing surge of research and an attraction to adopt models that explore the multiple roles that environments play in influencing context and determining health behaviours. Although Stokols (2000; 1992, 1996) has been advocating this type of thinking for decades, the uptake of this research as a popular model has been initially limited. The multiple factors of influence on a phenomenon are particularly pertinent to this study, specifically factors that influence the physically active values and practices of young children (birth to four). Trost and Loprizi (2010), keen supporters of this thinking, recently developed a model to examine physical activity in two early childhood contexts, the aim of this being to evaluate the model's effectiveness in being able to link parental physical activity orientations to the behaviours of preschool children.

Although this same theory has been emphasised in parenting models for the last two decades or more in relation to the social environment being understood as a powerful influence on parental values and practices, there is still much to be discovered about the role of families as the genesis and more immediate source of instilling values, practices and behaviours on children (Kolar & Soriano, 2000). Whilst appreciating parental influence and support in children's social, emotional and academic development, the intention of this study was to extend on previous research. It was important to further explore the integral role that parents have in instilling essential behaviours necessary for long-term wellness, eating and physically active behaviours – particularly through a 'strength-based' perspective (Center on the Developing Child at Harvard University, 2010; Hills et al., 2007; McNeil, 2010; Pill, 2006; Sanders & Munford, 2009).

Finally, this study was underpinned by the premise that it is only when we appreciate the power of context that we can truly target the specific factors required to improve health outcomes and build capacity for the long-term health and well-being of children and young adults (Stokols et al., 2003). Indeed, while there is a growing appreciation for understanding the contextual factors that influence behaviours and practices, this study appreciated that further research was necessary that focussed on models that recognised that determinants may be skewed (A term used to define a factor that is distorted from a line of trajectory) or interpreted differently in each micro-environment⁴ depending on the systems and social environments of most influence. Additionally, few studies till recently have explored whether, for example, parental support of physical activity and the physical activity behaviours of young children may vary due to multiple factors present within the micro-environment of the family home (Davison & Lawson, 2006).

3.3 The emergence of ecological models

The past forty years has seen increasing attention given to addressing the prevention of disease and the promotion of health, focussed on both intervention and programs that encourage individual modifications in behaviour, like weight reduction, increasing exercise, eating healthy foods, safe sexual practices, hand washing and refraining from smoking. Researchers, organisations and those in health related fields in the past have had a preference for using more positivistic approaches or narrow medical models to understand health issues. Unfortunately this approach frequently adopted a ‘blame’ ideology where ill health was seen as a personal failure and where individual health issues were only explained by individual characteristics. This historical view of human ecology neglected to appreciate the complexity and crucial

⁴ **Micro-environment:** A specific location defined by physical boundaries where a person is most heavily influenced or spends a large amount of time (for children this could include the family home, extended family, local neighbourhood as well as care or education facility) (Swinburn, Egger, & Raza, 1999, p. 565).

connection between social causation and environmental factors and their role in determining individual health behaviours and disease.

3.3.1 Early adopters of social ecological models

The term ‘ecology’ originates in the sciences discipline and refers to relationships between organisms and their environments. In the late 60’s and early 70’s a number of prominent researchers like Binder (1972) and Stokols (both conceptual authors of Social Ecology intellectual frameworks) forged a path beyond solely the consideration of the biological and geological processes of human behaviour (Binder, Stokols, & Catalano, 1975; Moos, 1979). These men, and others from a range of disciplines, including sociology, education and health, developed foundational ecological frameworks to better explore the effects of physical and sociocultural surroundings on human behaviour. Their approach distinguished itself from earlier versions of human ecology, by having a stronger emphasis on “social, institutional, and cultural contexts of people-environment relations” (Stokols, 1992, p. 7).

Those who contributed to the conceptualisation of the ecological paradigm, such as the ecological model proposed by Bronfenbrenner (1977, 1979) acknowledged the synergistic or reciprocal causation that existed between the individual and the environment in both creating and exerting a combined impact on each other (Moos, 1979; Stokols, 1988; Warren & Warren, 1977). Often divided into various systems of influence (explained earlier in Section 3.2.1), the popularity of these models were partly due to their capacity to more comprehensively understand and analyse behaviours and better inform and guide approaches for intervention (Sallis et al., 2008).

Researchers such as McLeroy (1992), Jamner (2000), Stokols (1992, 1996; 1996), Sallis (1997) and King (2002), continued to extend on these models and posit that health and health

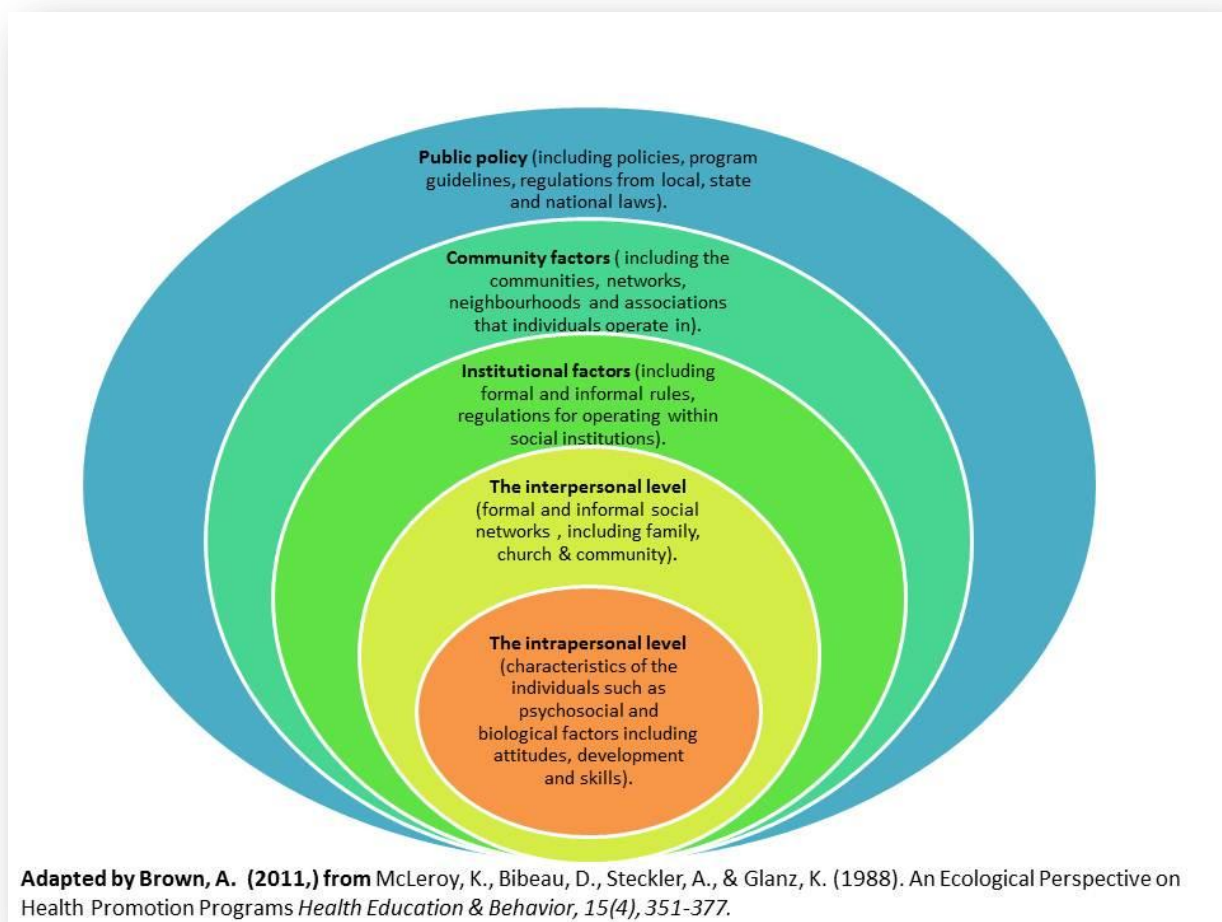
behaviours were influenced by the interwoven relationships that exist between the individual and their environment. Some of these layers of influence were distal (e.g., government support for parental leave) and other layers were more proximal (e.g., parental role-modelling). It was understood that if a change was made to one environment or layer of influence it could alter or affect an individual's behaviour and health either directly or indirectly. Since ecological models believed in the interdependent levels of influence, then the same thinking could be applied to the individual, that is, a change to an individual (change of age, change in body composition, physical injury or health) could either directly or indirectly affect multiple environments or levels of influence on their health or health behaviour (McGurk & Kolar, 1997).

The ecological model described and used by McLeroy, Bibeau, Steckler & Glanz (1988) was helpful in better understanding adult health behaviours. They suggested that health and health promotion should be viewed as starting from the individual perspective and then scoped more broadly to include the social causation of disease. It was appreciated systematically, that at every level of this model, there were barriers and enablers that worked in synergy with each other to influence health and health behaviours. The model proposed five levels of 'influencing patterns of analysis' and borrowed from several other models including that of Bronfenbrenner's model that viewed behaviour being affected by multiple levels of influence.

The model included : (1) The intrapersonal level (characteristics of an individual - such as psychosocial and biological factors including knowledge, attitudes, perceptions, development and skills); (2) the interpersonal level (formal and informal social networks, including family, social networks and the church community); (3) institutional factors (including formal and informal rules, regulations and policy for operating within social institutions); (4) community

factors (including the communities, networks, neighbourhoods, social norms and associations that individuals operate in); and (5) public policy (including policies, program guidelines, and regulations from local, state and national laws) (p. 355). The popularity of adopting this model reflected the recognition of the complex nature of most health issues. These types of models focussed attention both at the individual as well as the greater macrosystem in order to implement change (McLeroy et al., 1988; Sallis & Owen, 1997) (See Figure 3.3 for an overview of this model that outlines McLeroy’s multiple levels of influence).

Figure 3.3. McLeroy’s multiple levels of influence on health behaviour



An example of the early adoption of an ecological model can be seen in the research of Susser and Susser (1996). Their focus was in the field of epidemiology where they adopted a wider

frame of reference to explain chronic disease and appreciated the risk factors to an individual being influenced by multiple layers each fitting within and in turn impacting on another. They explained this by using the analogy of the ‘Chinese boxes’.

3.3.2 An escalation in the adoption of social ecological models to better understand health behaviours and health promotion

In the early 90s Stokols (1992) continued to expand on social ecological models with a view of them being an “overarching framework” or “set of theoretical principles” for making sense of the interrelationships that existed between environmental and personal factors (p. 7) (See Figure 3.4. Core principles of social ecological theory). This required a more comprehensive approach focussed not only on environments that an individual worked and lived within, but an approach that would integrate “psychologic, organizational, cultural, community planning, and regulatory perspectives” (Stokols,1996, p. 203). This refined emphasis on the interplay between the individual and the environment was reflected in four assumptions and a number of core principles of the social ecological paradigm. A summary of these assumptions adapted from Stokols, 1992, p. 7 are outlined in the preceding section.

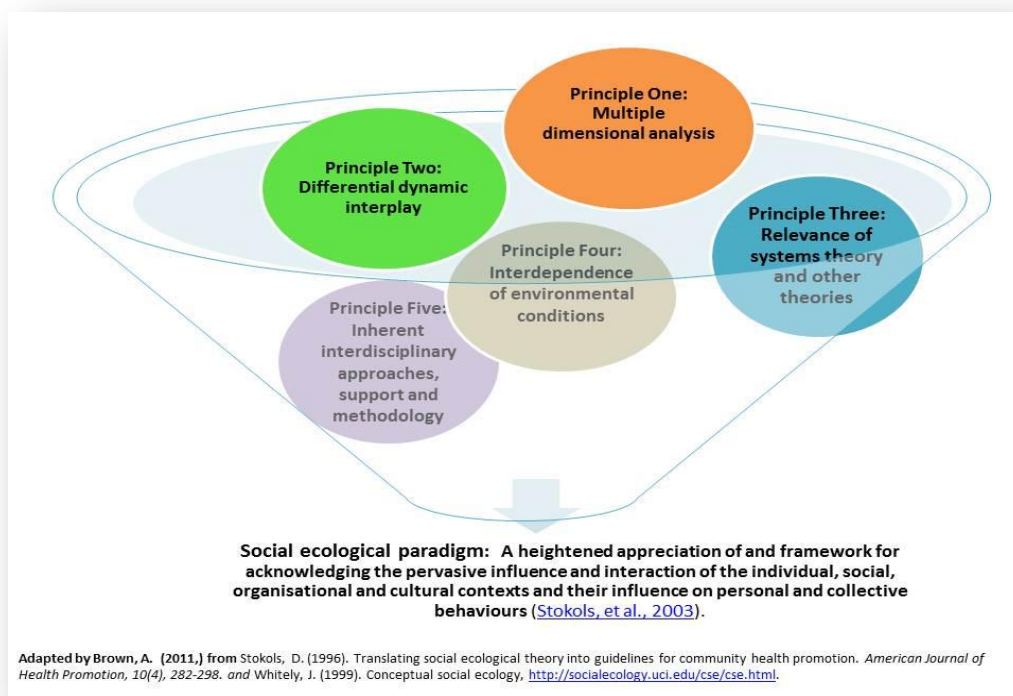


Figure 3.4. Core principles of social ecological theory adopted from Stokols (1996)

Assumption 1: Integral to social ecological analysis is the multiple facets and interplay that occurs between the personal attributes of an individual and the physical and social environment;

Assumption 2: The relative complexity of environments are characterised in terms of components such as physical (temperature, noise, infrastructure, lighting), social climate, objective (actual) or subjective (perceived) qualities, and immediacy to individuals and social groups.

Assumption 3: The social ecological perspective is most effective when it incorporates multiple levels of human-environmental analysis and diverse approaches.

Assumption 4: The social ecological perspective incorporates systems of mutual influence and takes into account the interdependent and dynamic interplay between people and their environments.

A range of health and social scientists including Gregson and her colleagues (2001), found the theory based social ecological approach an attractive model to adopt for their research. They applied this approach to better understand the nature and results of interventions conducted through large public/private partnerships for a Food Stamp Program. The theoretical framework proved valuable “for planning and evaluating nutrition education programs with low income populations and assisting with the planning and evaluation of multiple-component nutrition education programs” (p. S4).

Whilst acknowledging development and expansion of conceptual models for broadening the understanding of factors that influence health behaviours such as physical activity participation, King and her colleagues (2002) were also keen to adopt this thinking and use a

transdisciplinary perspective. They raised for consideration the use of differing perspectives and frameworks including social-ecology and urban-planning to more comprehensively understand and analyse different factors that influence health behaviours. They proposed that in considering a list of theories it was important to “include a greater array of behavioural and environmental factors that may well serve as potential mediators of physical activity change” (p. 17).

An escalation in the adoption of social ecological approaches

Recent years have seen an escalation and varying scope in the application of social ecological frameworks. Community and environmental health sectors, sport scientists, environmental planners, educators, psychologists, social scientists, human resource management and even criminologists have found this model of value particularly for helping to interpret the multiple levels of influence on human behaviour (Berkes & Folke, 2002; Colding, Folke, & Berkes, 2003; Holt, Spence, Sehn, & Cutumisu, 2008; Peterson, 2010; Sallis et al., 2008; Spence & Lee, 2003; Stokols et al., 2009;

Walker, Anderies, Kinzig, & Ryan, 2006). This is evidenced in the increasing number of publications using social ecological frameworks including journals such as ‘Ecology and Society’, and ‘Health and Place’ (See Figure 3.5. Publications using social ecological science).

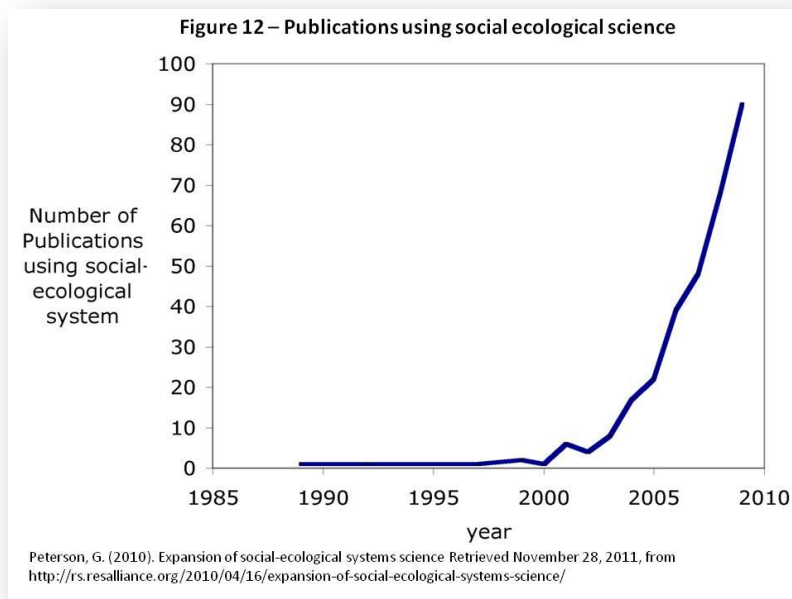


Figure 3.5. Publications using social ecological science

In relation to health research, intervention and promotion practitioners have increasingly recognised the critical need for utilising broader health promotion models to take into account the direct or indirect levels of influence of intrapersonal, interpersonal, physical environmental and sociocultural factors and their impact on human behaviour (e.g. Social, cultural, political, and historical) (Dwyer, Higgs, et al., 2008; Sallis et al., 2008; Spence & Lee, 2003). A social ecological framework has been attractive for not only developing practical guidelines and promotional programs but also as a tool for evaluating health interventions.

Such approaches integrate person-focussed efforts to modify individual health behaviour “with environment-focussed interventions to enhance their physical and social surroundings” (Stokols, 1996, p. 283). Adopting such an approach, provides insights particularly in relation to effects experienced from the rapid changes that are occurring within human environments and how this impacts on behaviour (Stokols et al., 2009). This approach extends beyond just behavioural and environmental change strategies and appreciates the interplay that occurs within the socio-physical milieu of an individual’s daily life.

Sallis, Owen and Fisher (2008) comment that this type of approach provides “comprehensive frameworks for understanding the multiple and interacting determinants of health behaviors” (p. 466). Additionally,

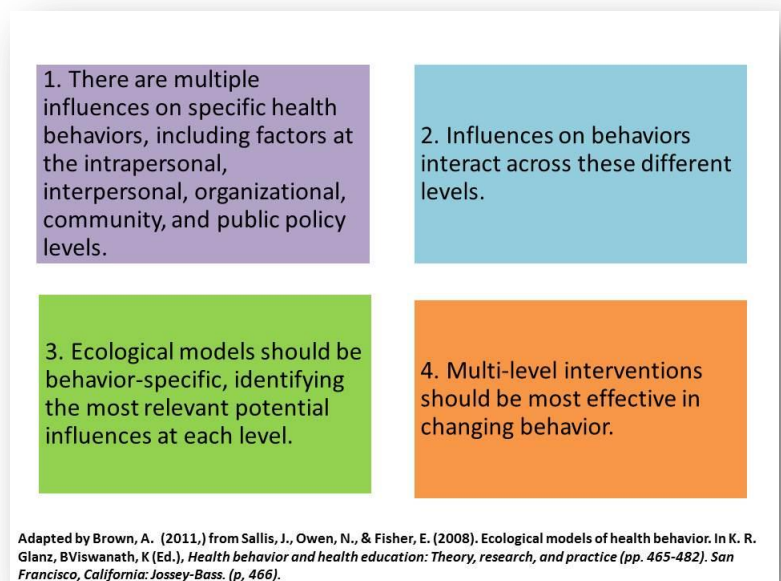


Figure 3.6. Four core principles of ecological models of health behaviour

ecological models are recognised as valuable for developing comprehensive interventions and health promotion approaches “that systematically target mechanisms of change at each level of influence” (Sallis et al., 2008, p. 466). Sallis and his team also outlined four core principles of ecological models of health behaviours and these are highlighted in Figure 3.6.

3.3.3 Social ecological models and their value in understanding physical activity behaviours

Welk (1999), an expert in health and human performance, recognised the extent to which personal, social and environmental influences impact on a range of health behaviours, in particular that of physical activity in children. In 1999, he and his team utilised a social ecological model to help make sense of a range of individual, social and environmental factors that “may predispose, enable and reinforce a child to be physically active” (Welk, 1999, 18). In line with Social ecological Principle 3, his work also attempted to unite constructs of a number of other theoretical models being used at the time.

Welk’s Youth Physical Activity Promotion (YPAP) Model (termed a heuristic model) was developed to help bridge the gap between theory and practice whilst at the same time intending to be a guide for future physical activity promotion (1999). Welk’s insight at this time was evidenced by the inclusion of an additional layer to complement existing models (1999). This layer highlighted the importance of distinguishing between an individual’s perception “am I able?” (i.e. perception of competence and self-efficacy) and “is it worth it?” (i.e. enjoyment, beliefs, attitudes) as an indicating factor of an individual’s behaviour and commitment to physical activity.

Researchers like Welk and his colleagues (1999; 2003) utilised social ecological models extensively to help make sense of factors impacting on older children, youth and adult activity

levels and behaviour. Over the last five to ten years, this model has been adopted by others who have also found it valuable for helping to inform and make sense of multiple influences of physical activity practices and behaviours (Booth et al., 2001; Giles-Corti, 2006; Salmon & Timperio, 2007).

Spence and Lee (2003) chose to add several additional layers to Wachs' (1999), referred to as the structural model of the environment (SME), its purpose was to help in better understanding the multiple influences on physical activity participation. Their model titled the Ecological Model of Physical Activity (EMPA) included the following considerations: "clarifying the roles of biological processes, higher level mediators, and physical ecology, and illuminating direct versus indirect roles of the environment" (p. 15). Veitch, Salmon, and Ball (2010) also found strength in utilising a social ecological framework. Based on Sallis's model (2002) this model helped them to better explore the individual, social environmental and physical environmental influences on children's physical activity behaviours. They examined associations between multiple environmental factors and how these impacted on the frequency children played in outdoor locations during outside school hours. They interviewed 8-9 year old children and their parents.

Finally, a very recent example of qualitative research that utilised an ecological model was conducted by Stanley, Boshoff & Dollman (2012). They used this framework to investigate the multi-faceted influences of lunchtime physical activity with fifty-four children aged 10–13 years. By adopting a social ecological approach Stanley and her team were able to more comprehensively explore the perceived barriers and facilitators of lunchtime physical activity. They considered the following influences: physical (eg. access to space, suitable space,

weather, and equipment), intrapersonal (e.g. perceived confidence, attitudes and feelings towards physical activity) and social (e.g. Peer influence and teacher influence).

3.3.4 The value of social ecological models for understanding family and parent behaviours

In comparison to the social ecological research that has been used to understand various aspects of health and physical activity in older children, adolescents and adults, there has been a paucity of research using an ecological model to explore the health behaviours of younger children (Dwyer, Higgs, et al., 2008). Unfortunately this has limited the value and acknowledgement of context-specific behaviours, determinants and the ecological niche in which young children are located (Davison & Birch, 2001). These crucial locations, which include the family, and education and care settings, are all embedded in larger social systems that play an integral role in proactive intervention and health promotion strategies (Salmon & Timperio, 2007; Stokols et al., 2003).

The key to utilising such an approach requires an appreciation of the multidimensional parameters of influence on children, with parents and the family home being an integral aspect of research. A social ecological model would help to inform a range of influences on parents' decision making, exploring not only how parents go about the business of child rearing, but where they draw their information on child development and the importance placed on childhood, health and active play (Kolar & Soriano, 2000).

The adoption of this frame of reference has been valuable in making sense of the influence of the family structure, socio-demographical influences and the family home on children's physical activity and sedentary behaviour (including habits of television viewing) (Bagley et al., 2006; Brown, 2009b; Van Zutphen, Bell, Kremer, & Swinburn, 2007). Davison and Birch

(2001) used ecological systems theory as a framework to review obesity research that assessed childhood characteristics that place children at risk of obesity (including dietary intake, physical activity, and sedentary behaviour). Their review considered the influence of the family environment, the school and the larger social environment. The study concluded by recommending that due to the complex set of factors that place a child at risk of being overweight, future research needed to adopt a broader contextual ecological approach in order to better understand and support this issue.

Dwyer et al.(2008) in their work, saw the relevance in using a social ecological model to investigate the attitudes and understanding of parents and carers of preschool-age children regarding barriers in supporting healthy eating and physical activity (See Figure 3.7). They modified McLeroy's model (1988) to include a new component, 'the parent-child dyad' "because of the innate interactive influences of this dyad for children in the preschool-age group" (Dwyer, Higgs, et al., 2008, p. 2). This formed a central focus of their framework and provided a better understanding of the duality of relationships and the process of shared influence, particularly with preschool children. Examples of influences upon young children's physical activity included "(a) personality traits; (b) functioning within the family unit including parental attitudes and capacities, and modelled behaviours by parents, siblings and peers; (c) attitudes, policies and regulations within preschool facilities; (d) social connectedness within the broader community; (e) perceived safety of the neighbourhood environment and (f) access to areas and facilities that promote physical activity (Dwyer, Higgs, et al., 2008, p. 8).

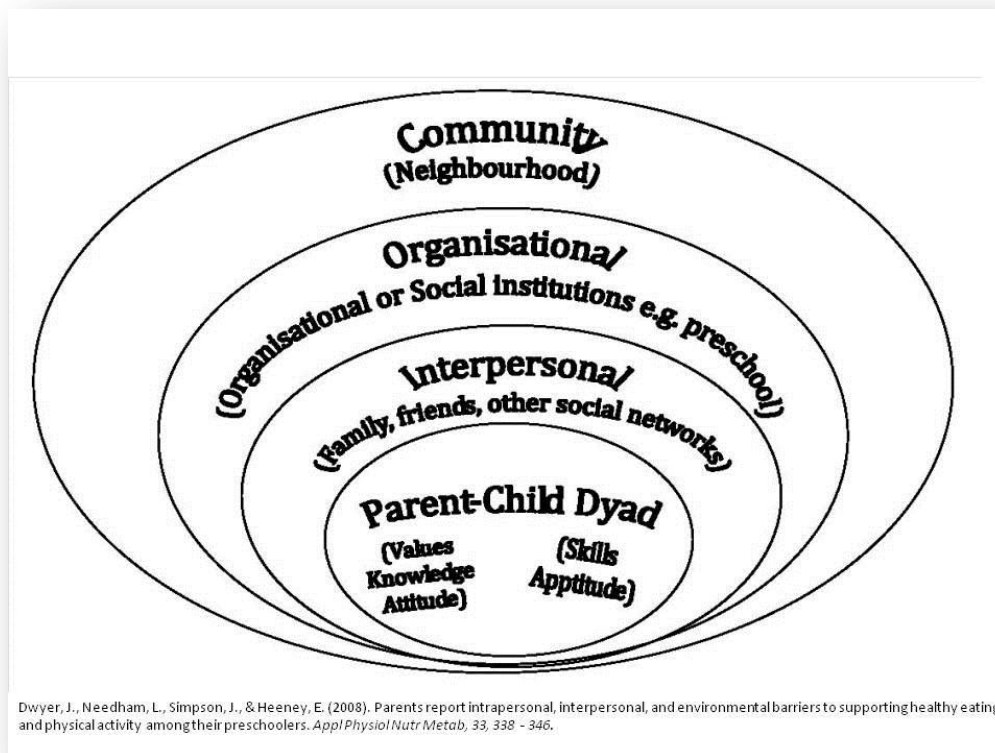


Figure 3.7. Dwyers, et al.s' (2008) adaption of Welk's social ecological model

Veitch, Salmon and Ball (2010), are an example of other researchers who chose to use an ecological model of health to investigate the role that the individual, social and physical environmental factors played in shaping individual behaviours. Their research explored the frequency with which children play in three specified outdoor locations. An important finding from their cross-sectional study, conducted with 8-9 year old children and their parents (n=187), was that due to features of the neighbourhood environment, often linked to parental reporting of children's active free play, consideration should be focussed on stronger social links within the community so that families and children can establish more effective connections linked to active play opportunities. Their work is particularly relevant in health promotion and for programs directed at parental concerns for neighbourhood safety and

providing children and families with a range of safety tips to help support the increased mobility of children.

3.4 Making sense of multiple influences: The emergence of a new model

“In cartography there is no ‘One Best Map’ of any particular terrain. For any terrain an indefinite number of useful maps is possible, each depending on the aspect of the terrain highlighted as an entity, the mode of its representation itself contingent on the uses to which the map will be put, and on the perspective from which the map is drawn” (Fay, 1996, 210).

The search for a conceptual framework to help make sense of parent stories and the range of data collected on the micro-environment of the family home was an arduous but necessary task. This involved looking beyond a positivistic approach, still the preferred paradigm in health and physical activity research, to a model that would better address the goals and questions identified for this research. This framework needed to take into account the ecological niche of the family environment, the complexity of determining factors impacting on parent behaviour, and the values associated with supporting childhood participation in active play.

The framework for this study also needed to account for the heightened appreciation of the context of each family. This framework needed to be robust enough to acknowledge factors impacting on the micro-environment for each family, while also recognising that that each micro-environment was, in itself, a micro-context with its own set of unique conditions and circumstances that operated on and were embedded in the lives of individuals and gave meaning to their thoughts and actions. The final part of this chapter now explains the application of this model and its multiple components, all of which have been founded on research, grounded in theory, and inspired by a range of models explored to date, particularly that of the social ecological perspective. Together these sources have helped in the

development of a framework that comprehensively aids in understanding the impact of the physical and sociocultural surroundings on human behaviour, whilst also acknowledging the inter-relationships between the various social, institutional, and cultural contextual influences (Stokols, 1992).

3.4.1 A multidimensional model for understanding factors impacting on the micro-environment of the family home

“We are not isolated beings getting older; rather, we are parts of collective bodies that condition our health over and above individual characteristics” (Merlo, 2011, p. 110).

In health research there are many instances of conceptual models, particularly multidimensional models or multivariate models used to help make sense of a range of elements which influence phenomena (Bartlett & Palisano, 2000; Bracco et al., 2006; Egger et al., 2007). The development of the multidimensional model used as the conceptual framework for this research emanated from multiple disciplines and discourses and borrowed from the work of a number of excellent models including the earlier work Barker (1968), that of Welk et al.(2003), Bronfenbrenner (1977, 1979, 1992), McLeroy (1988), Dwyer (2008), Stokols (1996), and later by Sallis (2008) and his colleagues (Bauman et al., 2012) .

Whilst each of these sought to understand the social and environmentally patterned exposure of health behaviours, each model varied in the degree of flexibility and robustness they had for exploring the interdependence “among people, their health, and their environment” (Swinburn et al., 1999, p. 563). In one way or another, most models struggled to encompass a total analysis of varying levels of influence “(individual, social, environmental, contextual) of determinants, but also of their (cross-level) interactions (Ball et al., 2006, p. 5).

The multidimensional model for this current study needed to understand factors impacting on parent support for the active play behaviours of their children, whilst also including factors impacting on the micro-environment of the family home. This model will be referred to as the *Parental and Micro-Environmental Model (PMEM)*. The model needed to take into account that health and health behaviours do not occur in a social vacuum, rather they are influenced by a complex set of determinants that emerge from multiple environments including that of the micro-environment of the family home (Kolar & Soriano, 2000). It needed to be robust enough to consider all the elements that converge to influence parental behaviours and practices in supporting active play within this environment. However, it also needed to track these practices out to the wider systems that impact both directly and indirectly on their lives. To help with this, I looked to others who had also adopted models that explored the multiple roles that environments play in determining health and well-being (Ball et al., 2006; Sallis & Owen, 2002; Stokols, 2000; Trost & Loprinzi, 2010; Veitch et al., 2006). An implicit assumption in the functioning of these models was the acknowledgement that each level or layer of influence does not work in isolation but influences and is influenced by other determinants and processes.

Whilst not specific to young children, a good case that reinforces the usefulness of such a framework is in the research conducted by Ball and her colleagues (2007). Their investigation explored women's leisure time pursuits. They found that this phenomenon was influenced by all three domains (personal, social and physical environmental factors) and included factors such as neighbourhood walking tracks; coastal proximity; friends' social support; dog ownership; self-efficacy and enjoyment (Ball et al., 2007). They point out that although a range of social ecological frameworks have been developed, there was still the need to better refine these, particularly in relation to more fully exploring the micro-context. In particular,

they point out that it was important that further efforts be focussed on “delineating the causal pathways linking environmental and individual behavioural determinants” (Ball et al., 2006, p. 5).

The ultimate test of the utility of the *Parental and Micro-Environmental Model (PMEM)* was that it not only had to make sense of the broader scope of behavioural determinants, but also needed to consider the contextual nuances (the environments, behaviours and circumstances that are altered due to being located in a particular context) that were present within each family micro-environment. This level of understanding and investigation was vital in order to recommend that health policy and intervention needed to be skewed to the particular contexts, environments and circumstances of a population.

This point was convincingly reinforced by Renzaho (2008, 2009) recently. He referred to his work with Arabic migrants and highlighted that health promotion programs and appropriate intervention needed to be “rooted in traditional values and habits” whilst at the same time requiring an awareness of the uniqueness of each generation (p. 594). His work and the work of Ball et al. (2006) supported the need to move beyond a ‘one size fits all model’ for service delivery and health intervention to a more targeted model that acknowledged the subtle nuances of peoples’ backgrounds and contexts.

Finally, it was important in developing a framework for this research that it not only helped to make sense of the data that could be substantiated by research and theory, but also understandable to readers and other practitioners that may find relevance and purpose in its application. The greater intention of this multidimensional framework was to present a case for

the appreciation of context as an essential component for more comprehensively understanding and in turn supporting population health and well-being.

The difference between the *Parental and Micro-Environmental Model (PMEM)* and a number of other social ecological models was that it nested the parent and child together within the micro-environment of the family home. This positioning aided in better understanding the attitudes, values, knowledge and behaviours of parents and the impact these aspects had on the active play of the child. The model also needed to consider the child, in terms of being influenced by their parents, family and the multiple environments in which the home was nested, whilst also accounting for the impact that the child had on these people and environments.

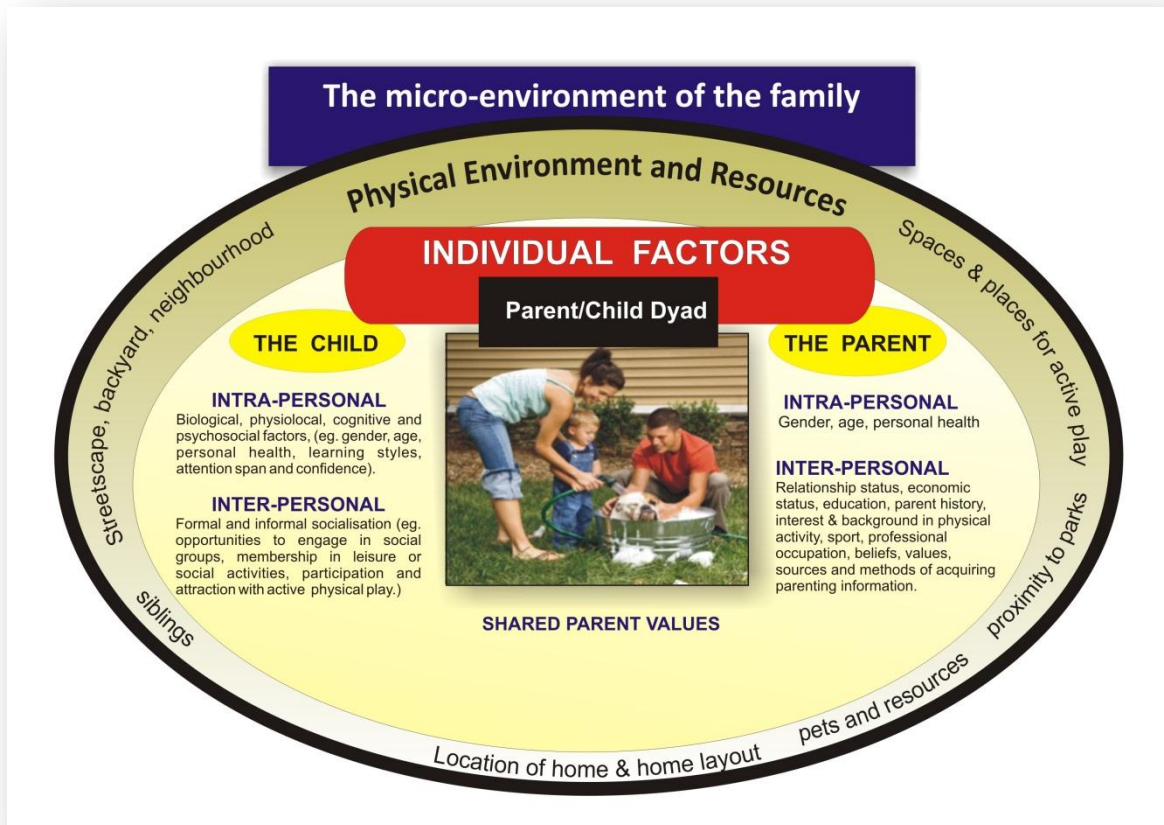


Figure 3. 8. Components 1 & 2 of the PMEM model outlining examples of factors sitting within the micro-environment of the family home

The ‘parent-child dyad’ was inspired by the work of Dwyer, Needham, Simpson, and Heeney (2008) which included the framework they modified from McLeroy’s model (1988). Therefore, the first two considerations that make up the central focus of the multidimensional framework for this study included: (1) the physical environment and resources; and (2) the individual characteristics of the child and parents (See Figure 3.8. Components 1 & 2 of the PMEM model outlining examples of factors sitting within the micro-environment of the family home).

3.4.2 The micro-environment of the family home

At the most proximal level, there is little doubt that a child’s immediate physical environment (particularly relevant for children birth to four) has a significant effect on their ability to participate in active play opportunities (as discussed in Chapter 2). A child’s individual characteristics (intrapersonal) as well as their social environment (eg. interpersonal) and the various levels of influence within the micro and macro environments are all identified as being significant determinants. Temporal influences such as seasons, times of the day, routines and daily schedules are also critical considerations when investigating the health behaviours, particularly of young children.

Figure 3.8 illustrates factors that sit within the micro-environment of the family home. Although this environment is only one of a number of environments that influence individuals, in this study the micro-environment represented the primary focus in which the parent/child dyad was located. This was based on the understanding that parents play a significant role in influencing a child’s behaviour and development, whilst also acknowledging the agency of the child in this dynamic (Dwyer, Higgs, et al., 2008).

The child is not powerless in impacting on or influencing multiple systems within their environment. Even from birth the child plays a pervasive role in this process (Bronfenbrenner,

1979). For example, although parents can invest efforts into attempting to manipulate and control a particular play space or environment, if a child is interested in the outdoors, or learns primarily kinaesthetically (through movement) they will often seek out alternative play spaces, use a space differently, or pay little attention to the toys selected by parents.

It is also important to appreciate that a high percentage of children are now spending nearly as much time in early childhood services and multiple care arrangements as they do in the home (Sims, 2009). However, for very young children (especially those birth to four), the family environment is deemed to be a significant location where active play behaviours and experiences take place (Booth et al., 2001; Spurrier et al., 2008). Although this study explored primarily the micro-environment of the family home, this in no way negates the importance of investigating other micro-environments or primary-care contexts where children participate in active play, however it is beyond the scope of this study.

Figure 3.8 highlights two integral contextual components nested within the micro-environment of the family home. These components are consistent with aspects of ecological models and include the individual, social and physical environment. The combination of these are understood to support or enable active play (McLeroy et al., 1988; Sallis & Owen, 1997). The first component, the physical environment and resources, includes aspects such as the location of home, home layout, streetscape, backyard, neighbourhood, proximity to parks, pets, places and spaces to play, resources and the weather. The second component is that of the individual characteristics of the child/children and parent/carer. Childhood factors could include their interests, participation and attraction to active play, intrapersonal details and interpersonal characteristics. For parents, factors could include parental health, ages, marital status, income, education, history of participation in sport and physical activity, occupation, beliefs, values as

well as sources and methods of acquiring parenting information. The theory and reasons behind the relevance and how these environments and factors influenced physical activity were discussed in detail in Chapter 2 sections 2.2 and 2.3.

Factors included within these two components were an important consideration when seeking to better understand aspects of contextual influence on the parents and the child/children in this study. This is consistent with contemporary theory that supports the fact that child health behaviours and aspects of parental support are influenced by a range of factors within the micro-environment of the family home (Waylen & Stewart-Brown, 2010). Just as important, considerations of components that made up the micro-environment of the family home helped in making sense of data collected, particularly data concerned with understanding how parents provided active play experiences, opportunities, environments and resources (physical, social, educational) for their children (birth to four) and determinants that impacted on these behaviours.

The data contained within this micro-environment created a contextual picture of each family (often termed ‘an environmental scan’). This was captured at the beginning of each analysis chapter (Chapters 5, 6 and 7) and consisted of information such as demographical details on the family and each of its members, information on the physical environment of the family home and neighbourhood and resources present in this environment. This information was also included within the PMEM model for each family.

This model became a valuable reference point for interpreting data and understanding various factors of influence unique to a family. These interpretations were integrated within each family’s individual chapter. Finally, reference to data contained in each family’s PMEM

model helped provide a heightened sense of awareness of the range of determinants and complexity of influencing factors that impact on the types of active play experiences, opportunities and environments that parents provided for their young children.

3.4.3 The multidimensional model: Other micro, social and organisational environments

In ensuring that the *Parental and Micro-Environmental Model (PMEM)* considered the totality of factors impacting on parents and young children it was not only important to include factors that impacted on the determinants of a parental practices in supporting the active play within the micro-environment of the family home, but also the complex set of factors that impacted on parent decision making and practices, including their perceptions, values and beliefs (Kolar & Soriano, 2000). This required an exploration of the inter-relationships of social and cultural factors that existed beyond the micro-environment of the family home (See Figure 3.9).

Combined with the first two components discussed earlier, the final considerations of the wider focus of the PMEM model's multidimensional framework included: (3) Other microsystems (e.g. neighbourhood networks, the workplace, extended family and friends, church groups, care and education settings and extra-curricular organisations); and (4) the wider macrosystem (e.g. Government, policy, media, parenting resources, and cultural beliefs). The PMEM model proved invaluable for looking at this terrain simultaneously whilst providing a graphic representation to help to organise and make sense of the reciprocity of relationships between these multiple layers of influence (Lawlor & Mishra, 2009). Figure 3.9 provides a holistic view of these multiple components.

Other external environments and microsystems

Bronfenbrenner refers to the mesosystem as a system that takes into account the interaction and influence of several microsystems (Bronfenbrenner, 1992). Within the PMEM model, it was

important that these microsystems, other micro-environments and social systems that exerted influence on parents and the micro-environment of the family home, were considered.

Parental support for the active play opportunities with their children is influenced by other external environments and microsystems such as the workplace, extended family and friends, social networks, church groups, education and care settings and extra-curricular organisations. These can also be referred to as examples of ‘social capital’ (Tayler, Farrell, Tennent, & Patterson, 2005; Ziersch, 2005). Extended family and friends were included with the microsystem of the *Parental and Micro-Environmental Model (PMEM)*, as they were recognised as an integral part of the social capital that many parents drew on for support in their parenting and decision making. This system (which emerges as part of the social epidemiology of health) was pervasive for parents in this study, particularly peer support and the socialisation of active play opportunities and the reinforcement of cultural values and beliefs regarding the importance of ‘family time’ and investing in a child’s physical development and health (Merlo, 2011).

Within the PMEM model, exposures to life experiences that occurred throughout and across the life-course (often referred to as aspects of the Chronosystem) often emerged as an example of the influence from other microsystem and macrosystem. These experiences were identified as having a significant impact on conditioning parents, particularly their behaviours or values towards physical activity. In this study these types of considerations were referred to as ‘Temporal considerations’ and defined as “a dynamic system that operates across space and time” (Spence & Lee, 2003, p. 12). A factor of particular influence on parental support for children’s active play was their own childhood experiences in physical activity. These could include: the type of encouragement they experienced towards physical activity, the places and

spaces in which they played, the values reinforced within the home (e.g. ‘give everything a go’) and their own history of participation in sport. These temporal considerations were not specific to any one system and could include other types of temporal influences. Of particular interest to this research was exploring whether temporal factors, such as the seasons (time of year), times of the day/week, routines and daily schedules, influenced parental support for active play.

The wider macrosystem

Within an ecological framework, the macrosystem accounts for the sociocultural contexts most distal to an individual. The Parental and Micro-Environmental Model (PMEM) understood these to be broader levels of influence such as cultural and institutional contexts that included health initiatives, government recommendations, policy, media, internet and parenting resources (books, brochures and promotional material). Although these influences were most distal to the family, they were still recognised as being of significant influence to parental support for active play. For example, at a macro-level, the opportunity for a parent to access information on the importance of supporting young children in active play and experiences to support this (through the media, the web and various health promotion initiatives), could influence and perhaps increase their ability to support these opportunities.

One of the most important features of the macrosystem and subsequent systems of influence is the interdependence and bi-directionality that exists between them (See Figure 3.9). Spence and Lee (2003) reinforce this and highlight that “If a change is made at one level of influence, all other levels may be affected” (p. 9). An example of this could be in the case of a parent being provided information and ideas for supporting and the importance of active play (macro level). A family experiencing high levels of stress or located in a neighbourhood that was

perceived not to be safe (micro level), may be limited in their ability to uptake this information and these types of health promotion initiatives.

3.4.4 An examination of determinants within the Parental and Micro-Environmental Model (PMEM)

As discussed in sections 2.5 to 2.8 of Chapter 2, there is an extensive number of determinants that impact on health behaviours such as parental support for and childhood participation in active play. In this research determinants were understood to be a powerful force that could either constrain or enable parent attitudes, dispositions and practices, depending on the influence of a range of factors. In this study this meant that the systems in which parents and the micro-environment of the family home sat within could skew the impact of various determinants.

The PMEM model developed for this study provided an excellent framework for investigating the extent to which ecological factors, such as parent values, backgrounds, and access to social capital, impact on the way that a determinant (such as time or perceived risk) was skewed to become either a barrier or enabler in a particular family context (relevant to Research Question 3). It did this by tracking within the model to social ecological factors (eg. parental values, backgrounds, extended family and education) that heavily influenced parental beliefs, values and behaviours (Ball et al., 2006; Hertzman & Williams, 2009). Due to the large number of determinants experienced by individuals, three of these, time, perceived risk and the physical environment, were the focus of this study as they were identified as being significant ones that emerged out of the micro-environment of the family home. It was important to explore whether particular factors within these systems played a more salient role in influencing these determinants. Thus a determinant could in fact become either a barrier or an enabler,

depending on the nature of each idiosyncratic context (Giles-Corti, Broomhall, et al., 2005) (See Figure 3.9 – located on last page of this chapter).

For example in looking at the determinant of ‘the physical environment’, particular features in a family backyard could be perceived as either a barrier or enabler in parental support for the active play. This could be dependent on a range of social ecological factors that impact on parents. Of particular interest in this study was exploring the impact other factors within various systems had on skewing the way determinants were realised within each micro-environment. Factors such as parental history of physical activity participation, their ability to access social capital, or even the value a parent places on physical activity experiences could influence the impact of these determinants.

3.5 Summary of the chapter

The development and adoption of the *Parental and Micro-Environmental Model (PMEM)* was based on the importance of better understanding the various factors that impacted on parental values which in turn influence their support for the active play opportunities that occurred within the micro-environment of the family home. As the model illustrates, the underlying premise of this idiosyncratic approach was the recognition that every micro-environment is influenced by their own unique suite of intrapersonal characteristics, whilst also recognising the other systems (including environmental, interpersonal, organisational, community and cultural).

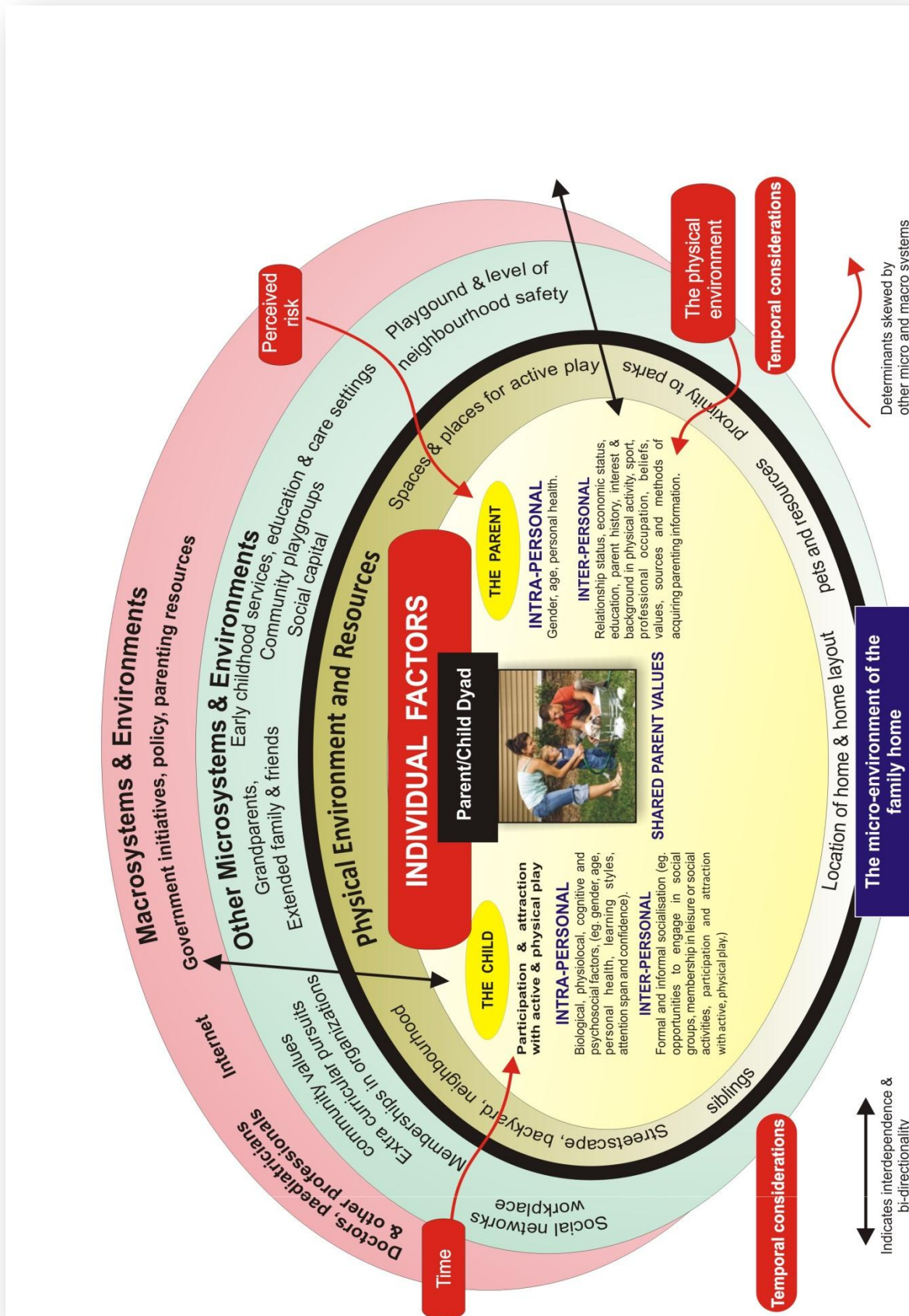
In presenting this model it is important to highlight that, it was beyond the scope of this study to explore every dimension and factor that impacted on this phenomenon. However, the PMEM model did provide a structure and theoretical way of understanding the data that was collected from multiple sources. In the complex world of health behaviours that emerge within the

micro-environment of the family home the PMEM model, based on sound theoretical principles, helped identify a range of factors, systems and determinants of influence.

It is anticipated that this model may prove valuable as a guide for intervention, particularly for identifying critical leverage points and understanding the inter-relationships that exist between and within these systems. It is suggested that strategies need to be targeted and planned to involve multiple stakeholders from different sectors which include the individual, family, education and care, local, state and federal governments (Giles-Corti & Salmon, 2007; Koplan et al., 2007).

Note: Figure 3. 9. Parental and Micro-Environmental Model – located on next page.

Figure 3.9. The PMEM Model - Parental and Micro-Environmental Model



“With increasing interest in physical activity, or lack thereof, and increasing societal focus on physical activity, there is a wide-open opportunity for qualitative researchers to make a substantial contribution to our knowledge regarding how individuals understand physical activity, as well as the role of physical activity and exercise in their lives” (Pearce, 2009, p. 880).

Chapter 4 – The Methodology

Chapter 3 provided a detailed overview of the conceptual and theoretical framework that underpins this research project. It discussed the importance of recognising that people are embedded in a social milieu and the pervasive influence that multiple systems have in supporting or constraining health phenomenon and determining the manner in which we come to adopt our prevailing beliefs, values and habits (Australian Institute of Health and Welfare, 2011; Jamner & Stokols, 2000; National Preventative Health Taskforce, 2009). The chapter also addressed the theory of social ecology and the elements that have contributed to the emergence of the PMEM model used in this research to comprehensively understand the influence of determinants, environments and contexts on parents’ support for the active play of young children within the home.

At the heart of this research was the desire to investigate the context of people’s lives. This goal in many ways formed a roadmap that determined the methodological approach of this study and the tools used for making sense of the data. This chapter begins by presenting information about my own ‘lived experience’ and understandings of ‘self’ and the world, and then proceeds to frame this through a technical description in terms of my epistemology, ontology and axiology. The second part of Chapter Four outlines the processes, strategies employed and design of the research. The reasons for choosing case study are then discussed, particularly in helping to understand those ‘living within the case’. Finally, details for choosing

participants and the timing of the study are outlined together with a rationale for the research tools chosen to assist with the ethical engagement with parents and the individual and idiosyncratic nature of their lived experiences. The chapter concludes by addressing the approach for analysing parents' stories and data collected including discussion on trustworthiness as a measure of rigour.

4.1 Setting the scene - the positioning of this study

4.1.1 Acknowledging the complexity of self as researcher

I acknowledge Angen's (2000) sentiments that by "being in the world, we are already morally implicated. Our values and beliefs will show themselves in our actions whether we stop to think about them or not" (p. 384). As an interpretivist researcher, my stories, values, 'who I am' and 'how I see the world' permeate all phases of the inquiry process. In these are evidenced my intra-subjectivity (constructed in relation to self) and inter-subjectivity (a negotiated or shared position, understanding or perspective). My experiences and values not only contribute to the design and analysis of this study, but also play a significant role in the way I am an 'observer in context' (Becvar & Becvar, 2000; Pring, 2000). This lens can cause a blurring of the boundaries with respect to ways of seeing and doing. The diagram, presented in Figure 4.1 captures the foundational positioning of myself in the study and summarises key components used.

I. I am an advocate for the health benefits of physical activity and model it in my life

Moving and exercise have always been a huge and rewarding part of my life. In my youth this included competing and participating in a range of sports. During my tertiary education and early teaching career I would provide opportunities for children to be physically active during the day by integrating these experiences into the daily timetable. In my spare time I would

work in fitness centres and managed my personal training business. In recent years, my active pursuits have consisted of lots of walking (often joined by my ever loyal Border Collie, Bella, or my partner), bike riding, swimming and yoga.

Foundational positioning for this study

Overarching the foundation of all other elements of this study is the understanding that the physical, social and cultural environments are a pervasive influence in supporting or constraining the health of individuals, groups and communities. **The focus of this study is an exploration of parents' supporting physically active play behaviours with young children in the home.**


An interpretist paradigm with a naturalistic perspective. Elucidating the idiosyncratic behaviours of individuals and a context-dependent understanding of the impact of multiple environments on determinants of health ([Denzin & Lincoln, 2008](#); [Schwandt, 2000](#); [Buchanan, 2004](#)).

Qualitative methods for understanding the lives and experiences of parents. Suited to the identification of behaviours, beliefs and practices of participants that they ascribe to in context ([Denzin and Lincoln, 2000b](#); [McAtee, 2006](#); [Pearce, 2009](#)).

The epistemological positioning reflected in prominent and complementary constructs (social constructivism and social culturalism).
1. Knowledge and meaning are constructed by self and or with others. 2. The body and mind are also created from and with a social context which includes culture and history ([Torin and Fisher, 2010](#); [Connelly & Clandinin, 2000](#) [Creswell, 2003](#))..

A complimentary ontological position: valuing the reciprocity between social constructivism and a socio cultural understanding of the world. This view supports Packer and Goicochea's (2000) position that these positions generally understood to be irreconcilable can in fact be complementary .

The axiology of this study is viewed through two lenses: Parents and primary caregivers are viewed through a 'strength-based' lens that recognises the critical role they play in the development, learning and loving of children ([Dockett, et al., 2009](#) [McNeil, 2010](#) [Sanders & Munford, 2009](#)); and the valuing of reciprocity where each party's contribution is mutually beneficial ([Higgs, Moore, & Aitken, 2006](#)).



My Context

- I am an advocate for physical activity and health.
- I am an early childhood educator and believe in the foundational importance of the early years.
- I am a social ecologist that believes in the pervasiveness of context.

Figure 4.1. The foundational positioning of the study

A large part of my advocacy has been in the promotion of incidental movement and the integration of movement into the curriculum or 'Catching a moment to move' (Landy & Brown, 2010). I see movement and active play as integral in supporting all aspects of child development (discussed in detail in Chapter 2). Although my role now focuses more on supporting and working with pre-service teachers, the intention of my philosophy hasn't

changed and that is *to ignite the passion and love of moving and physical activity with every person we meet.*

II. I am an advocate for the importance of healthy development in the early years of life

My advocacy for the early years is underpinned by advances in the theory of neurobiology and physiology (McCain et al., 2011; Mustard, 2008; Shonkoff, Boyce, & McEwen, 2009; Sims, 2009). This research confirms that children thrive best, are at less risk of negative outcomes and experience optimum brain development and health when they are in stable and secure relationships and engage in experiences that stimulate the senses.

The value that I place on the critical period of the early years of a child's life and the impact that experiences have on their current and future development, health and wellbeing, is based on research, reports, policy and government initiatives (Center on the Developing Child at Harvard University, 2010; National Scientific Council on the Developing Child, 2007). My belief flows over to supporting the 'economic rationalism' of investing in young children as a proactive step in developing strong and more sustainable societies (Heckman, 2006a; Heckman & Masterov, 2007; Save The Children, 2009; Wise, Silva, Webster, & Sanson, 2005). I believe that at the heart of this formative time in a child's life is the importance of quality relationships and experiences with significant caregivers. These experiences are understood to be a vehicle to help mitigate and perhaps even prevent a range of health and developmental issues as well a proactive step for building stronger individuals, families and communities (Brown, 2009b; Hertzman & Williams, 2009; McCain et al., 2007; National Scientific Council on the Developing Child, 2007).

III. I appreciate the pervasiveness of context

In Chapter One I shared a significant event in my teaching career that led me to develop a strong regard for the pervasiveness of context. This has generated a view of the world that includes a heightened appreciation of context and adopting a social ecological framework for interpreting these phenomena. The goals and questions of this research were then framed around exploring the multiple contextual influences impacting on this issue. The methods and research design employed are also context-dependent recognising that knowledge is “experiential and situated” and illuminated by the power of the stories of parents (Warr, 2004, p.580). This approach has enabled me to understand the individual actions, values and behaviours of parents and the origins of these ideas in relation to their ability to support active play in the home.

This section has outlined my experiences and understandings of the world, particularly in relation to early childhood, the valuing of active play and the pervasiveness of context. These critical components of ‘myself’ permeate all aspects of this study and provide a particular lens through which the stories of others and this phenomenon are heard, examined, interpreted and told (Reinharz, 2011).

4.2 The epistemological positioning of the researcher

The qualitative research methods adopted are underpinned by social-constructivism and socioculturalism (Vygotsky, 1981; Wertsch, 1991). In the first instance, individuals are understood to sit within a system of relationships (Lightburn & Sessions, 2005; Stake, 1995). This meant that my constructions of realities and values often merged from and with the stories parents shared and the way they assigned meanings to their practices and behaviours for supporting active play (Connelly & Clandinin, 2000; Creswell, 2003). Collectively, and in

collaboration with parents, a picture was co-constructed in terms of understanding this researched phenomenon (Bryman, 2001; Denzin & Lincoln, 2000a).

This research was located within a social ecological perspective where the participants and myself were engaged in a process of enculturation⁵. I was aware that the participants and myself were being acted upon and learning from and with others as well as interacting within multiple contexts, which were embedded in the sociocultural milieu. Our construction of reality (which included our decisions and actions) were inherently influenced by multiple systems and environments (Bartlett & Palisano, 2000; Stokols et al., 2003). Torin and Fisher (2010) suggest that “meaning is not out there to be found by the researcher; it is continuously made and remade through social practice and the give-and-take of social interaction, including interaction with the researcher” (p. 363). Through this ongoing process we become not only a thinking person where mind and knowledge are seen as separate from the body, but also involved in a process where the body and mind are also created from and within a social context which includes culture and history.

4.3 An ontological exploration

My ontological and epistemological perspectives are linked as they are based on the premise that meaning making occurs and is embedded in context and dependent upon ongoing collaboration with social beings (Davidson & Tolich, 1999). Through this process of sharing ideas and negotiating new meaning, constructions of reality are created (Pring, 2000). Further to this, it is my assumption that an appreciation of the impact of contextual influences on individual and group behaviours goes further than the social environment and extends to the

⁵ **Enculturation:** the adoption of cultural habits including jargon, values, behaviours and norms of a particular social group. Becoming a member of a particular culture (Packer & Goicoechea, 2000).

broader events of people's everyday lives, including social, cultural, historical, geographical and political realms (Bronfenbrenner, 1979, 2004; Stokols, 2000).

The two 'ontogenic lenses' of social constructivism and a sociocultural understanding of the world, generally understood to be irreconcilable can in fact be complementary (Packer & Goicoechea, 2000, p. 227). Rather than seeing a forced distinction between a social constructivist and sociocultural perspective, I was inspired to adopt what Packer and Goicochea (2000) refer to as a nondualist approach that appreciates that these two notions could be inextricably linked and where one perspective may be integrated and could conceivably complement or enhance another. They contend that "sociocultural and constructivist perspectives are not two halves of a whole, but that the constructivist perspective attends to epistemological structures and processes and that the sociocultural perspective can and must be placed in a broader historical and cultural context" (Packer & Goicoechea, 2000, p.228).

Valuing this position, particularly in terms of exploring the concept of parents supporting children in the home, meant that parenting could conceivably be understood as being formed or created (socially constructed) through interactions with others in the greater social milieu whilst at the same time being tightly woven within the fabric of human culture (sociocultural) (Lightburn & Sessions, 2005). As a social-constructivist/sociocultural researcher these processes, contexts and the social construction of parents' experiences were a focal point of this study and are explicated in detail in Chapters 5, 6 and 7.

4.4 *Unfolding the stories and ‘lived experiences’ of others*

4.4.1 Choosing to work within an interpretivist paradigm

The field of health and physical activity research historically, has being heavily located within a reductionist positive paradigm⁶ where measurable variables are used to define and understand health phenomena. In contrast to this approach, other disciplines that include environmental health and social science, are increasingly adopting an approach that is interpretive. This was an attractive position for this study as it allowed for a more rigorous studying, reconstructing and contextual understanding of the lives of others and the stories they share (Denzin & Lincoln, 2008; Denzin & Lincoln, 2005; Schwandt, 2000). Interpretivists are interested in investigating the perspectives of people within particular contexts and environments and do this through their adeptness in asking the right questions (Gubrium & Holstein, 2003, p. 215). This goal would be only “superficially understood if left solely to the realm of quantitative methods” (Pearce, 2009, p. 880).

I chose to adopt an interpretivist approach as it was more suited to the exploration of health phenomena that are impacted by a range of social ecological factors. An idiosyncratic approach afforded a more in-depth insight into the lives of parents and families and allowed for commonly held assumptions to be critically questioned (Creswell, 2003; Hurlburt & Knapp, 2006; Merriam, 2002; Stokols et al., 2003). The intention of this was to unravel rich and detailed stories shared, and provide a context-dependent understanding of their social and cultural matrix⁷ (Buchanan, 2004). Stake (1995) captures this by saying “we enter the scene with a sincere interest in learning how they function in their ordinary pursuits and milieus and with a willingness to put aside many presumptions while we learn” (1995, p. 1).

⁶ **A reductionist paradigm:** A belief or understanding that the world, phenomena, people can be reduced to the sum of their parts. A reductionist paradigm strongly reflects a perspective of causality.

⁷ In this case referring to the socio-ecological framework or influences on a phenomenon.

An example of this occurred during research with the Mason family (one of the three participant families). Using simple prompts such as “*can you share your routine or how you spend time with your child each day?*” or “*where have you acquired your knowledge and understanding on active play from?*” helped elicit the contextual details of their unfolding story. Each visit built on and continued to inform the research questions with the aim of an idiographic body of knowledge emerging from the data. These understandings of situated meaning were based in a particular temporal moment and context of the participants being interviewed.

4.4.2 An interpretivist paradigm with a naturalistic perspective

An interpretivist paradigm and naturalistic frame are more suited to developing insight into parents’ stories. Warr (2004) reinforces this approach, commenting that “the illuminative power of people’s own life stories gives researchers valuable access to context-dependent accounts of people’s lives and the values and practicalities that frame them” (p. 580). This involved active listening, shared dialogue, sitting within the lived environment and observing families within their micro-context where people’s stories were fleshed out with relaxed ease as they were well attuned to their own environment. This is in line with two assumptions of a naturalistic perspective where it is understood that:

- meaning making only occurs in the context of the natural environment where individuals are influenced by the interplay of multiple systems and environments (Bell, Greene, Fisher, & Baum, 2001; Stokols, 1987); and
- an individual’s interpretation as well as her or his experiences and knowledge are unique to a situation and a given set of circumstances (Lincoln & Guba, 1985).

This research supported Connelly's (1990) view that participants are storied people "who individually and socially lead storied lives" (p. 2). Adopting a naturalistic perspective for this study was necessary to better appreciate the complexity in the lives of parents of young children and that the findings would be a "composite of realities" (Polit, Beck, & Hungler, 2001, p. 15). Understanding the lives and experiences of parents are best addressed through qualitative methods. I will now describe how these are utilised in this study.

4.4.3 Qualitative methods for understanding the lives and experiences of parents

".....consensus has grown for the need to stretch the boundaries of the study of behavior and health in order to capture the role of social structure to a greater degree" (Glass & McAtee,

Qualitative methods are suited to the explorations of complex interrelationships and environments that shape behaviour and for illuminating the stories parents shared (Glass & McAtee, 2006; Pearce, 2009). This is in line with Denzin and Lincoln's (2000b) definition of qualitative research as an inquiry process that occurs in "natural settings, attempting to make sense of or interpret phenomenon in terms of the meanings people bring to them" (p.3).

Qualitative research methods helped me to 'drill down' into understandings of the micro-environment of the family home and the complexities of human experience (Denzin & Lincoln, 2011; Stake, 2010). This approach allowed for a greater insight into the research questions to be revealed (Stake, 2010). Pearce (2009) supports this by stating that "qualitative researchers are particularly interested in and adept at asking the right questions to get to the substance of a phenomenon of interest" (p. 880).

Data collection techniques (that included semi-structured interviews, observations, photo documentation and a contextual analysis) also supported the characteristics of qualitative research. It was important that this data was collected within the micro-environment of the family home rather than viewing the phenomenon from the outside (Denzin & Lincoln, 2000a). Finally, it was important that the analysis and strategies employed, helped capture the unique and holistic perspective of each case situated in context. The intention of this being not to generalise or break the data into discrete variables of cause and effect relationships (Glass & McAtee, 2006). Instead, this process was driven by the desire to reflect and depict the authentic stories and worlds of participants in all their complexity (Patton, 2002).

4.5 Axiological perspectives: Assuming two lenses

Axiology is concerned with the nature and theory of values and value judgment. This research was underpinned by two axiological perspectives both of which sat behind the reasons why research was conducted in a particular manner. The first was the value of viewing parents and families from a strength-based perspective, and the second was the value placed on the process of reciprocity – the mutual exchange of stories between the participants and myself. Further details on both of these positions and how they impacted on considerations in relation to the research tools used and details of the methodological process chosen will now be explained.

Throughout this study *parents were viewed through a 'strength-based lens'*. As indicated in Section 2.5.2, a strength-based perspective views parents as 'the experts' in the relationship forming, development, learning and loving of children. This perspective appreciates that parents have at their disposal their own set of enablers and potential (Dockett et al., 2009; McNeil, 2010; Sanders & Munford, 2009). It is also acknowledged that whilst in some contexts parents may have limitations and may not be able to draw on their own resources or

aspects of social capital, I hold a generalised assumption that in most cases they are driven by an endearing love and desire to want the best for their children. This desire prompts them to overcome barriers by seeking ideas and resources to proactively support them. This perspective is a shift from a deficit approach that focusses on the limitations and problems that families experience and those practices and behaviours that may require ‘fixing’ by contemporary standards. As a researcher in context, adopting a strength-based perspective meant that I could learn from and with parents (Denzin & Lincoln, 2000a; Krathwohl, 1998; Merriam, 2002; Rinaldi, 2005).

My second axiological perspective is based on the valuing of *reciprocity* which recognises that each party’s contribution is mutually beneficial (Dockett et al., 2009; Higgs, Moore, & Aitken, 2006). In terms of my role, reciprocity was seen as a way of ‘giving back’ or compensating parents for the time and effort they gave to the interview process. I understood that I brought with me to the relationship, knowledge that I had gained from years as an early childhood educator and physical education specialist. The example shared below illustrates how the axiological perspective of reciprocity was consistent with the strength-based lens for this research, in recognising the contribution and resources each party brought with them to the research process. For example, during the process of Patricia and Mark Calming (one of my participant couples) sharing their story of how they were trying to help their daughter Tiffany improve her physical development, Patricia talked about how she had already been doing some of her own research and reading about ways that particular exercises could help to improve the connections between the left and right brain.

Alice – *Left and right brain huh?*

Patricia – *Yeah, because we had a bike for her and she couldn't ride it. She always cycled backwards.*

Mark – *She never really took to the bike did she?*

Alice – *Some great examples of helping her to connect the left and right brain is by encouraging her to crawl along with her brother and also encouraging her to climb. They are some of the best ways to connect the left and right brain.*

Patricia – *Yeah, so she's gotten a lot better with it but we are still trying to do marching and stuff with her.*

Alice – *Or if you can put a little bit of some great music on and do some aerobics, anything that crosses the midline is really helpful. (I demonstrate some of these movements on the floor), and perhaps you could look up brain gym on the internet for extra ideas.*

Patricia – *That's the stuff we've been looking at, yeah the brain gym stuff and just reading about that.*

Alice – *Great to hear Patricia, another really good one is the importance of doing baby massage on young infants and children.*

The valuing of reciprocity influenced the dynamics of the interview process regarding the relationship that was formed between myself and parents. This system of values influenced everything from the choice of research topic right through to the questions for which I sought answers. Adopting a *strength-based perspective* had particular relevance to the way research questions were framed in terms of appreciating that parents would be able to provide examples of types of active play experiences, opportunities and environments that were offered within the home context (Brown, 2009b).

4.6 A case for case study

4.6.1 Defining case study and its purpose

A 'case' is defined by Stake (2006) as "a noun, a thing, an entity; it is seldom a verb, a participle, a functioning" (p. 1). Stake (2006) points out that whilst a case is an opportunity to examine functioning, "functioning is not the case" (p. 1). When specifying a case Stake (2006) highlights that "boundedness, contexts, and experience are useful concepts" (p. 3). A case study is therefore a process or means of inquiry that best affords researching or gaining critical insights into a system, an organisation, a social unit or an individual in context (Creswell, 2002; Stake, 2010). Adopting a case study approach for this research was useful in penetrating below the surface to thoroughly examine, explore, investigate and understand the case across entities, whilst appreciating that it was part of an integrated system (Stake, 2003, 2006).

4.6.2 Case study: Valuable for advancing towards a frontier

Qualitative case study was chosen for this research because of its particular value for advancing towards a frontier (Stake, 2006). As was discussed earlier in this thesis, there are a range of micro-environments where individuals occupy and spend large amounts of their time and these influence their behaviours, beliefs and actions. The micro-environment was identified as particularly relevant to this research as it is an environment that exerts significant influence on young children. Therefore, the bounded system this research was most interested in understanding was the family unit and context, and the 'case' was defined as the micro-environment of the 'family home'⁸ (See Figure 4.2). Note: Further detail on the 'boundedness' of the micro-environment of the family home was explained Section 3.4.2 of Chapter 3.

As identified in Figure 4.2, three cases sat within this study, these being The Mason, Hampton and Calming families. The reason for this was based on recognising the need to explore a

⁸ **Family Home:** Those practices and environments that exist within the space which is defined as the home, unit or main place of residence for a family (physical, emotional, social).

number of cases, with each micro-environment (each case), a specific entity influenced by the interplay of their own unique set of contextual factors and external determinants that occurred both inside and outside the case (Hills et al., 2007; Joens-Matre et al., 2008; Stake, 2006). Binding the case in this way ensured that the study was reasonable in scope and aligned with its anticipated outcomes (Baxter & Jack, 2008).

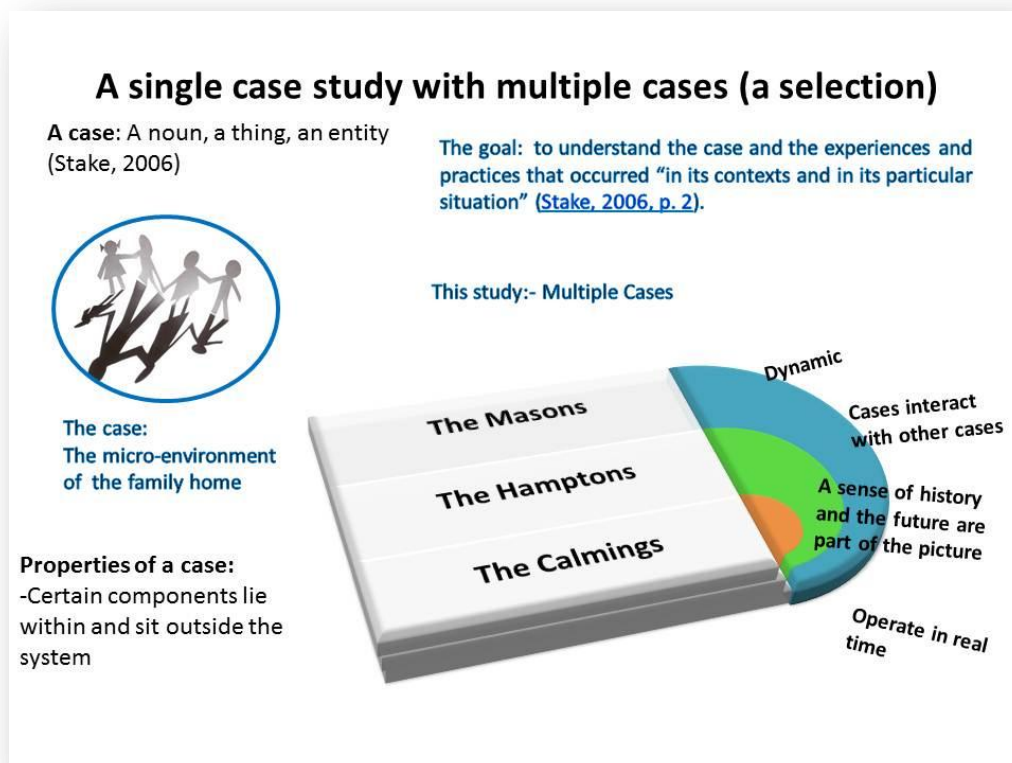


Figure 4.2. Key case study considerations for this study

Adopting a case study approach directly supported a process for understanding complex real-life contexts. This approach was valuable for investigating the 'how' and 'why' questions this research aimed to investigate (Anderson, Crabtree, Steele, & McDaniel, 2005; Dockett et al., 2009). Case study enabled the focus of the study to be placed on exploring the uniqueness of

each case and gathering ‘context-dependent knowledge’⁹ about parents’ decision making and practices for supporting active play with their children in the home context (Warr, 2004 Stark, 2005 #365). This process enabled studying, what Stake (2006, p. 3) refers to as “real cases operating in real situations” (p. 3). Finally, the adoption of a case study approach allowed for a number of features within the case to be thoroughly studied, to generate a picture of the case and “then produce a portrayal of the case for others to see” in anticipation that the reader could also vicariously experience the case and perhaps draw their own conclusions (Stake, 2003; 2006, p. 3).

4.6.3 The type of case study determined by state of combined purpose

Whilst Yin (2003) and Stake (2003, 2010) offer different approaches to case study, this current study chose to adopt two of Stake’s approaches: intrinsic and instrumental case study. Although initially concerned about choosing to adopt two different approaches, Stake’s (2005) comment reaffirms the validity of this suggesting that “there is no hard-and-fast line distinguishing intrinsic case study from instrumental, but rather a zone of combined purposes” (p. 445). The reasons for choosing the combined purpose of these two types of case study will now be discussed.

In the first instance case study was intrinsic as it was curious about understanding the phenomenon that was bounded by those “living the case” (Stake, 2003). Rather than adopting a nomothetic approach used to develop universal generalisations about human behaviours, intrinsic case study provided an opportunity to gain a context-dependent understanding of experiences and motivations unique to each case or each context in all its ordinariness (Denzin & Lincoln, 2005; Flyvbjerg, 2006; Hurlburt & Knapp, 2006). The intrinsic properties

⁹ A methodological approach for exploring the social world that appreciates that some knowledge is situated in experiential in terms of beliefs, behaviours, practices and values (Warr, 2004).

contained in this case, including the complexity and interconnectivity of the phenomenon based on the interrelated range of external and internal factors, were also a benefit of this approach (Stake, 2000).

Although the immediate interest of this study was intrinsic, the decision to combine it with an instrumental approach proved to be effective as it helped to facilitate the focus and theory of the study known in advance (this being the social ecological influences on individuals). This approach proved valuable for providing scope for the emergence of new theory during the understanding of this phenomenon (Mills, Durepos, & Wiebe, 2010). Both intrinsic and instrumental case study were valuable in supporting the understanding of constructivist and sociocultural aspects of this study, both supporting the premise that in order to understand the contextual factors that influenced participants realities it was important that research be located within these environments (Baxter & Jack, 2008).

This section of the chapter has focussed on clarifying the reasoning behind the choice to use case study for this research. The parameters of the case and its boundaries were discussed and it was pointed out that this study was a case study with multiple cases, each of which were bounded by the micro-environment¹⁰ of the family home. I have argued that case study was a means of inquiry that best afforded researching and illuminating the understandings of the contemporary phenomenon and particularly suited to investigating real-life contexts. Owing to the multiple research interests of this study two different types of case study design (intrinsic and instrumental) were then outlined.

¹⁰ **Micro-environment:** A specific location defined by physical boundaries where a person is most heavily influenced or spends a large amount of time (for children this could include the family home, extended family, local neighbourhood as well as care or education facility) (Swinburn et al., 1999, p. 565).

4.7 *The Design of the study*

4.7.1 Selection of participants

Three families accepted the invitation to participate in this research. All families lived in the same regional town located in South East Queensland. Families were chosen using purposive sampling to achieve the main criterion of participants being parents (single or a couple) who had at least 1 child of four years of age or under (full details of each family are outlined in Chapter 5, 6 and 7). Children of this age were recognised as significant as they were more likely to be influenced by the values and practices of primary caregivers (Baranowski, Cullen, Nicklas, Thompson, & Baranowski, 2003; Müller et al., 2005).

Convenience sampling was then used to choose families who were able to be reasonably accessed by myself during this study. Owing to the idiosyncratic nature of this study, concerned with studying and determining the unique characteristics of particular parents and families in all their 'ordinariness', it became evident that it was not necessary to choose a representative group of participants (eg. ethnic, low socioeconomic or indigenous). Participants were referred to me by friends of friends, as well as from contacts I had in the field of early childhood. The advantage of researching with families that were familiar to me, either through referrals or family friends, meant that there was already a certain level of trust and openness to the interview process that may not have otherwise existed.

Consistent with intrinsic case study was the appreciation that each case chosen fulfilled the requirements necessary for this study as each was a unique and complex setting where the intention of the research was the pursuit of a detailed understanding of each case. For this reason it was not necessary to choose a representative sample of participants based on a range of attributes and qualities, with the intention of exploring variation and dimensions of interest

(Patton, 2002). Rather, as long as the sample of participants met the bounded system requirements, they could have in fact been any family that included a child or children birth to four, as each family would sit within their own complex set of contextual factors and external determinants (Flyvbjerg, 2006; Merlo, 2011) which was of most interest for this study.

Only three families was necessary for this research as intrinsic case study sought to understand the uniqueness of each case (Hurlburt & Knapp, 2006). This would allow for the detailed pursuit of the understandings, experiences, and motivations unique to those living in the micro-environment of the family home. Another reason for choosing three families for this study was that it allowed for detailed and in-depth engagement with parents that would help to gain a rich insight into this micro-contextual phenomenon (Burns, 2000; Stark & Torrance, 2005).

4.7.2 Details of the study

Interviews were conducted within the micro-environment of the family home as this was a key location where very young children's values, behaviours and health practices are influenced (Campbell et al., 2008; McNeil, 2010). All three families lived in a three to four bedroom home with varying size backyards. One home was a traditional Queenslander¹¹, another was a wooden high set home and the last home was an average sized brick home (approximately 200 m²). In order to suit parents' busy routines, interviews usually occurred in places where children could play or be supervised.

A point of note was that the weather during these times was unusually wet, so this had two major impacts on the study that will be discussed in detail in the following chapters, particularly in Chapter 6, 'Meet the Hamptons'. However, it is important to point out that

¹¹ **Traditional Queenslander:** An architectural style of home very popular in Queensland commonly built after the 1840's. The feature long wide verandas and doors that open out onto the verandas. They also typically are raised above the ground with vertical timber stumps to allow for cooler air to circulate.

because of the wet weather, children were spending large amounts of time indoors. In saying this, owing to the high rainfall, when the rain did stop, the outdoor areas around the home were fresh and lush and were very conducive to outdoor play.

Each family was visited three times. However, due to reasons previously discussed, these visits were spread over a four to six week period with the duration of most interviews being anywhere from forty-five minutes to an hour and a half. The scheduling of visits occurred at different times of the day and was very much dependent on the availability and routines of the families. Most visits were in the late afternoon when children were home from care/kindy or after dinner when children were getting ready for bed or already asleep. This variation proved worthwhile in gaining insight into whether different times of the day impacted on a parents' support of children's active play. The analysis of this information was given consideration in determining whether the cooler weather conditions, seasons and variation in scheduled visits had any impact on parent support or involvement with the children in developing activity play experiences, resources or environments (Brown, 2009b).

4.8 *Sources of evidence*

A number of data collection methods were employed to help give flesh to parents' stories (Warr, 2004, p. 581). In a process rather likened to a television documentary, these various approaches afforded me the opportunity to 'get inside' the micro-environment, capture individual perspectives and build a rich and more accurate portrayal of the multiple 'layers of meaning' in each context (Cohen, Manion, & Morrison, 2007; Stark & Torrance, 2005). Another study conducted prior to this thesis, titled 'The South Burnett Project' utilised a number of similar data collection techniques, this meant that I approached this investigation with a certain level of confidence (Brown, 2009b). The combined methods also enhanced the

methodological rigour and trustworthiness of this study (discussed further in section 4.10) as well as facilitating disclosure by participants (Dickson-Swift, James, Kippen, & Liamputtong, 2006; Pring, 2000).

Semi-structured interviews (Berg, 2008; Gray, 2004) and the active listening to participant stories helped gain a deeper level of understanding and validation of their experiences. Being an observer in context, provided a heightened sense of awareness of social life processes such as body language and behaviours (Fraser, 2004). Employing conscious reflexivity afforded an opportunity to interpret what was being observed, whilst documenting the physical environment offered another ‘set of eyes’ for capturing physical evidence. Finally, the contextual audit template (referred to as the CAT scan) was a useful tool for helping to draw attention back to the focus and key considerations of each interview. Additional details and the rationale behind choosing to adopt each of these tools will now be discussed.

4.8.1 Semi-structured interviews – capturing situated stories

In order to gather a collection of parent stories and address the research questions, I chose to use semi-structured interview techniques or ‘friendly conversations’ (Rinaldi, 2005). This technique was effective in eliciting participants’ views and gathering rich details of their taken-for-granted contexts and experiences (Berg, 2008; Gray, 2004). The situated nature of these encounters “on their own turf” offered a relaxed setting for parents’ meaning making to take place (Warr, 2004, p. 580). During these interviews, I did not try to set permeable boundaries “between the interview and the rest of household happenings” (Chavez, 2008, p. 484), and although often busy and even chaotic, this more natural approach offered me as ‘researcher in context’ an invaluable opportunity to observe environments, uncover behaviours and develop a

context-dependent understanding of the domestic settings (Giles-Corti, Timperio, et al., 2005; Stake, 2010).

Observing the unfolding ‘household happenings’ often occurred while I was present with families during meal times, where almost invariably as I sat and conversed with the parents around a table or in the kitchen, family members would talk to one another and move off task or into ‘routines of parenting’. In these cases it was important to just ‘go with the flow’ and observe the natural unfolding of domestic events. This approach provided insight into the reality of family routines, the spaces where children played, the busyness of a young family and the benefit of collecting authentic data.

Conscious of parents’ comfort levels during this process, the recording device was placed in an unobtrusive location (in my pocket, on a table to the side of the interview or on a chair close by). This process proved to stimulate further discussion and questions whilst ensuring a degree of flexibility and informality to the household happenings. A brief overview of the process and areas addressed during these interviews is now outlined.

After receiving a referral, I would communicate with participants initially via telephone. I would outline the intentions of the research, an overview of the requirements and expectations, as well as the benefits of this study to the family and myself. I concluded this session by asking parents if they had any questions and organising a time for the first home visit. This would be followed up with a consent form mailed to each participant (See Appendix 4).

Each visit focussed on particular aspects of parental experiences. The main aim of the first visit was to gather contextual details on the family and setting, which included taking photos of the physical environment and recording details to inform the Contextual Audit using the CAT

template (Contextual Audit Template - see Appendix 3). The first visit also sought to gather information on the types of physical or active play experiences or opportunities parents were providing for their children (birth to four) and how, where and when these experiences took place. The second visit pursued more detailed stories of parents' own history of physical activity and discourse concerning contextual factors impacting on parents' beliefs, choices, knowledge and understandings about and of young children's active play experiences. The final visit aimed to investigate the barriers and enablers for supporting active play that parents identified (Hands et al., 2001).

The first visit

The first part of the visit started with informal conversation to help put the participant at ease. I would then collect any paperwork that was required and at this time would ask permission to record our conversation. The initial topic of discussion aimed to glean an understanding of the micro-context (including socio-demographic information) whilst trying to acquire some rich background details on the family and setting (see Appendix 3 for CAT details of key themes for questions and audit). Usually, due to work commitments, the socio-demographic information was shared by one parent on behalf of both. This included information on the family structure, employment status, and the education level of each parent, all of which provided important data that supported and extended on research into health and physical activity determinants. These factors are recognised as being significant predictors of active play opportunities and health outcomes of young children as well as directly influencing how behaviours are assimilated (Bracco et al., 2006; McCain et al., 2007; Sluijs et al., 2008) (Note: Refer also to section 2.7 for further details).

The central focus of the first interview was to gain an idiosyncratic understanding of the phenomenon of *the types of active play experiences, opportunities and environments that*

parents were providing for young children (birth to four) within the home environment (Goal 1).

It was also helpful during the first visit to take photos to document the physical environment, resources and play toys children had available to them. Although not initially planned for, these images proved an excellent prompt for extending conversations on a range of interview topics both during the first interview and subsequent visits.

A naturalistic line of questioning with parents allowed for discussion to spontaneously evolve that allowed for individual variance and context (Fontana & Frey, 2005). Additionally, a response by a participant would often reinforce a line of theory or research that had been covered in the literature review and provided an additional stimulus for extending a line of questioning to expand further on a particular theme.

I always carried with me to the interview a bag containing my clip-folder, copies of interview permission forms (See Appendix 4), business cards, pens and spare note paper. I also brought with me a few articles that I had written, relevant to this topic of research and some relevant books. To each interview I also carried with me two voice recorders (Sony IC), spare batteries and my digital camera for photographing the physical environment. I felt it was important to have two recorders going as a back-up in case one didn't work for some reason.

Finally, sometime during the first interview I explained the reason behind my desire to document the home's physical environment (front yard and pathways, backyard, child's room, lounge room and other family spaces, etc) through photos. At this point I was happy to share some of my theoretical understanding in relation to how the physical environment had recently become a popular area for research, whilst highlighting that there were very few studies that were exploring the influence that the home and parents had on supporting or hindering physical

activity, active play and independent mobility of children (Australian Government Department of Health and Ageing, 2009; Dwyer, Higgs, et al., 2008; Malone, 2007).

The second visit

The second visit focussed on further investigating the complexity of parent practice, behaviour and context. More specifically the focus of this visit was on exploring the influence of environments on parental beliefs, understandings, choices and knowledge of active play (Goal 2). The intention of the second visit was to better understand a range of social ecological influences on the phenomenon and called on parents to apply what Gordon (1992) termed 'higher order' skills. This line of questioning required parents not only to reflect on and discuss their attitudes and practices of parenting in relation to physical activity and active play but also to delve more deeply into their values, history and their own experiences in relation to physical activity.

During the second visit parents were also encouraged to reveal their knowledge and understandings of physical activity, active play and sedentary environments (Campbell et al., 2008). These data provided invaluable information in relation to acknowledging the pervasiveness that contextual factors have on parents' practices, values and understandings in supporting physical activity opportunities and behaviours with young children (Egger et al., 2007; Franks et al., 2005; Müller et al., 2005). During this interview process my themes for questions were used as a guide only as it was often the case that the topic of questioning for the second and third visits may have already been answered on a previous occasion.

The final visit

As full transcriptions and critical reflection were completed after each interview, additional questions or topics often emerged that required further clarification. The final visit provided an

opportunity for this to occur. Although the last interview was fairly brief, a high level of rapport usually existed by then. The final visit was therefore an ideal time to explore further barriers or hurdles that parents identified as hindering their support of children accessing active play opportunities in the home environment (Goal 3). This helped to achieve the goal of better understanding the social ecological impact on how parents were influenced by various determinants for supporting active play opportunities in the home environment.

4.8.2 Contextual observations and documentation

I understand that adult and child learning is a series of continual “complex social negotiations”, “fundamentally situated” in context (Brown, Collins, & Duguid, 1989, p. 33). I also recognise that the stories parents tell are influenced by a range of social ecological factors. For this reason, and in line with intrinsic case study and the ontological positioning of this research, contextual observation and documentation were adopted as meaningful data collection techniques. These strategies enabled me to adopt the role of ‘self in context’ “learning from observing others” (Ball et al., 2006; Franks et al., 2005; Stake, 2005, p. 4)

Observing in and reflecting on context

Being ‘in the field’ as an observer, meant I was able to watch the “daily lives and activities” of others and their “social life as process” unfold (Torin & Fisher, 2010, p. 363). I viewed the potential of data being present all around me. This included times when parents were busy parenting or engaged in domestic routines such as organising children for bed or a bath, making dinner or hanging out the clothes. These occasions provided an excellent opportunity to just sit and observe the events of the micro-context ‘in situ’. Observing context could include gleaning information on the social/emotional environment, the temporal environment (time, schedules, routines, and time pressures) and the physical environment that could include the resources used to support physical activity and the space and places for indoor and outdoor play.

Consistent with the interpretivist approach of this research, I included the methodological data collection process of conscious reflexivity (note that conscious reflexivity is also addressed in Section 4:10 as being a significant strategy for ensuring rigour and trustworthiness in qualitative research). Lather (1994) comments on self-reflexivity and self-scrutiny as having potential strengths. A significant strength of using this tool for this research was that it helped to clarify the data, inform the research questions and enable a debrief after an interview. This process involved being “self-examining, self-questioning, self-critical and self-correcting” (Lincoln & Guba, 1988, p. 11). In most cases these multiple perspectives completed the cycle in developing and reconfiguring my own view of the world (Hames, 1995). This process occurred as soon as practical after leaving each interview and usually included a written description of my immediate impressions of the physical, temporal and human environment. This was invaluable to refer to later in conjunction with other data sources.

This process of self-reflection also occurred during the transcription of interviews where aspects of the interview would prompt me to recollect contextual factors or incidents that occurred. Other researchers have also seen value in the process of “inward gazing” as a means of articulating the assumptions that underline their work and in more fully interpreting the data particularly in relation to those we are researching (Leung & Lapum, 2005, p.9). A final benefit of conscious reflexivity was the sharing and discussion of my observations, interpretations and reasoning for themes with critical friends. These conversations were both formal and informal opportunities to share and ask colleagues for their suggestions and feedback.

8.3 The Contextual Audit Template (CAT)

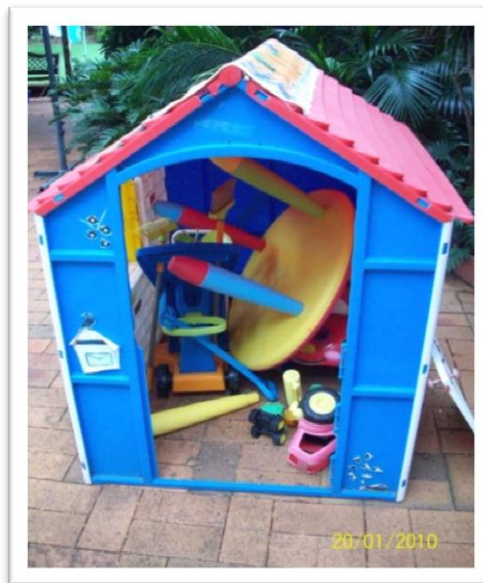
A tool, referred to as the Contextual Audit Template (or CAT) was developed as a prompt to remind me of the focus of each interview and the contextual information that would be of value to collect, observe and gain further insight regarding particular research topics. This was motivated by the value that I placed on the importance of acknowledging the uniqueness of individual context and the impact that a child's environment exerts on the establishment of their health and well-being patterns (Bronfenbrenner, 1992; Müller et al., 2005).

In designing the CAT for this research, I drew on previous knowledge and application of ES studies conducted in early childhood, educational organisations and several of my other research projects (Brown, 2009b). I also drew on scanning techniques, utilised by Egger et. al and Swinburn, et. al for diagnosing and dissecting obesogenic environments (2007; 1999). Their techniques and important categories used such as in the ANGELO framework (Swinburn et al., 1999) were modified for this study to help make sense of children's access to and parents' support for active play environments in the home.

4.8.4 Capturing evidence of the micro-environment

Observing the environment (temporal, social or physical) helped reveal so much about the lives of those living within. Not only did it clarify parental values, but it also helped to understand the parameters in which they work, live and play. In this study, photo-documentation was the final data collection tool primarily concerned with capturing the physicality of the micro-environment. During the visits to each site, photos were taken of the streetscape, play spaces, other indoor and outdoor environments, and the toys that children had access to. These types of images provided greater insight into the world of each family.

Although not initially anticipated, taking photos proved to be another way to build rapport, as it emerged as a genuine technique for demonstrating interest in the lives of each family. This process would complement times when we wandered around the home talking and conducting the interview. Photo-documentation proved to be an excellent data collection tool to heighten and help to focus on the meaning behind the choices and uses of the various resources and environments dedicated to active play experiences. These images would often stimulate



**Image 4.1. The plastic cubby:
An example of photo-documentation that
stimulated conversation**

conversation and encourage parents to share their ideas, excitement and extend on their stories about the role of active play opportunities in their context (See Image 4.1). It is also important to note that adopting the data collection process of photo-documentation was another way to affirm a strength-based perspective in this study as the photos shared with parents affirmed their efforts in supporting active play.

An example is shared below of a conversation that took place between Sally and myself as we moved around the outdoor environment watching Helen play and talking about the outdoor play spaces and the recreational activities Helen liked to engage in, in the backyard. Attention and conversation then moved to the use of the plastic cubby house.

Alice – *Does she play in that very much?*

Sarah – *Ah, the thing is that she's never been very interested in playing in that house, which is kind of curious, but she always loved the sandpit. Do you want to take the lid off the sandpit Helen and show Alice what's in there so she can see it?*

Alice – *It's interesting though, because she'd rather make something else into a house instead of playing in the playhouse. Perhaps it's too claustrophobic?*

Sarah – *Yeah, that's exactly right and this is one of those things that people think kids will like, but she's never really been interested. And when she was very small I used to put the little kiddies tables and chairs in it and say, "let's play tea parties" and say, "come on" and set up the play. And it's ended up as a storage shed because she's never been interested. She'd prefer to get the tea party out, pull out a picnic rug and sit out here and have the tea party.*

A benefit of taking photographs was that when photos were shown to parents, the photos often triggered new conversations or extended on conversations we had had previously. These conversations moved far beyond what was originally anticipated in my planning for these interviews and added an additional layer to not only rapport building but a window into viewing the lives of children and parents living in context.

This section of the methodology chapter addressed the data collection methods adopted for this study. The combination of these methods has helped to capture the multiples layers of meanings and the complex portrayal of each case (Stake, 2005).

4.9 *Analysing the data: A reading of different domestic spaces*

Many a researcher would like to tell the whole story but of course cannot; the whole story exceeds anyone's knowing, anyone's telling (Stake, 2003, p. 144).

After I returned home from each interview, the audio file from the digital recorder was transferred and stored on my computer and a back-up was saved on my external hard-drive. Data collected on each family was placed in a separate folder labelled with a pseudonym family name like 'The Hamptons'. Pseudonyms were also allocated to each family member for the

transcription process. These pseudonyms were maintained during the whole research project and ensured that information for each context was accessible, yet confidential.

The data analysis occurred in several layers (this process is elaborated in detail on page 132). Initially each case was treated independently. Although there are two main types of transcription methods adopted in qualitative research, naturalised and denaturalised transcription, the decision was made to adopt a denaturalised approach for this research as the substance of the interview was the primary concern. While this approach still embodied a 'faithful' transcription, it is acknowledged that there was a certain degree of selectivity in this process (Davidson, 2009), as the decision was made to leave out a range of elements including idiosyncratic elements of speech and involuntary sounds (MacLean, Mechthild, & Alma, 2004; Oliver, Serovich, & Mason, 2005). As mentioned previously, a series of journal entries from the process of conscious reflexivity, and a collection of images documenting each micro-environment, also occurred and were included with the data at timely junctures into the transcriptions, helping to provide a lasting impression and inform the future analysis of the data.

4.9.1 Understanding the case: Deciding on what stories to tell

A struggle amongst all qualitative researchers is deciding which stories to tell, which to "winnow" and which to "consolidate" (Stake, 2003, p. 114). Rather than hoping to produce "the right" knowledge", or indeed, "one truth" (Fraser, 2004, p. 195), the interpretation and reconstruction of people's stories for this study were analysed through my reading of the world and the series of lenses that I imposed on the data (Stake, 2003; Torin & Fisher, 2010). I understood that these interpretations may not necessarily have been how others chose to read them. However, in considering a style of analysis, I kept in mind the key goals of the study that

were concerned with gathering ‘context-dependent knowledge’¹², particularly focussed on exploring the home environment and aspects of parents’ decision making and practices for supporting active play with their children (Warr, 2004). This meant that I was intrinsically interested in the situated nature of human behaviour (Denzin & Lincoln, 2005; Hurlburt & Knapp, 2006). It was also important that the analysis and presentation of these stories were organised in such a way that others could relate to the people and contexts vicariously (Mills et al., 2010).

After transcribing and conducting a number of readings on the interviews and reviewing all other forms of data that I had collected, I chose to adopt two very distinct styles of analysis:

Style 1 Analysing data into themes and categories; and

Style 2 Sharing ‘heartfelt’ stories.

Style 1: Analysing data into themes and categories (a more structured style of analysis)

The first style of analysis (structured), followed a traditional approach of identifying general themes and clustering these into categories that fit loosely under topics outlined in the research questions (See Section 1.7 of Chapter 1 where the research questions are outlined) (Dey, 1993; Stake, 2003). This approach enabled me to draw on what Eisner (1998) refers to as one’s ‘artistry’ or a professional’s appreciation of their work and resources (connoisseurship¹³). For this research I considered my ‘artistry’, or the tools that I had at my disposal, to include the PMEM model (to help view and make sense of the data through social ecological eyes), as well as access to an extensive literature review that would help inform and substantiate my

¹² A methodological approach to exploring the social world that appreciates that some knowledge is situated and experiential in terms of beliefs, behaviours, practices and values (Warr, 2004).

¹³ *The word connoisseurship comes from the Latin cognoscere, to know.* “Connoisseurship is the art of appreciation. It can be displayed in any realm in which the character, import, or value of objects, situations, and performances is distributed and variable, including educational practice” (Eisner, 1998, p. 63).

interpretations. The process of analysis attempted to go one step further than the appreciation of the tools at my disposal. It was important that I also employ the skills of a ‘critic’ (Eisner, 1998). This involved employing a range of strategies for helping others to also ‘see’ the data and appreciate my interpretation of it and its “relevance to a phenomenon” (Eisner, 1998, p. 92-93).

As mentioned, the first important decision in embarking on the analysis phase of the research was the decision to not cross-compare data from each case. As you make your way through to the reading of Chapters 5, 6 and 7, you will appreciate the intentional personal introductions to each family that celebrates the idiosyncratic nature of their micro-environment. The introductions, located at the beginning of each chapter, are in the form of a diary entry or brief personal reflection that attempts to capture the essence of the family, a moment in time, that somehow helps to harness the personal connection that developed between the participants and myself during the research process. Following this diary entry that introduces each family, I chose to include quite a lot of the demographical information (informed by the CAT and personal observations). This style of analysis is in the form of a rich contextual description of each family and helps to create an immediate picture for the reader of: the family members, the location of the family home, and the indoor and outdoor environment.

The next part of the analysis and the second part of each of the case chapters then explored key aspects of research Question 1, 2 and 3 as these questions applied to each family. Data to inform these parts of each chapter was gained from reading the transcripts several times to gain a general comprehension, and then chunking the transcriptions into sets of ideas and themes that would address each question (Dey, 1993).

One of the greatest challenges of this phase of data analysis was “trying to disaggregate long chunks of talk into specific stories, or segments” (Fraser, 2004, p. 189). Fraser (2004) points out that “sometimes this is difficult to do because one story ebbs seamlessly into another” (p. 189). There were a number of instances in conducting the analysis of this data where this occurred and when parts of participants’ stories overlapped and were applicable to several sections.

Initially data were divided into four broad categories. These were:

- i. *Background and personal details of the family and parents, including information on the physical environment.* This information drew primarily on data collected by using the CAT (Contextual Audit Template), interviews and photo-documentation. This section included details such as demographics, information on the family, family composition, the home, neighbourhood and local community.
- ii. *Active play experiences, opportunities and environments.* This theme linked closely to data that informed Research Question 1 and included examples of the temporal and physical environments where active play was supported and types of parental facilitation that occurred.
- iii. *Influences regarding parents’ attitudes, dispositions and practices for supporting opportunities for their children to engage in active play in the home.* This theme linked closely to data that informed Research Question 2 and included background information relating to parent and family history of physical activity and examples of significant people, places or incidences that influenced parents’ beliefs and values in framing their decisions about supporting active play.

iv. *Determinants skewed by context.* This theme was the last to emerge and initially overlapped with several other themes. However, this theme drew on data where parents discussed determinants (including time, perceived risk and the physical environment) impacting on physically active play and examples of stories that parents shared about factors influencing their decision making pertaining to these determinants. Data collected on this theme would eventually inform the final research question of this study (Question 3).

A number of sub categories were then identified under the main categories, this approach was inspired by Nikolarazi and Hadjikakou (2006). These categories helped form a broad structure for analysing data, whilst appreciating that several categories may vary depending on the idiosyncratic nature of each family. Figure 4.3 illustrates an overview of some of the thematic categories of data analysis used in this research.

Thematic categories of data analysis	
Broad categories	Sub categories
Background and demographics	❖ Home, neighbourhood, Individual and family details,
Active play experiences, opportunities and environments	❖ Environmental and lifestyles factors; ❖ Types of parental support of active play and physical activity; ❖ Role modelling ❖ Children's opinion of active play; ❖ Health environments and behaviours; ❖ Holidays and extra-curricular activities
Influences of parents' supporting opportunities for their children to engage in active play	❖ Parental history and commitments with physical activity ❖ Education ❖ Reading, the Internet, research and contact with experts in the field
Contextual factors impacting on parents' understandings of active play	❖ Unique to each family but included prioritising time, the value and importance associated with active play, points of tension and concern, different interpretations of risk taking

Figure 4.3. Thematic categories of data analysis (Style 1)

Style 2: Sharing ‘heartfelt’ stories (A more personal style of analysis)

Warr (2004) states that “printed words cannot be piled on top of each other” (p. 582). In these words, Warr was referring to the fact that often in the transcription process a great deal of meaning gets left out. From a participant’s perspective this could be in relation to the emotion, the sarcasm and the inflections in a voice. From a researcher’s perspective, being present on a family’s ‘own turf’ meant that I could draw on other data collection methods such as observations, reflection and photo-documentation, to illuminate the ‘lived experiences’ of participants and complement the other data collected. Although the transcription and categorising of data provided rich detail which assisted with understanding the research questions, as a researcher it was important that I include another style of analysis that accounted for the “nonverbalized and situational details” that furnished my research encounter (Warr, 2004, p. 579). I termed these moments or style of analysis, ‘heartfelt’ stories (Style 2) (Dey, 1993; Warr, 2004).

Drawing on my personal and sensory experiences allowed me to tell a different, more personal account of individual contexts, so that others could experience these cases vicariously (Melrose, 2009; Stake, 1995). This included seeing the delight in the eyes of both Helen, Tom and Sarah walking and playing with their dogs in the local park, or the fear in the eyes of the Calmings as they talked about their concern in letting their children play in the backyard without supervision, or the wonderful family atmosphere and valuing of family time shared that came across so strongly in the Hampton family.

These ‘heartfelt’ stories linked closely to the axiological perspective for this research that viewed parents through a ‘strength-based lens’, that recognised their critical role in influencing children and supporting secure attachments, healthy behaviours, values and participation in

active play (Campbell et al., 2008; Spurrier et al., 2008). This step in the analysis process required me to reread the original transcriptions and rather than adopting an approach similar to that of a reporter discussing facts from a distance, there was a need to adopt a more personal lens to capture a very individual and ‘real’ side of each family’s approach to supporting active play.

I adopted a method used by Fraser (2004) and named these key stories from themes which emerged from the stories or from actual phrases used by participants, these included labelling the Calmings’ Heartfelt Moment 3– ‘A snapshot in time: *‘The ebbs and flows in the Calming household’*, or the Hamptons’ Heartfelt Moment 1– *‘Watching from the sidelines’*, or the Masons’– Heartfelt Moment 1 *‘Active play – an integral part of togetherness time’*.

4.10 Trustworthiness as a measure of rigour

While the measures of reliability, validity and generalisability may be used to evaluate quantitative research, the rich and in-depth design of this study required a different type of measure. The strength and trustworthiness of this study was founded on the appropriateness of the methodologies chosen to investigate the problem and inform the research questions (Baxter & Jack, 2008). This criterion was underpinned by acknowledging that rather than seeking to achieve generalisability, this research was driven by the desire to explore a case in a specific time and interpersonal context where participant stories and a range of data collection techniques would provide substance and insight into the worlds of children and families (Stark & Torrance, 2005).

One of the criticisms faced by those committed to interpretivist research has been that of ‘lack of rigour’ (Schwandt, 2007). To avoid this I chose not to accept the conventions or rigid two

dimensional concepts of validity and reliability and instead adopted an approach that followed a different set of criteria for establishing trustworthiness as a measure of rigour (Richardson, 2000). The three strategies employed for this research were (Guillemin & Gillam, 2004; Seale, 2002):

A. learning the context and ethical co-construction;

B. conscious reflexivity; and

C. prolonged engagement

Learning the context and ethical co-construction

Understanding context and ethical co-construction were based on the desire to prioritise the voice of participants and create a rich picture of each micro-environment (Byrman, 2001; Cohen et al., 2007). The differing intent of the questions shared during the interviews allowed for a rich description of the overall perceptions of parents to be heard. During the process of ethical co-construction with participants as well as discussing the intent of the project, all efforts were made to acknowledge my own interests, reactivity, prejudices and assumptions (Angen, 2000; Fawcett & Hearn, 2004).

A. Conscious reflexivity

The process of employing conscious reflexivity (being critically self-aware) as part of the process of data collection has already been discussed in Section 4.8.2. This was an appropriate criterion for helping to heighten my interpretive awareness, and included a process of personal self-reflection and co-construction with my peers and supervisors (Guillemin & Gillam, 2004). The collective voices of ‘self’ and ‘others’ helped to strengthen my argument at times, critically evaluate the data from varying perspectives and from an ethical standpoint helped to clarify my perspective and subjectivity (Finlay, 2003).

B. Prolonged engagement

Prolonged engagement in this research was achieved by the multiple visits to each site for a significant duration of time. Critical to this process and in ensuring trustworthiness and methodological rigour was the high priority given to building rapport and trust with participants (Brown, 2009b).

Employing all three strategies for establishing rigour forged a strong position in terms of trustworthiness whilst at the same time legitimately led to the adoption of a particular methodological approach that was responsive to the special nature of my research ideals. These strategies also ensured transparency for enabling others to better understand the approach adopted.

Seeking a deep understanding rather generalisability and transferability

This research required a methodological approach that would best afford a deeper understanding of what was happening in the home regarding parents supporting young children's physically active play and the uniqueness of each context. Therefore adopting notions of transferability and generalisability would have been futile and miss the point in relation measurements of rigour for this study as neither of these considers the richness of the lived experience of others and the complexity of their contexts (Pring, 2000).

To some degree the utilisation of multiple sites rather than a single case study can certainly highlight a range of characteristics that may not necessarily be generalisable in scientific terms but the portrayal of rich stories could in fact resonate or provide a vicarious experience for readers of this research (Finlay, 2006; Stake, 2003). This process, referred to as 'naturalistic generalisation', could in fact occur in this research, where others may relate to how practices

and decision making can be shaped by a range of social and physical environments and impact on the way determinants are realised and relevant to their own context (Mills et al., 2010).

As the first of such in-depth studies to explore the influence of parents on the active play behaviours of young children (birth to four) within the home context, this research provides rich social ecological data and relevance in terms of parents' values, beliefs and practices with regards to this phenomenon. This study also contributes to the knowledge base of health research in relation to the contextual exploration of determinants. Three determinants (time, concerns over safety, and restrictions of the physical environment) were explored in relation to the three families in this research in terms of how a range of social ecological factors can alter the way that determinants impact on each case. As such, this rich data helps inform and contribute to what has, until recently, been a limited body of knowledge in this field and is sure to stimulate future investigation in relation to this phenomenon.

In conclusion, intrinsic and instrumental case study by its very nature, “does not fit well into conventional notions of generalization” (Mills et al., 2010, p. p. 475). The choice of naturalistic inquiry ensured a focus on the interpretation and uniqueness of this phenomenon to individual situations. The primary point being that each family is complex. Each family influences, is influenced by and interprets a phenomenon differently owing to a range of micro and macro factors. Therefore the analysis and findings of this research are context-dependent and are not intended to be generalised. This thesis draws its legitimacy from the integrity of the methods described and applied within this study and the quality of the sources of data collected as evidence. From the sound methodology utilised right through to the epistemological and ontological premise from which these are based has emerged the authenticity of these interpretations.

4.11 Ethical and political considerations of the study

Guillemin and Kristin (2009) note that “it is a paradox in qualitative research that often the best data comes at the expense of participants revealing something deeply personal about themselves” (p. 292). This holds true in this research. Ethical dilemmas and political considerations occurred and they required consideration in the dissemination of the research findings (Denzin & Lincoln, 2011). These considerations were particularly pertinent due to my decision to be ‘in the field’ as researcher as well as observer. A number of processes and considerations were adopted to ensure a fine ethical balance between planning and collecting rich data right through the research journey to maintain a trusting and respectful relationship.

In preparation for the commencement of this research project, ethics clearance for this research from the University of Southern Queensland Human Ethics and Research Committee was sought and approved (See Appendix 5). This process included outlining the benefits of this research to stakeholders as well as outlining how this research would contribute to the body of knowledge that currently existed in this area. Details relating to considerations to broad ethical issues and appropriate assurances were also included. Participants were fully informed of the intentions of the study and the research methods to be utilised via a consent form prior to the interview being conducted (this included being guaranteed confidentiality) (See Appendix 4).

Prior to each interview the intentions of the study were reiterated and participants were encouraged to ask any questions or raise any concerns that they may have. Each participant was contacted and mailed a permission sheet. On several occasions I would meet for a short initial meeting with parents to outline the study, answer any questions on the intent of the study, discuss the handling of private information, issues of confidentiality and anticipated time commitments. Prior to the first interview being recorded, permission was sought again and issues of confidentiality addressed in terms of ensuring anonymity (Outlined in Section 4.9)

(Dockett et al., 2009). Participants were also reminded that they could withdraw at any stage without consequence.

4.11.1 The ethical dilemma in gaining trust

In order for participants to feel comfortable sharing their stories and disclosing information on their values, beliefs and practices, it was critical to develop a high level of rapport¹⁴ and heightened interpersonal relationships with parents and families (Goodwin, Pope, Mort, & Smith, 2003; Guillemin & Heggen, 2009; Kornblum, 1996). This approach required the intentional ‘blurring of the boundaries’ between the role of researcher and participant where there was often a seamless shift between myself as ‘researcher’ to other roles which included the ‘sharer of information’, confidant and friend (Dickson-Swift et al., 2006; Dockett et al., 2009; Higgs et al., 2006).

This process helped create a climate where I was not viewed as the expert which would have unbalanced the ‘power relationship’ “between researchers and people they encounter in the field” (Parameswaran, 2001, p. 1). Although the theory may reinforce the importance of the rapport building process, one could easily dismiss the value, or investment in time, of such a process. The following Journal entry (Journal Entry 6) written after my initial visit to the Hamptons captures the valuing of this process.

Journal Entry 6: No longer a lone voice in the wilderness

I continue to reflect on the imperative value of the lengthy rapport building process during each interview. Is it really worth the time? I respond quite quickly with the answer, yes, this process is invaluable, especially as a researcher, when one is entering someone else’s turf, somewhere personal like the family home.

¹⁴ **Rapport building:** Strategies employed to develop a level of trust and non-threatening environment between the researcher and the participant so that participants are comfortable sharing their experiences (Dockett et al., 2009).

Before the formal interview time, and in the process of my initial contact with Lucy Hampton to invite her and her husband to be a part of this research, I recall her expressing concern, and showing signs of anxiety and nervousness about her role as a mother, and of “not being the best sort of family”, or “ideal family for this interview”. I recall her expressing concern, worried about a messy house, the toys all over the place, not knowing everything or not being up with the most current theory reflected in parenting books.

In this case, it became evident that my efforts in rapport building were imperative in setting the scene, reinforcing a sense of informality, respect, and clearly communicating the type of information that I was interested in collecting. During my initial visit to the Hamptons, there was the need to reinforce that I was not there to judge Lucy or her family. I needed to highlight that I was interested in understanding the uniqueness of how they as parents were supporting active play in the home and the factors that influenced their decisions making. An important aspect of this initial, and subsequent visits, was to clarify the expectations that we both had about the process, and on my part, to be up front about what the study was about and the benefits the study could offer each party.

With the aim of gaining trust through a high level of rapport building and respectful dialogue (Liamputtong, 2007), a series of techniques were adopted, underpinned by a set of principles which included ‘Connectedness’, ‘Humanness’, and ‘Empathy’ (referred to as the CHE principles¹⁵).

¹⁵ **CHE’ principles:** A form of rapport building integrated throughout qualitative research to help break down initial communication barriers as well as build connections and trust with participants. Adapted from techniques initially referred to in developing rapport with online students (Reushle, 2005), ‘CHE’ techniques include informal chat, the sharing of ideas and information as well as informal jokes and banter.

Unpacking the CHE Principles

The initial idea for coining the term ‘CHE’ originated in the research of Reushle (2005). The CHE factor was one of 10 key online design principles recommended to help to build capacity with in-service teacher education students in an e-learning environment. Of particular relevance to this research were Reushle’s concepts of Connectivity, Humanness and Empathy (aspects of the CHE factor). Adopting these concepts in this research helped participants to feel comfortable with the interview process and shorten “the distance between the researcher and the researched” (Brown, 2009b; Johnson, 2009, p. 30).

Examples of this included informal chat, the sharing of ideas and information as well as jokes and banter. These techniques emerged from my gleaning strategies shared in numerous writings on effective data collection techniques as well as from my own experience of previous research where, after reflecting on a particular interview or series of interviews, I was able to identify a specific moment where the relationship between the participant and myself changed. This is often referred to as a ‘key turning point’ in rapport building (Pitts & Miller-Day, 2007).

More specifically, the first CHE principle, *Connectivity*, was important to establish with the participants and families in order to build a trusting relationship, and to overcome initial experiences of vulnerability, cautiousness and apprehension. I appreciated that it was an imposition for parents to allow someone into their home to interview them about their values, beliefs and parenting practices. Conducting these meetings at family’s home offered more flexibility to parents in terms of working around routines and busy schedules, and also altered the power differential as parents were in familiar territory (DiCicco-Bloom & Crabtree, 2006). This initial stage of the interview process is referred to by Pitts and Miller-Day (2007) as the ‘other’ orientation phase where the focus is not on the self, but on the other” (2007, p. 188).

This initial part of the process is concerned with gaining “entry or consent, establishing purpose and initial rapport whilst responding to any resistance from a participant who might challenge that role” (Pitts & Miller-Day, 2007, p. 188).

Initially *connectivity* was enhanced by using first names, taking care to use body language that would reflect ‘openness and acceptance’ and by engaging in eye contact and smiling. These strategies helped to validate parents’ stories and ideas by demonstrating openness to their opinions (Dickson-Swift, James, Kippen, & Liamputtong, 2007; Taylor et al., 2006).

As mentioned early in this chapter, the process of self-disclosure or the sharing of experiences was not necessarily always one sided but was more often what Pitts and Miller-Day (2007) in referring to Malinsowski’s work might say was a “reciprocal, symbiotic relationship” (2007, p. 180). It seemed only fair that if I was asking parents to share something about themselves that I could also open up and where appropriate disclose information on my own experiences and knowledge (Johnson, 2009). This process could be referred to as integrating a ‘humanness quality’. This level of relationship forming is often echoed in feminist approaches where researchers seek the self-disclosing of sensitive information about intimate or private aspects of people’s lives (Johnson, 2009). In this research the reciprocal nature of information sharing with parents was usually not of a sensitive nature. However, it would sometimes involve me sharing personal information or at other times sharing ideas and resources about ‘playing with children’ and strategies for ‘connecting with kids’. This view of reciprocity was consistent with my axiological position where both parties were recognised as being the ‘giver’ and ‘receiver’ of information.

Humanness, the second CHE principle, reinforces an atmosphere of informality. This included considerations in the way I dressed and presented myself in each micro-context. When attending interviews, I usually wore something comfortable and casual like jeans or slacks and a 'casual' shirt and sandals (Mack, Woodson, Macqueen, Guest, & Namey, 2005). As meetings were in the home usually during meals or around playtimes for children, wearing comfortable clothes enabled me to engage more actively with routines and play experiences (Fontana & Frey, 2005). This technique can assist in building a trusting relationship that overcomes initial emotions of vulnerability, cautiousness and apprehension on the part of participants.

The final aspect of the CHE principle is Empathy, a quality of emotional intelligence that aligns closely with a strengths-based axiological position when research is being conducted. Adopting this approach moves the interview focus away from one of interrogation to one where researchers are much more in tune with developing enduring relationships with participants, which in turn acknowledges and values their contributions and positions (Dickson-Swift, James, Kippen, & Liamputtong, 2007). Exhibiting empathy requires researchers to enact three specific steps. Firstly, they must communicate a deeper level of interest and an appreciation of participants' contexts and experiences by employing active, open-ended questioning and responsive listening techniques. Secondly, they need to demonstrate a genuine interest and a sincere desire to understand participants' viewpoints and worldviews. Thirdly, they should be intuitive and pay close attention to participants' body language, the tones of their voices and their emotional states, in order to comprehend more fully the multiple meanings of their words (Cherniss & Goleman, 2001).

Despite the previous justification, I do acknowledge that there is little doubt that my position as an academic and as a researcher impacted on the power differential, no matter how hard I tried to create an atmosphere of informality and equality (Kvale, 2006). I was also aware that tools used for my data collection, such as my recording device, was in its own way a signifier of control and power. Although no particular participant mentioned this, it could have had the effect of making informants feel uncomfortable or anxious. I was also aware that in many ways no matter how effective the rapport building process was, I was still asking participants to “make exceptions from their normal social roles” in allowing me to enter their inner zone and share with me their personal thoughts (Guillemin & Heggen, 2009, p. 293).

Importantly, I acknowledge that my approach was done with authentic sincerity. While I was willing to overcome a certain level of anxiety in order to reap the rewards of the depth of detail and honesty of stories shared by participants, many researchers may enter such an interview process with much trepidation, and feel that they are stepping over ethical or professional boundaries. However, in acknowledging this, I also appreciate that being aware of and applying the CHE principles, proved invaluable in developing a high level of trust and reciprocal respect during the interview process. Finally, there was the aim of ensuring that the interview experience was mutually beneficial to both parties whilst still negotiating through the critical junctures of ethical and effective interview relationships.

Due to adopting these techniques associated with the CHE principles, I did not experience any difficulties in moving between multiple roles (eg. researcher, friend, confidant, or information provider) for this research. In such cases where the conversation required me to move from researcher to confidant, I raised for consideration the suggestion that the recorder be turned off. However this was never a concern. Often these more personal or informal discussions occurred

after the recorded interview and were part of the dismissal process. During these times I may share an idea about baby massage, ideas on supporting active play with toddlers or may perhaps share a book or article that I had read on a particular topic. This approach proved to be another effective strategy for gaining trust and respect with parents and helped reduce power inequalities (Liamputtong, 2007).

4.11.2 Ensuring the authenticity to parent stories and voice

This research was interested in intentionally illuminating the ‘lived experiences’ of parents within the particular context of the micro-environment of the family home. This included gathering authentic stories and direct accounts of their experiences, values and knowledge of active play. Ethically this involved ensuring that it was the parents’ voice that emerged, particularly in relation to investigating their values and beliefs, and not mine that were superimposed. As discussed in Section 4.8, the various sources of evidence helped to maximise the authenticity of their voices ‘in situ’. It was then the intention that my voice, my stories and personal reflections emerged by weaving these at timely junctures throughout this thesis. The PMEM framework (outlined in Chapter 3) was then used with each family to help ensure that the idiosyncratic nature of individual contexts and stories were recognised.

4.11.3 The risk of an ‘epiphany moment’

In gathering rich data and in the process of self-disclosure, there was a potential risk of parents ‘opening up’ and potentially experiencing a heightened sense of emotion, or ‘epiphany moment’ (Smith & Kornblum, 1986). During these times the high level of rapport and respect gained during the research process, meant that any anticipated emotion or confrontation experienced by these events was well supported. As a mother myself and an experienced early childhood educator, I was comfortable in talking through this information with participants. As an experienced researcher I had previously had conversations with participants who had expressed

similar emotions and I had been able to support them during these times. I did, however, remind parents of contact numbers that were included with their copy of the consent form if they chose to follow up with a professional for further support. I also offered to stop the recording of the interview during this time if they preferred this option.

4.12 The focus of the study

In this section I discuss the delimitations of the study. This study focussed specifically on social ecological influences on parents' practices in supporting active play with their young children in the home. It is likely that other important caregivers such as extended family and child care staff would also have been of interest to explore to see if they were also affected by similar determinants and the extent to which social ecological factors influenced their practices, yet it was appreciated that this was beyond the scope of this study.

The scope of the study was not chosen specifically to investigate a range of factors that have been identified as influencing a child's ability to participate in active play opportunities in the home. Therefore sites were not chosen to explore a parents' history of high or low participation in physical activity. Families from different socio-economic backgrounds, parents' level of education, family structure and culture were also not specifically targeted. However, a growing number of studies have scrutinised these factors suggesting that they are important and do impact on participation in physical activity and obesity trends (Bracco et al., 2006; Moore, Diez Roux, Evenson, McGinn, & Brines, 2008; Sluijs et al., 2008). Although the above factors were not the primary focus of this project, this study did uncover a range of understandings on a number of these issues.

It is understood that all case study research faces trade-offs between sample size, depth and breadth (Elger, 2009). Because the sample size was homogenous (three middle class, white suburban families) findings are not generalisable. Nevertheless, as mentioned in the previous section of this chapter, findings from the study should inform, enlighten and provide valuable information that could be sourced to understand and design more targeted and meaningful family-based physically active play interventions (Jamner & Stokols, 2000) as well as considerations for delivering appropriate educational and support materials to meet the needs of parents and families.

In choosing to research only 3 cases, I am aware that the findings are contextual and very much confined to the particular micro-context from which they were extracted. It was not the intention of this approach to prescribe conclusions, rather through the rich construction of participant experiences, the reader is enabled to relate to this study vicariously (naturalised generalisation) and raise awareness of further insight into a phenomenon (Melrose, 2009; Mills et al., 2010; Stake, 1995).

Despite these limitations, this research was able to use a social ecological framework to more fully explore social and environmental factors that influence the decision making, beliefs, values and understandings of parents in relation to supporting their children's active play. Young children develop and socialise in environments where they spend large amounts of time with significant caregivers. These environments are important to understand in terms of initiating behaviours and values that often track into older childhood (Heckman, 2006b). This study generated rich data that enabled further clarity on understanding complex factors which influence the micro-environment of the family home and in turn young children's access to physical active play opportunities (Robinson & Borzekowski, 2006). Additionally, this study

provided a rare window into parents' understandings and choices in providing physical activity, experiences and environments whilst also contributing to the limited body of knowledge of the contextual influences that impact on these areas.

4.13 Looking forward, Chapters 5, 6 & 7 - Introducing the families

"...the practical space of journeys actually made" can be experienced in the difficulty of recognizing even familiar landscapes when they are represented on paper (p. 2), Bourdieu, quoted in Warr (2004).

The proceeding Chapters, 5, 6 and 7, introduce the families studied in this research, Chapter 5 introduces the Masons, Chapter 6 introduces the Hamptons and Chapter 7 introduces the Calming family. Each chapter analyses and interprets (my reading) and the retelling of participant stories. For the most part, findings reported are based on categories and subcategories derived from semi-structured interviews, contextual observations (CAT audit) and personal reflections as described in sections 4.9 of Chapter 4. The aim of these chapters is to move through the unfamiliar territory of the micro-environment of the family home to better understand the impact of social ecological factors on parents' support of active play with their young children.

Each chapter is broken into three main sections section: Section 1 opens with a story that attempts to capture the essence of each family often drawing on my first impressions and encounters of the relaxed nature of engaging with each family. The section proceeds to then provide a contextual overview that helps set the scene and provide the reader with a representational picture of the background of the family, including several images of the family setting. In Section 2 the format shifts and uses two very distinct styles of analysis (structured and personal) as outlined in section 4.10.2 of Chapter 4. Together, these two approaches help

recreate the complexity of the research encountered, offer insight into the types of active play experiences, opportunities and environments that parents provide for their young children, as well as a heightened awareness of the influence that environments have on parental beliefs, understandings, choices and knowledge of active play. Finally, Section 3 makes specific use of the conceptual framework to better understand the social ecological impact on how parents are influenced by various determinants in supporting active play opportunities in the home environment.

4.14 Summary of the chapter

With the ‘home context’ being a key geographical location where physical activity of children takes place, it was important that this study be positioned in the critical environment where a parent’s influence is most profound and where the private home space is now also a child space (Karsten, 2005). This chapter provided a detailed overview of the epistemological, ontological and axiological positioning of myself as researcher and how this impacted on the way I approached this research and the choice of data collection. The chapter sought to make visible the rationale and relevant theory behind an interpretivist approach and multiple tools adopted for exploring the ‘lived experiences’ of parents.

The choice of these methods and tools, particularly that of ‘storying’ was important in order to help illuminate the multiple discourses and conversations with parents (Warr, 2004). These included parents sharing their stories of their attitudes, values and understandings regarding the provision of opportunities for young children to participate in physically active play. The methodological decisions were shared in this chapter and included adopting an interpretivist paradigm with a naturalistic focus to investigate the complex and interrelated factors that

influence the unique micro-context of the family home (Denzin & Lincoln, 2008; Schwandt, 2000).

From this exploration I have come to appreciate that it is possible to adopt a complementary ontological position that values the reciprocity between a social constructivism and a socio cultural understanding of the world (Packer & Goicoechea, 2000). Whilst it was anticipated that this methodological approach would allow me to better understand the lived experiences of others it was also important that this approach lead to ‘consciousness raising’ in others and in turn stimulate action in terms of intervention and support for families (Denzin & Lincoln, 2011).

Chapter 5 Meet the Masons



Image 5.1. The Mason family (including Millie & Maxie)

Sarah, *“Helen’s so excited. She’s been saying, “I can’t wait to tell Alice about all the things I love to do!”*”

I was welcomed into the Masons’ home by Sarah and her daughter, Helen. I popped my things down and informally chatted with them both. Within a few minutes of arriving Helen invited me into her room to show me her toys. We chatted there for quite a while as she enthusiastically pointed out the favourite toys she loved to play with. I asked her for permission to photograph these items and invited her to do the same. As we did this, Helen chatted about which were her favourites and how she played with them. Sarah was occupied in the kitchen. She called out as we were finishing up in Helen’s room and invited us to join her for a cup of tea and some nibbles.

As we were sitting down, Tom arrived home. This was rare, as Tom works long hours as co-owner of a local gym. It was a bonus for him to be able to join us for tea and a bite to eat. The interview process became quite busy, and a little bit overwhelming for me, as at times, several conversations occurred at once and I was trying to spread my time between Sarah, Tom and

Helen whilst remembering what sorts of questions I needed to ask. We all sat around the table drinking tea out of a Japanese pot and little cups and snacking while Tom ate his lunch.

5.1 Overview of the chapter

In Chapter 1, I indicated that the intention of the study was to explore the complexities of the lived experiences of parents in relation to their support for active play opportunities with young children. Current literature was surveyed in Chapter 2, with the aim of providing a background understanding on the topic of early childhood health, active play and the role children and families had in this process. It was revealed that environments (Ball et al., 2006; Sallis & Glanz, 2006) and a range of determinants, play a significant role in influencing the health behaviours of children as well as parental support and valuing of these behaviours (Anzman, Rollins, & Birch, 2010; Spurrier et al., 2008). The chapter also explained the important role parents have as ‘gatekeepers’ in supporting experiences and environments of physical activity. Chapter 3 was used to articulate how a conceptual framework was valuable for understanding the idiosyncratic nature of social ecological factors and their impact on parent practices within the micro-environment of the family home. Chapter 4 then explained and justified the adoption of the research methodology for this study that would best support the investigation of a phenomenon, illuminate conversations with parents and help to explore the interrelated factors that influence the unique micro-context of the ‘family home’ (Denzin & Lincoln, 2008; Schwandt, 2000).

This chapter (Chapter 5), is the first of three analysis chapters to draw on theory and apply the PMEM Model (Parental and Micro-Environmental Model – explicated in Chapter 3) to better understand the lives, stories, and factors that impact on parents and their support for children’s active play, whilst also acknowledging the idiosyncratic nature of these influences. The layout

of Chapter 5 sets a template that will also be adopted by the other two analysis chapters (Chapter 6 and 7), with the goal of thoroughly examining and generating a rich picture of each case (Stake, 2003).

Each chapter contains a Figure (e.g. Figure 5.1) located at the end of the chapter, which is a personalisation of the PMEM model. The model includes a range of factors and characteristics specific to the idiosyncratic nature of each family and reflects the complexity and interconnectedness of these factors. This model nests the parent and child, referred to as the parent/child dyad (Dwyer, Higgs, et al., 2008), together within the micro-environment of the family home. It also recognises the unique determinants located within the home and the intra and interpersonal characteristics of the parent and child. Recognising the multitude of factors that impact on the micro-environment of the family home, the PMEM model for each family includes specific details of factors that sit both inside and outside the home environment including those from the micro and macrosystem.

In Chapter 5 the ‘context-dependent details’ about the Mason family and their decision making and practices for supporting active play will be explored. Subsequent chapters will then follow, introducing and examining The Hamptons (Chapter 6) and The Calmings (Chapter 7). These three families are at the heart of this research, therefore the beginning pages of each chapter start with a story that introduces and helps to generate a picture of each family. Appreciating that individuals are embedded in a unique set of contextual conditions (Oers, 1997), the first section of each chapter provides a detailed overview of the family, its members and key features of the built environment that encompasses this complex domestic space.

The next part of each chapter, titled ‘Active play experiences, opportunities and environments’) turns to responding to the first research question, “*How do parents support the active play experiences, and environments of their children (birth to four)?*”. This part of each chapter illuminates parent stories and shares details on the unique types of behaviours and environments they provide in efforts to support active play. Moreover, attention is paid to discussing the particular resources (physical, social and education) that parents draw on in making decisions about these practices and environments and the influence their children have over these spaces and behaviours.

The chapter then moves to a section titled ‘Contextual factors impacting on parents’ beliefs, choices, knowledge and understandings of active play. The goal of this discussion is to address the second research question, “*How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children?*” The adoption of an idiosyncratic approach of the in-depth understanding of the characteristics of individuals (Allport, 1962) assists with the discussion for this section, as it helps to focus on the nuance of precipitating factors that influence parent thought, behaviours and practices. Using the PMEM model to trace the origins of these behaviours and commonly held assumptions is an essential aspect of Section 5.3 as this helps to better inform the research questions and gain a better appreciation of the pervasiveness and complexity of social ecological factors in relation to individual habits and behaviours.

The final section of each chapter scrutinises data relating to the third research question, “*How do ecological factors influence the way that determinants are skewed to become barriers or enablers of parental support for active play experiences and environments?*”. A particular focus of this discussion is highlighting the unique ways a number of determinants (perceived

risk, time and the physical environment) are skewed by a range of ecological factors. In order to effectively support parents, accurately target the key issues or factors impacting on their support of young children's participation in active play and protect against possible health determinants in the future (Campbell et al., 2008), we need to first understand how families live and the unique patterns and factors that influence them (Jamner & Stokols, 2000). This chapter focuses 'The Masons' and reveals the experiences, values and practices unique to their micro-environment.

5.2 *The Masons' context*

The data in this section of Chapter 5 provides details of the micro-environment that helps create a picture or contextual overview of the Mason family (often termed 'an environmental scan'). It consists of a range of information including demographic, interpersonal and intrapersonal details of each family member as well as information on the physical environment of the family home and neighbourhood. This information has also been translated onto the PMEM model for the Mason family (See Figure 5.1 at the end of this chapter) and is referred to often within this chapter to help make sense of the environment and individuals being studied.

5.2.1 The family

The Masons are a very active and busy family comprising of parents Sarah (45) and Tom (40) and their four and half year old daughter Helen (See Image 5.1). They also have two chickens (Beauty and Bell) and two dogs named Millie and Maxie who form an integral part of their family. They live on the Eastside of one of the busier streets in a town in South East Queensland.

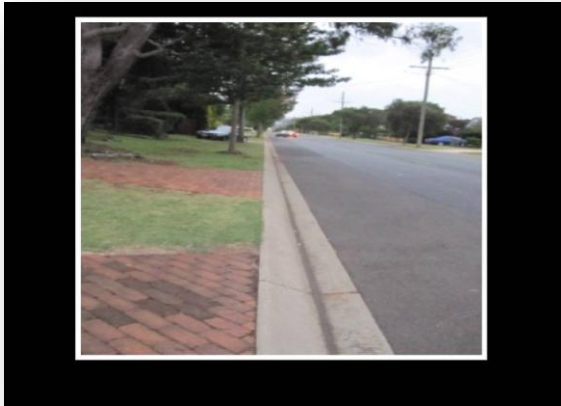


Image 5.2. The Masons' streetscape showing a major tree-lined street

The Masons have been married for ten years. Initially Sarah had trouble conceiving and experienced a number of miscarriages prior to and after having Helen. Tom was thirty-five and Sarah was forty when Helen was born. As a family they love spending

time together at every opportunity and Helen is the focal point of Sarah and Tom's world.

5.2.2 The home and neighbourhood

The Masons have lived in a tidy three bedroom brick home for the last nine years. The house is situated off a relatively busy street that extends east to west nearly the full length of the town (See Image 5.2). The neighbourhood is located in an established part of the city with most yards, as well as the streetscapes, lined with large trees and well established gardens (See Image 5.3 and 5.4).

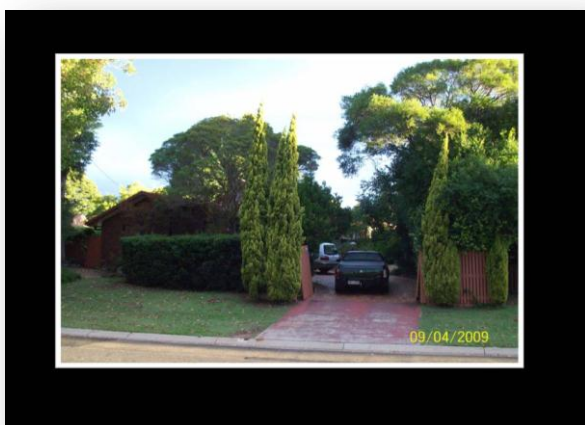


Image 5.3. View of front yard with close access to busy street (Note, yard surrounded by bushes and high fence)



Image 5.4. Neighbourhood playground which includes a range of quality equipment

Two new housing developments are within close proximity to the Masons' neighbourhood. These areas comprise of larger, more costly modern homes with smaller backyards. These parts of the community offer several well-presented leisure areas comprising of green spaces which include children's playground and play equipment (See Image 5.4).

5.2.3 The parents – Tom & Sarah

Tom is the co-owner of a local gym and has been working in the fitness industry as an exercise physiologist for the last sixteen years. He is also part owner of a local health and fitness business. Tom is often required to work very long hours, regularly starting at sunrise with a run or training session at the gym with a client and then working late into the evening. Any spare time that he has during the week is divided between family and fatherhood commitments as well as his own sporting commitments, which primarily revolve around Touch Football (a game similar to rugby played with six players on each team, often with mixed teams and not usually as rough).

After moving from a remote country town (in West Queensland) when he was younger, Tom, his parents and his younger sister, relocated to their present place of residence when he was nine. He spent the rest of his schooling days in town where he attended a local Catholic primary and high school operated by the Christian Brothers. Currently, Tom is still very heavily involved in Touch Football at a high level and also chose to play Rugby Union last year. His business is based around health, fitness and training, with many hours a day dedicated to training, motivating and educating his clients.

Sarah finished school in grade 10 and started work as a receptionist. She walked the five kilometres to work and back each day. After several years, she decided to complete year 12 and received a degree in teaching where she graduated and specialised in the field of drama and

the arts. Later she made the decision to move into tertiary teaching. She currently lectures part-time at the local University and specialises in literacy, art, drama and education. In her spare time Sarah is busy caring and spending time with Helen and associated home duties. Sarah's limited leisure time usually revolves around a little bit of personal exercise (about twice a week) and an art class once a week in the evenings. Tom's long hours of commitment to business and training, mean that Sarah is limited in the amount of time she can dedicate to her own fitness and social commitments.

5.2.4 The child - Helen

Helen is the vivacious daughter of Sarah and Tom. She is sometimes shy and may hold back when meeting new people. Once she is familiar with others, Helen is very talkative and confident, particularly in her own environment. Helen is comfortable in the presence of adults and doesn't mind speaking her mind and expressing her point of view on topics she feels passionate about. Helen is attending Prep at one of the town's finest girls' schools. At the time of the interview Helen was 4 years 7 months old.

Helen is an only child and has grown up in a loving and nurturing environment where she is treasured and is the cornerstone of the family. Helen enjoys playing with her friends and her pets and in her leisure time she enjoys art experiences, physical activity (walking, running and riding her bike) and ballet classes. Image 5.5 was captured during my first visit to the Masons whilst Helen was sharing her special toys with me. She said she loved dressing up in her pink fairy costume and doing magical fairy dances.

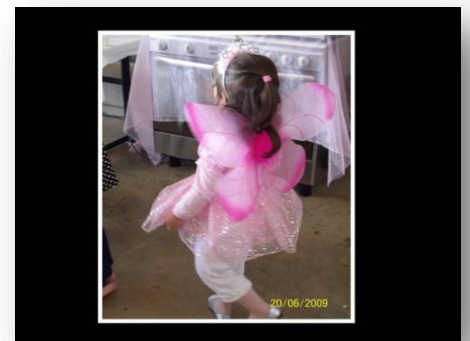


Image 5. 5. Helen demonstrating her magical fairy-dance

5.3 *Active play experiences, opportunities and environments*

As explicated in Chapter 2, the environment (temporal, human and physical) is understood to be a perceived or physical boundary that includes the built environment, neighbourhood, buildings, and the places and spaces in which people live and work (Center on the Developing Child at Harvard University, 2010). Adopting Jamner and Stokol's (2000) position, it is understood that the home is an environment that exerts great influence on individual health and well-being patterns. The purpose of this section of Chapter 5 is to provide insight into Question 1, where discussion will focus on the type of active play experiences, opportunities, resources and environments that were supported by Tom and Sarah Mason within this micro-environment, the influence Helen had on these experiences, and other social practices and micro-environments that were utilised as a resource for supporting active play. Discussion takes place under a number of key headings:

- 5.3.1 The provision of physical play spaces (indoor and outdoor);
- 5.3.2 Helen's interest and influence (intra/inter) on active play;
- 5.3.3 Social practices that support active play; and finally,
- 5.3.4 Other micro-environments used as resources for supporting active play.

Although the headings referred to above will be used as part of the template that will also be adopted by Chapter 6 and 7, the behaviours, and environments discussed in this chapter, highlight the uniqueness of the Masons' context. These features are analysed through a social ecological framework (the PMEM model) that helps to identify the inter-relationships of these social and cultural influences located within the various micro and macro systems.

5.3.1 The provision of physical play spaces

The indoor environment

Within the Masons' micro-environment there were a number of indoor and outdoor play spaces and resources for active play. In exploring these features it was important to understand how

these spaces were used and the types of support provided by Tom and Sarah in these environments. The indoor environment offered limited space for active play. Those opportunities that did occur usually took place on a mat near the kitchen table, the lounge room where Helen enjoyed dancing and on Tom and Sarah's bed, where Helen sometimes participated in acrobatics and rough and tumble play.

Most play environments inside the home were used for fine-motor and quiet dramatic play. These environments included Helen's bedroom, the bathtub and a small mat area near the kitchen.

Image 5.6 shows a collection of toys placed near the bathtub, all supporting fine motor play. This image was documented during my first visit to the Masons. The space near the kitchen was a popular place for dancing, however usually this space was a place where Helen engaged in fine motor play such as puzzles, musical instruments and craft experiences.



Image 5. 6. Helen's fine- motor bathtub toys

This area was quite a social space where Sarah and Tom would engage with Helen and provide feedback and support while they sat at the table or prepared meals. Image 5.7 shows the mat play area tucked in behind the kitchen table, as well as a collection of fine-motor toys located to the left of the mat against the kitchen wall. The lounge room

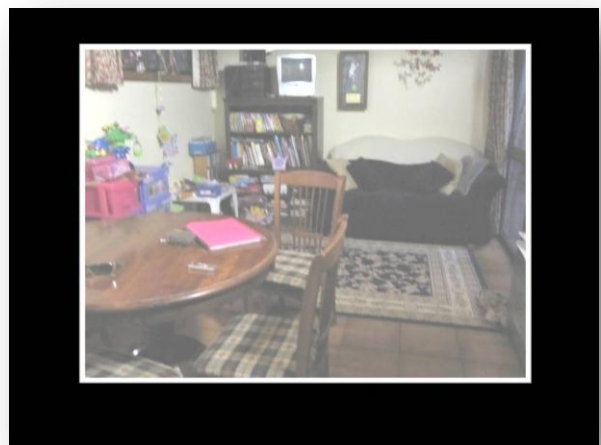


Image- 5. 7. Indoor mat and play space area near kitchen (primarily used for fine motor play)

offered a space where Helen could enjoy dancing to music while watching children's television. This space was also used for fine motor play or watching a DVD before dinner.

The type of resources and the experiences observed within the indoor environment of the Masons' home confirmed current research that suggests that the indoor environment offers limited space for active play, and that large spaces afforded in outdoor play provide opportunities for a greater range of movement experiences (running, turning, building, moving quickly through space) and 'risk-taking' (such as climbing trees or different ways to balance and negotiate through space) (O'Connor & Temple, 2005; Spodek & Saracho, 2006). It is important to highlight that the limited space or opportunity for indoor active play was in no way a reflection on Tom and Sarah's valuing of these experiences. It was purely related to the fact that there was a lack of space available within the home.

Of interest to note, was that whilst Helen engaged in both fine motor and gross motor play in the lounge room, it was also a space where sedentary behaviour occurred. Although the Masons owned only one television and limited Helen's access to screen-time, there was evidence of these opportunities being enjoyed and valued as a 'shared time' between Helen and Tom.

Helen – *We watch the 'fall over show'.*

Tom - *Oh yeah. On Saturday nights we watch the 'fall over show' together.*

Alice – *Hmmm, I don't think I've ever seen the 'fall over show'!*

Tom – *'Funniest home videos' [An Australian show specialising in video footage of 'funny accidents'].*

Helen – *Yes, and they do funny things.*

Tom – *Helen calls it the 'fall over show' because everyone falls over.*

The interpretation of this anecdote was that for the Masons, the act of TV viewing was more about enjoying shared viewing, and being in each other's company as an opportunity to bond, rather than being purely identified as an example of sedentary behaviour. These types of values and behaviours are not raised in the research regarding factors impacting on sedentary behaviour and screen time, nor is it an environmental factor noted by Salmon et.al (2005) in a study into factors within the environment of the family home associated with TV viewing. Yet for the Masons, although they valued the importance of physical activity, there were still times set aside for sedentary activities such as watching the 'fall over show' together.

Creating and modifying outdoor play spaces

The outdoor environment is understood to be an ideal place for supporting children's physical play (Children's Play Council, 2002). However, a range of factors, including the types and amount of equipment, 'overscheduled children', perceived risk by parents (Zubrick et al., 2010), lack of space for outdoor play (due to smaller blocks of land, high density housing, or larger homes with adult entertainment areas rather than 'traditional grassed



Image 5. 8. Backyard area showing swing set, grassed area and Maxi

backyards'), can influence the frequency and type of play behaviour that occurs. Characteristics such as these are also hypothesised as determinants that impact on the type of parent support for and children's participation in active play within these environments, whilst also recognizing the idiosyncratic nature of these factors with each family (Spurrier et al., 2008).

For the Masons, the backyard offered a significant outdoor space for supporting active play. Image 5.8 captures this environment and shows the high fence surrounding the yard, the recently laid grassed area and swing set. Whilst roughly an average to small yard (approximately 640 m²), this environment offered a range of active play opportunities and play spaces that were enjoyed not only by Helen, Tom and Sarah but also by their dogs Millie and Maxi. The outdoor area also included a small chicken run, a climbing frame, a paved area which provided a great space for bouncing balls, using a scooter and bike and a dramatic play area near the small outdoor children's play house. In this example Sarah mentions efforts made to ensure the backyard was conducive with active play.

Sarah –*This space is actually a really good area for us, and we put the grass in deliberately. During the worse part of the drought we had a paper bark tree in the back yard and all the grass that was under it just died off and there was nothing.*

We realised that Helen really didn't know what grass was when we had her at the park when she was just starting to walk at 12 months of age and she'd put her feet down. And yet our other friends would put their kids down and they would crawl all over and have handfuls of dirt and grass and we were really horrified. We ripped out the tree and we put in turf so that she would have soft grass to play on.

For many parents of young children, particularly first time parents, social networking and the sharing of information and experiences are understood to be key determinants of the health and social well-being of families (Commonwealth Department of Family and Community Services, 2000; Kolar & Soriano, 2000). The theory regarding social capital, outlined in Chapter 2 (See Section 2.5.2), revealed that social capital was a complex network of relationships including social networks, culture, information and resources that individuals have access to or can draw upon (Dwyer, Higgs, et al., 2008; Jamrozik & Sweeney, 1996). In reference to the anecdote

above, it was evident that access to this ‘social capital’ (including access to other parents, extended family and friends) significantly influenced Tom and Sarah’s decision making regarding the support and the types of environments they created within the home (Kolar & Soriano, 2000). The Masons revealed examples of social capital when they discussed a number of reasons for choosing to support the outdoor environment and alter its appearance and function.

The anecdote also makes reference to Helen’s age (twelve months) and the Masons’ comparison to other children of the same age. Theory on social capital (Putnam, 2000; Ziersch, 2005), supports the point that family life and the Masons’ decision making with regards to developing strategies to facilitate and support Helen’s active play, is complex and doesn’t occur in a vacuum. The resources they utilised included background reading on child development, Tom and Sarah’s educational theoretical understandings from their tertiary education background, as well as ideas offered through networking with family and friends.

From a social ecological perspective (Bronfenbrenner, 1979; Stokols, 2000), it is understood that the Masons’ social capital was sourced from and embedded within and beyond the micro-environment of the family home. All these systems of influence were understood to be crucial aspects that they utilised to help navigate through their decision making and parenting practices for supporting Helen’s active play environments. The PMEM Model was valuable



Image 5.9. A collection of outdoor play toys including a mower, push car and gardening set

in tracking these social support sources (See Figure 5.1 located at the end of this chapter). It was appreciated that their micro (including family, friends, peers, various extra-curricular activities, education and care services) and macro system (including access to professionals, tertiary education, the internet and health promotion materials), were both significant aspects of social capital influences. The social ecological foundations from which this model originates helped to appreciate that the influence from these various environments may converge on parents simultaneously or in conjunction with other factors, all influencing behaviours and practices.

Both parents made a conscious effort to prioritise (Veitch et al., 2006) and directly ensure that the outdoor environment motivated Helen to enjoy getting outside and participating in active play experiences (Discussed in detail in Section 5.3). Image 5.9 (taken during my first visit to the Masons whilst discussing outdoor equipment with Sarah) captured some of the resources that were used for playing in the backyard - including a toy mower, a toy car, a gardening set and in the background you see the base of the cubby with lots of equipment stored inside (a cubby is a small outdoor playhouse). A significant component for the success in the creation of these play spaces was the confidence, priorities and the perceived importance placed on active play experiences and environments by the Masons (Troost et al., 2003). This was continually evidenced by being 'in the field' and through the various data collection methods employed.

5.2.2 Helen's interest and influences (intra/inter) on active play

Whilst evidence has been shared of the high priority for active play experiences provided by Helen and Tom and their use of various social capital to support this process, theory related to 'the parent/child dyad' (Dwyer, Higgs, et al., 2008) reinforces that unique determinants based on the intra and interpersonal characteristics of a child, will also influence these efforts. These

factors are important to analyse at this point in order to provide additional insight into Question 1 regarding the impact of Helen's characteristics (Ball et al., 2006; Ewing et al., 2003) had on influencing the active play experiences, opportunities, environments and resources that took place within the micro-environment of the family home.



Image 5. 10. Helen's display of Russian dolls

Even at the young age of four, Helen was at an age where she was able to articulate well-formed opinions of her interests in, and choices for active play. Although her family, peers, educational and extra-curricular contexts (examples of other microsystems) played a critical role in shaping these behaviours, Helen's temperament, gender, age and a range of other intrapersonal and interpersonal characteristics, abilities, likes and dislikes, were all determinants in this process. These factors influenced her behaviour, experiences and play spaces (Castelli & Erwin, 2007; Dwyer, Higgs, et al., 2008). A number of these will now be discussed.

Helen engaged in a wide range of experiences that took place both indoors and outside the home. She loved playing with intricate toys such as a set of Russian dolls (See Image 5.10), and making things out of paper and craft materials. However, she also showed a preference for more open spaces, dramatic play, dressing up and even modelling the daily routines of adults, such helping to hang out clothes, gardening and cleaning. In addition, when asking Helen about her active play interests she expressed her enjoyment for an extensive range of these experiences. Her enthusiasm with gardening and mowing were reinforced with Sarah

commenting, “*She loves to push the mower around for hours and hours. She would see me get out the gardening tools, get out the bucket and the secateurs and gloves and she’d get hers out and start to help me garden.*”

The types of social support that Sarah and Tom provided for Helen will be discussed later in Chapter 5 (Section 5.3.3), however in responding to Question 1, it is important to raise here the point that Helen’s personal characteristics (Dwyer, Higgs, et al., 2008) were also a determinant in the types of experiences and support she sought from her parents that could either be in opposition or align with the Masons’ efforts. The most common type of parent support she enjoyed was facilitated play experiences (Dzewaltowski et al., 2008; Welk et al., 2003). These types of experiences were when her parents scaffolded play, like in the case of providing resources or engaging in play such as ‘rough and tumble play’, fairy play, gardening and walks to the park. Other parent facilitated experiences that Helen enjoyed were more social and extra-curricular play opportunities, like ballet, swimming lessons, meeting up with friends in the park or visits to a friend’s house. Due to Helen being at a developmental stage where she was happy to engage in solitary play (Van Hoorn, Nourot, Scales, & Alward, 2011), she expressed enjoyment for experiences such as swinging, climbing, using her scooter and playing on her own or in the company of the dogs and chickens. This pleasure for solitary play experiences was evidenced during a conversation where Sarah and I were discussing how Helen used the outdoor spaces. I noticed Helen dancing by herself with obvious enjoyment and looking very comfortable with spontaneous solitary play.

Alice – *She is just breaking into dance.*

Sarah – *Well she does this all the time.*

Although not specifically solitary play, the next anecdote shares an example of Helen using Mollie and Maxi as another source or resource for active play.

Helen– *[Talking to the dogs] Do you want to dance? Ah, what a clever dog? You're such a clever dog aren't you? Watch Maxi! [She calls to Sarah and me to watch Maxi].*

A cubby with a different purpose!

The next example of the influence that Helen excerpted on her opportunities to participate in active play, was shared by Sarah in a conversation where she talking about the types of outdoor play that Helen enjoyed. Sarah's conversation moved to commenting on a small outdoor playhouse (the cubby). Sarah remarked that some resources and active play environments had not been popular with Helen and that Helen had chosen to adapt or use the resource for a different purpose. Helen preferred dramatic play in open spaces, rather than being confined in the small 'playhouse' (See Image 5.11).



Image 5. 11. A cubby, or storage shed?

Sarah – *She's never been very interested in playing in that house, which is kind of curious, but she always loved the sandpit.*

Sarah – *Yeah, this is one of those things that people think kids will like, but she's never really been interested. And when she was very small I used to put the little kiddies tables and chairs in it and say, "let's play tea parties" and say, "come on" and set up the play. And it's ended up as a storage shed because she's never been interested. She'd prefer to get the tea party out, pull out a picnic rug and sit out here and have the tea party.*

This example reinforces Helen's ability to proactively influence her choice of active, play experiences and the places they occur. A number of studies confirm this, reporting mixed results of associations between the types of environmental attributes (like home equipment)

selected by parents, and children's physical activity levels (Davison & Lawson, 2006; Sallis et al., 1993). However, although there are mixed results regarding the level of influence parents have in their support (home environment, equipment and resources) for older children, there is limited research that explores this phenomenon with younger children. As younger children have less control over their environment, particularly in the first three years, there could perhaps be a stronger association between various aspects of support provided by parents and the impact this has on childhood activity patterns and participation (Dwyer, Needham, et al., 2008).

The final two anecdotes provide further evidence of how Helen expressed strong opinions about her experiences and play behaviours. In mentioning an example from a ballet concert at the end of the year Sarah tells of Helen's frustration about the restrictions of the conventional tutu, "*and she said, "You can't move in this thing and it's itchy!"*"

The next anecdote highlights how Helen chose to interpret her play differently in different contexts. This was evidenced in the types of play that occurred during Helen's time at kindergarten with her peers. This type of play didn't necessarily translate to the home context. Also of interest is the example included below that illustrates Sarah's attempts to facilitate different types of dramatic play (pretending to impersonate or role play various characters), yet this facilitation being limited, due to Helen having her own ideas of how, and with what resources she wanted to play with.

Sarah – *Well it is very structured in the class situation (referring to Helen's participation in ballet classes), but at home it is all about the play. At home there is nothing formal about her ballet, it is all about putting the music on and having fun and pretending to be whatever she needs to be, a ballerina, a witch, a queen, a princess.*

The conversation continues and moves to discussion of Helen's choice not to role play being a ballerina at kindergarten.

Sarah – *That's what I find so curious. She's not at all interested in dressing up as a fairy at Kindy. All the other little girls have got their wings on.*

Sarah – *At home she's got a box of dress-ups and I've got a whole lot of dress-ups Alice, and as an ex drama teacher I have African costumes and things from everywhere, yet she's not really interested in doing anything but being a princess or a fairy, which drives me insane because I think there are so many other things you could be. I have a policemen's outfit, I have a cowboys outfit [laugh], I have a hunter's outfit, not interested in any of those. It's the old gender debate, it does make me laugh the things that she's choosing or electing to do over what I might like her to do to have a much wider range of experience.*

From this analysis in responding to Question 1, the evidence reinforces that although Tom and Sarah may provide experiences, environments, and in this case, a 'range of dress-ups' (resources) for Helen, a number of Helen's individual traits and characteristics will play a role in determining the amount or ways that these resources are utilised.

5.3.3 Social practices that support active play and an active lifestyle

A number of studies from emerging research are confirming that socially patterned exposure (attitudes and behaviours established early in life), particularly by parents, can influence a child (Karsten, 2005; Lawlor & Mishra, 2009). For very young children, parent social practices in the home are understood to either engender opportunities for, or resistance to messages, values and health behaviours such as active play (Dietz & Robinson, 2005; Koplan et al., 2007). As discussed in Chapter 2, there are two main types of socialisation, these being parental support for physical activity (parental encouragement and facilitation) and parental interest in physical activity (involvement and role modelling) (Welk et al., 2003).

The next subsection continues to explore issues relating to Question 1, however, the analysis turns its focus to understanding how the human environment and aspects of social practice impact on the environments, resources and support provided for Helen's active play. As an opening move, a 'Heartfelt Moment' is shared. As discussed in Chapter 4, these types of personal stories provide a sensory account of a particular context so that others (the reader) may vicariously gain a sense of the case. These 'Moments' (also included in Chapter 6 and 7) attempt to capture the rich detail and nuanced nature of each family.

Heartfelt Moment 1: Active play – an integral part of togetherness time for the Masons

During my second visit to the Masons, I asked if we could all go for a walk and use this opportunity for them to show me around their neighbourhood and the local park that Helen enjoyed playing in. Afterwards, reflecting on the interview and this experience, I made a note of my impressions.

We have just arrived home from a lovely walk in the light rain on a warm overcast evening. On spending times like these with the Masons, there is an increasing sense that as a family, physical activity and active play are an integral part of what makes up their collective identity. It is uncomplicated, natural, fluid and emerges out of their love for one another. These active times are bonding moments where they appear to connect and become closer to one another. Their conversations during these times are a mixture of light banter and laughter. I can't help but feel that these experiences are destined to ensure that Helen receives positive early experiences and behaviours in relation to active play and physical activity in the future.

Heartfelt Moment 1 continued.

These active play experiences shift and flow depending on the interests and experiences of her parents as well as Helen's opinions and interests. There are times when Tom shares his love of movement with Helen, teaching her sport skills like ball handling and fundamental movement skills like hopping and jumping, to more rough and tumble play where they perform acrobatic skills on the double bed in her parents' room. While time spent between Helen and Sarah is often more creative and dramatic, where they could one day be fairies swirling dusters and cleaning clothes in the backyard and another day socialising and enjoying active play with friends at the local park on a sunny Sunday afternoon. Together, as a family, active play entwines large family gatherings of outdoor cricket, body surfing at the beach during holidays or long walks to local parks on a crisp autumn day with their two dogs (Millie and Maxi) underfoot. These special times are stolen from other imposing pressures and time restraints of the day. Precious but purposely prioritised.

'Heartfelt Moment 1', highlights the different types of social support that Helen enjoyed with Tom and Sarah. As evident in the sharing of this story, it was hard to separate the Masons' passion for being active and healthy from their day to day life.

For Helen, there was a close association between 'family time' and the valuing of an active lifestyle. Active social practices were closely connected and part of the Masons' routine. These practices enveloped many aspects of what made up Helen's micro-environment. Although Sarah and Tom were recognised as being only one of the 'gatekeepers' in Helen's life, they supported research that confirms the significant role they played in sculpting these active play behaviours (De Bock et al., 2010). This was evidenced in a story Tom shared about a teacher at Helen's school. In retelling this story, he mentioned that the teacher had asked

Helen what she liked the best at school, and Helen responded that she liked “*music day and library day*”. Tom continued, “*and then Mrs J said, “What about physical education?” And Helen said, “We do physical education all the time at home”*”. Tom explained that Helen was making reference to the fact that she always engaged in physical activity at home and that it was closely related to their daily practices, so she saw physical activity at school as something that wasn’t such a big deal or overly special.

Different types of support offered by Tom and Sarah

Consistent with Welk’s research (2003) the Masons shared a number of accounts of their support for Helen’s active play. These examples could be categorised as ‘parent involvement’ (Pearson et al., 2009) and ‘parent facilitation’. Parent involvement consisted of experiences where they directly participated in active behaviours with Helen. Whilst instilling positive messages about health and physical activity, these experiences vicariously emphasised a range of other social messages. In this instance the messages reinforced that active play was fun and valued as part of everyday life. These experiences were also a time for building relationships (bonding) (Dzewaltowski et al., 2008; Ginsburg, 2007) and an opportunity to reinforce that Helen was loved. The next few examples highlight the different types of support offered by Tom and Sarah.

Tom –*Most of our connections are through physical activity, so we’ll be bouncing on the bed and jumping. We’ll also do a lot of balancing.*

Tom’s involvement in active play with Helen included a wide range of ‘task oriented’ experiences (focussed on practicing a skill such as hopping or learning to surf or swim) and rough and tumble play (RTP). It was obvious that no matter what type of play experiences Tom engaged in with Helen, these times were embraced by both of them as opportunities to bond and build relationships. Helen and Tom appeared to be very comfortable with

experiences such as rough and tumble play. This type of active play, more often associated as ‘gendered activity’ that occurs between fathers and sons (Paquette, 2004), was an opportunity for Helen to learn that: moving with dad was fun, the difference between aggression and play and messages such as persistence, determination and a sense of achievement in trying to defeat her father. However, these experiences did support the gendered role of Tom being more prone to support vigorous, gross motor, ‘risk-taking’ behaviours (Pate et al., 2004) than that of his wife, Sarah who had a greater proportion of the caretaking and facilitative roles (Baxter, 2010).

Sarah’s involvement in active play with Helen was quite different from Tom’s. In commenting that “*there are no other playmates, apart from the invisible ones, or the dogs*”, Sarah often supported Helen’s active play in the role of a playmate where they would play games like, ‘What’s the time Mr Wolf?’ and ‘Simon Says’. Sarah and Helen also participated in dramatic play (playing fairies and dress-ups). In the example shared below, Sarah comments on the benefit of the tall fence offering protection against any type of embarrassment. However, perhaps due to her background in drama, she comfortably moved into role playing and dramatic play with Helen.

Sarah – *But, Helen, you often ask me to play fairies, don’t you? And that usually involves being the fairy and fluttering up and down the garden and running up and down on the grass and running up and down on pavers [stone footpath]. And it is quite active. There’s no one that can see over our eight foot fence, so I’ll do that. Well, they are active fairies. They don’t stop. They’ve all got jobs. We talk about garden fairies who smell the flowers or collect the flowers and some fairies have jobs helping people get well, or helping the chickens or the dogs. All the fairies have jobs and dusting things with the fairy dust, which is sand from the sand pit.*

In terms of supportive practices, encouragement was evident in many examples shared and observed at the Masons. This was not only in terms of Tom and Sarah facilitating Helen's physical activity, but just as importantly, it was evident in their ability to sustain Helen's focus on an activity. On a number of occasions these experiences highlighted Helen's enjoyment not only in these experiences as active play opportunities, but also as important opportunities to spend quality time with her parents (Dzewaltowski et al., 2008). These facilitated practices highlighted the differences in the types of play provided by Sarah and Tom. An exploration of the social ecological factors that influenced the Masons' adoption for their values for types of facilitated experiences is examined in the next section of this chapter.

The power of role-modelling

The influence of parental role-modelling and its association with childhood physical activity patterns, particularly with older children, is understood by some to be contentious (Jago et al., 2010), with the most studies reliant on self-reports by parents and small sample sizes. Other studies have claimed adult modelling to be an important predictor of future health and activity levels (Beets et al., 2007; Koplan et al., 2007; Lindsay et al., 2006). Although role-modelling is defined as a type of indirect support, it is still important to analyse the types of support provided by the Masons within their micro-environment. Additionally, as most research on this type of support has, until now, been focused on older children and adolescents, it was important to analyse whether this type of support impacted on Helen's values and active play.

For Sarah and Tom, modelling was one of a range of social practices in their support for Helen's active play experiences. As a young child, Helen was constantly surrounded by a 'human environment' where, directly and indirectly (Welk, Wood et al.2003; Spurrier, Magarey et al.2008), she witnessed active practices and behaviours. In the Masons' case, with

Tom being so involved in physical activity, not only in his work as an exercise physiologist and co-owner of a health and fitness business, but also his own participation in sport (discussed in detail earlier in the environmental scan – Section 5.2.3), meant that Helen moved within an environment where she was constantly aware of the value and integral part that physical activity played in their lives. This socially patterned behaviour was also reinforced with Sarah's commitment and love of being outside, her enjoyment in singing and dancing and her own participation in physical activity.

During the time spent interviewing the Masons, it was observed that their diet and lifestyle also consistently modelled and emphasised health and wellbeing. Evidence of their eating practices included the Masons drinking green tea, nibbling on cheese and rice crackers, fat reduced foods and dips and preparing meals using lots of fruit and vegetables. They shared a number of stories about physically active behaviours, healthy food and lifestyles and the importance of social/emotional well-being, all understood to be part of their daily routine. These practices are consistent with research which suggests that the family environment and parents play a central role in shaping early eating and childhood activity behaviours (Hendrie, Coveney, & Cox, 2011).

5.3.4 Accessing other micro-environments as a resource

Although the main focus of this study was understanding the social ecological factors impacting on parental support of active play with young children in the micro-environment of the family home, it is also understood that there are a range of other environments that families move amongst that impact on their these behaviours. This final subsection highlights data that analysed ideas of interconnecting systems and the role that other micro-environments (and

microsystems) (Davison & Birch, 2001) had in supporting Tom and Sarah's provision of active play experiences with Helen.

These other micro-environments were places that provided opportunities for Helen, Tom and Sarah to engage in different types of active play, often at a higher intensity and for longer periods of time. These micro-environments included holiday destinations, extra-curricular activities, as well as places of extended family, social networks and friends (also referred to as aspects of 'social capital') (See Figure 5.1). Several examples are shared from these contexts and discussed below. These are analysed further in Section 5.4 regarding the impact these had on parental beliefs and values.

Although as a young busy family, times for holidays were infrequent, these opportunities did offer the Masons, and in particular Tom, time to bond and enjoy active play and more adult-directed experiences with Helen. Sarah, as Helen's primary carer during week-days, was able to regularly facilitate her active play during these times. The week-ends and holidays coincided with opportunities for Tom, like many other working fathers (Yeung et al., 2001), to allocate time for enjoying active play with his daughter. He shared some of these experiences in the next anecdote.

Tom – *I do swimming. I always take Helen to her swimming lessons. We started fairly young with Helen swimming. We'd go to the pool at our gym every week-end. Now that she is comfortable with that, we started body surfing on our last week-end at Byron. I say, "start swimming", and off she goes.*

These types of experiences emphasise the overlap between a range of environments located outside the home in supporting the active play of Helen. The reasons behind the Masons' choices for these will be discussed in the next section, but at this point it is important to

emphasise that these places played a significant role in providing additional support for Helen's active play experiences.

5.3.5 Summary of section

At this point it is important to revisit research Question 1: How do parents support active play experiences, opportunities, environments and resources for their children? Throughout this thesis the point has been reiterated that each family sits within their own unique micro-environment which in turn influences and alters the environment and types of support parents are able to provide for their young children. Four significant points are worth mentioning that emerged from the analysis of the Masons' data pertaining to this question.

First, although the indoor environment offered spaces for active play, due to the limited space in this environment most experiences were fine motor in nature. The outdoor environment, was the space most used by both Helen (for solitary play), as well as by the Mason family in supporting a range of facilitated and engaged play. Due to the valuing of these experiences by the Masons, the environment was enhanced to provide additional opportunities for active play experiences. The Masons also drew from a rich selection of social capital to inform their ideas and decision making in terms of strategies for active play and environments to support this.

Second, due to inter and intra personal factors such as Helen's age, gender and temperament, there was evidence of her impacting on the environments, places and types of play that she was involved in. A third point to note, was that culture and social practices played a key role in the way that active play was supported within the micro-environment of the family home, as well as the effectiveness of this approach. Through the various data and examples shared, it was evident Helen was surrounded by consistent and multiple messages (modelling), that physical activity was valued, both for its health benefits, as well as opportunities for spending quality

time together as a family. Apart from the modelling of healthy behaviours, Helen and Tom's social support included different types of involvement and engagement with Helen in physical activity, as well as a range of facilitated support, including the provision of resources, environments and the driving of Helen to friends and extra-curricular pursuits.

Finally, although the focus of this study was on better understanding the domestic space of a number of families, the data reinforced that for the Masons, a range of other environments such as holiday destinations, homes of family and friends, extra-curricular experiences and parks, offered support and provided different types of active play opportunities and experiences. Whether it was within the home environment, in the backyard 'playing fairies', at the local park, or learning to swim with Tom at the beach, it was evident that the Masons provided a wide range of environments, resources and types of support for Helen's active play. The next section of Chapter 5 will now address more specifically an analysis of the precursors and precipitating factors that influenced the Masons' thoughts and behaviours in terms of their support for Helen's active play.

5.4 Contextual factors impacting on parent beliefs, choices, knowledge and understandings of active play

The environments, practices and resources that are provided within the micro-environment of the family home are closely linked to decision making and support for health behaviours such as active play (Kolar & Soriano, 2000). This raises significant questions about the role contextual factors have on these aspects of parental support. As the ability to engender opportunities for healthy behaviours are influenced by the messages and values from within the home, as well as the greater social spaces that exist outside this space, including the micro and macro system (Lawlor & Mishra, 2009; Merlo, 2011; Robinson & Borzekowski, 2006; Trost &

Loprinzi, 2010), it is timely at this point to employ the PMEM model to explore the mechanisms that influence parenting by addressing the following research Question 2: “*How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children?*”.

Like others who navigate their way through the parenting process, Sarah and Tom draw on their backgrounds, past experiences and ideas from extended family, friends as well as accessing a range of other social capital. This is also the case regarding the information and strategies they adopt in supporting health behaviours. In other words, “in order to understand parenting, not only is it important to consider characteristics of individual parents but it is also necessary to include the influence of the wider social and cultural context” (Kolar & Soriano, 2000, p.3).

Four themes are examined that highlight the factors that have influenced the Masons’ values and behaviours for supporting active play. The first relates to influences at a more personal level that emerge from within the micro-environment, including the background of parents and their history of childhood experiences in physical activity. The focus broadens with the second theme introducing the role of the microsystem including the cultural context of extended family and friends. The third theme highlights the influence from the greater macro level and examines the Masons’ access to information such as the media and parenting resources (examples of more ‘distal’ social capital). These sources foster particular values and understandings of physical activity for young children. The final subsection discusses the complexity and interrelationship that exists across these various layers of influence, and provides a number of examples where factors of influence overlap, are multi-directional, and cannot be easily categorised.

5.4 1 Influences from within the micro-environment and the microsystem

Influences from within the micro-environment

Sarah - *When Tom and I met, the big joke was that I had played every sport under the sun; just not necessarily well! Tom was incredibly competitive and he was always interested in playing everything well.*

What often emerged from examples and stories such as the one shared here, was evidence of exposures from life experiences that occurred throughout and across the life-course. Further examples in the next few pages will show that these experiences were identified as having a significant impact on the Masons' conditioning regarding their behaviours and values towards physical activity. Within the PMEM model (See Figure 5.1) these types of influences are referred to as 'Temporal considerations', understood to be a dynamic system that operates across space and time" (Spence & Lee, 2003, p. 12). Influences from Tom and Sarah's childhood experiences could include: the type of support and encouragement provided by their parents, the places and spaces they played in, the modelling of physical activity by their parents; and their own history and experiences of participation in sport. This subsection highlights a number of examples of the pervasiveness of these types of experiences and temporal considerations on parenting values and understandings of active play.

In their childhood, Tom and Sarah experienced a number of subtle and at times, direct messages regarding the importance of outdoor play and exercise participation. In reflecting on her upbringing, Sarah comments, "*both Tom and I had parents who were very much of an era where you went outside and you exercised and that was from the minute you could move. You know, it was really important to do that.*" The mutual valuing of outdoor play and getting outside regularly to be active was reinforced by the Masons on a number of occasions during this research.

Tom's parents were heavily involved in sport, primarily representing Queensland in basketball. He was immersed, directly and indirectly, in the 'live culture' of sport (Dwyer, Needham, et al., 2008) and was physically active from a very young age. Tom commented, *"I was playing sports since I was four!"* Both at school and outside of school hours Tom actively pursued and took a smorgasbord approach to sport, participating in everything available to him including rugby league, cricket, soccer and softball. From when he was very young, Tom's parents were very involved and supportive of his sporting commitments, and were prepared to drive him to numerous sporting and training events scheduled each week. He shared stories of the many times where extended family and friends played games of cricket at the local park or backyard. *"Yeah, I can still remember going on runs with dad. Mum and dad played sport. Dad played basketball for Queensland and I used to travel around with them and used to live at the basketball courts."* Tom's peers were also involved and participated in sports at a high level. Tom's approach to physical activity was very much focussed on 'sports skills' and he experienced success with just about everything he was involved in.

Sarah's experiences and background in physical activity were quite different from Tom's. Of interest, were the memories she shared of her sporting involvement at school. *"I will encourage Helen to do team sports, but I never knew what it was like to belong to a team. I've never known that my whole life! I was the nerdy kid. I was the intellectually bright kid who was the dunce (at sport) and I would drop the ball. No one wanted me in their team. I was the last to be picked and I was the one who was always on the sidelines watching. I had a problem with my vision that wasn't picked up till I was a bit older and I had that problem all through my childhood. I couldn't see where the ball was. I'd be in the pool and I couldn't see what the*

swimming instructor was telling us to do, but no one picked that up and I didn't know that until later.

Sarah's family, however, viewed physical activity as an important component of childhood and growing up. Her parents believed that it was important to 'give everything a go' and to 'be involved'. She comments, "*We'd be involved in anything that was on and she (her mum) was always chasing us outside! We were always active and doing things as kids. Always on the go. We always had bikes and I rode a bike until I was fifteen or sixteen.*" Sarah enjoyed everything from ice skating, bushwalking and swimming, to softball, bike riding and jogging. In discussing her time with Helen, Sarah mentions that: "*We will always try to get outside for some play, and I think that comes from my childhood, which was always about getting outside and playing before dark. It was about getting some fresh air and getting some activity going.*"

The examples of contextual details shared here, support Kolar and Soriano's (2000) research that reinforces that the backgrounds of parents, including their culture and past experiences, can frame their views and the priority they place on health behaviours and practices. Tom, influenced by his history of being active in sport and the modelling of his parents' participation in sport from a young age, now prioritises, and places importance on ensuring, that Helen learns a range of motor skills, and is consistently active. Sarah draws on her own memories and childhood experiences in her parenting of Helen. She does this by reinforcing the message of 'giving everything a go', 'getting outside for fresh air', and 'being physically active every day'. These examples emphasise, that even within the micro-environment of the family home, parents carry with them a set of understandings, many of which have been established in their own childhood.

Influences from within the micro system (extended family and friends)

While many of the Masons' decisions and shared values have emerged from intentional collaborative negotiation, others have been influenced by subtle messages translated from a range of contexts outside the micro-environment (Dwyer, Higgs, et al., 2008; National Preventative Health Taskforce, 2009). These significant places of influence included the interpersonal and interwoven relationships that occurred between their parents, extended family and Helen's educational setting (located within microsystem - the system most proximal to the micro-environment, See Figure 5.1). The Masons are a very social couple, with a rich source of social capital. The first anecdotes provide examples of exposure to extended family. This group represents those most proximal to the Masons and had a significant influence through their actions, behaviours and conversations, as well as the resources they provided. All of these provided particular expectations or beliefs about active play that were translated not only to Sarah and Tom, but also to Helen.

In the first example, there is evidence of how Helen's grandma and grandpa, on Tom's side of the family, reinforced the value placed on the love of sport and competitive team games. Tom's dad has a history in competitive sport and regularly shared these messages through his facilitation of Helen's visits to the local netball park. These types of 'outings' provided an opportunity for sharing his knowledge and passion for competitive sport and the valuing of physical activity. Perhaps by reinforcing the particular characteristics of a 'great netballer', in more subtle ways, he was also reinforcing expectations that Helen may one day aspire to play netball at a high level.

Tom – *Mum and dad's place is across the street from Joyce Thompson Park [A local park famous for netball competitions]. My parents watch netball. Dad took her over when she was*

really young and he used to ask Helen, "What are you going to do when you grow up?" And she'd say, "Play netball for Australia!" She was mad about netball.

The resources and equipment provided to children for physical activity can reinforce particular values. These can be expectations about gendered behaviour (like buying a girl a tea set), sports related activity (such as giving a child a football or cricket bat) or the valuing of fine or gross motor experiences (like buying Lego or providing craft materials). Although the majority of resources and equipment that young children access will be provided by parents, these toys and play resources may be given for birthdays and Christmas by extended family and friends, or perhaps passed on after children have grown out of these toys. The next example shares toys that were bought by Sarah's mother to support Helen's play. Of interest in this example, is the point that Sarah provided some suggestions to her mother on the sort of toys that she understood as being important to Helen. In this case, Sarah thought it was important for the toys to cut through stereo-typical male genderedness, and tried to encourage Helen to also play with trains and a tractor.

Sarah - (Discussing her mother's support) – *Her nanny gave her this train set. I love the fact that nanny gave her a train set with my encouragement, and a tractor. She'll push that up and down, up and down. She has this ball, Nana gave you this ball didn't she?*

Parents, particularly those with young children, network and often benchmark their own beliefs about physical activity on the information offered by other parents (Hamilton & White, 2010). The Masons' social network is quite extensive and includes friends and parents of children from Helen's educational setting, playgroup parents, as well as the parents they have met by attending various parenting classes such as prenatal classes. In the next anecdote Sarah reflects on the impact of prenatal classes on her ideas about parenting.

Sarah - *So much of what you get in those prenatal classes you wonder about the value of it [laugh]. And then you look back and you pick out what really worked, what was valuable and what wasn't.*

The Masons' rich social capital is recognised as being a significant part of the social environment that directly, and indirectly, influenced their parenting and decision making through socialisation and modelling (Spurrier et al., 2008). The examples shared below provide a glimpse of this particular social system that not only played a supportive role, but also offered a range of messages, understandings and values.

5.4.2 Influences from the greater macro level (access and influence of social capital)

Parents are affected by influences from a variety of avenues (Kolar & Soriano, 2000). Whilst many of the interactions and influences are located within the microsystem, others are more distal (See Figure 5.1). Within the greater macrosystem, these include sources of information from various child and medical specialists, government departments and policy, as well as from other sources such as the media, books and parenting material. All of these sources are acknowledged as engendering particular understandings and beliefs about parenting. The next example, shares evidence of the Masons' access to advice and information from resources distinct to books, newspapers, professional child development and parenting literature, and the influence these sources had on Sarah and Tom's knowledge and understandings of active play.

Both Sarah and Tom are avid readers and through their tertiary backgrounds and interest in physical activity and parenting, have regularly sought out advice, knowledge and reassurance on parenting from a range of sources. Sarah extended on this information by remarking that Tom is *“a voracious reader and took a real interest in the fact that movement for Helen could make such a difference. Of course doing his Masters studies meant that he was reading a lot of theory in the area of children's development.”*

Both Sarah and Tom were able to very clearly articulate a comprehensive definition of physical activity and outline its benefits. Sarah shares her understanding of physical activity as “*everything from fine motor skills right through to very gross motor skills. It includes Helen running, leaping and jumping and it is important that the heart rate rises rapidly.*” She continues to reinforce her value of physical activity as being “*important that Helen does some of that activity every single day*”.

The Masons’ sourcing of information within the macrosystem regarding child development and support for health behaviours, such as active play, not only impacted on their values but in many ways influenced their sense of confidence and self-efficacy towards support for these types of practices and experiences. This included: decisions about altering the outdoor play area and providing more grassed areas, facilitating a range of extra-curricular experiences for Helen, and the purchasing of specific toys to support a particular purpose such as a range of outdoor ‘child-friendly’ gardening tools.

5.4.3 Examples of the complexity and interconnection of multiple influences

Although previous sections have highlighted examples of influences from Sarah and Tom’s own childhood experiences as well as the micro and macro system, there are many examples that highlight the complexity and interconnectedness of these multiple systems and the influence they have on the Masons’ support for active play. The final subsection provides a number of anecdotes and contextual information that highlights the interplay that exists between these multiple environments. Reference to the PMEM model will be made to better consider these elements that converge on the micro-environment, whilst also tracking practices that occur within the home, out to the wider systems that impact both directly and indirectly on their lives.

Tom's focus on risk-taking, rough and tumble play and task 'task oriented' play

As outlined in Section 5.3.3 (Social practices that support active play) Tom shared a number of accounts of participating in a range of 'task oriented' experiences with Helen, as well as moments of rough and tumble play. These experiences were opportunities for Tom to reinforce the value of taking 'calculated risks' and the importance of challenging oneself. Often, these experiences also had a particular purpose, technique or skill, such as how to catch a ball, balancing, hopping or swimming techniques. At other times, Tom valued these physical play moments as wonderful opportunities to bond and build relationships, Tom commented, "*Most of our connections are through physical activity.*"

In viewing Tom's behaviours through the lens of the Masons' PMEM Model (See Figure 5.1) one can appreciate the pervasiveness of Tom's own background, as well as his experience in his sport and personal training business, being factors of significant influence on his values and in particular, his confidence levels for supporting Helen. These influences are most proximal to Tom and sit within the micro-environment of the family home. Tom's past experiences in playing, and his regime for training in various sports, as well as his family's support for his active pursuits, are also factors that could also have attributed to his valuing the skill component of his support for active play.

His comfort levels in providing challenges and integrating the 'element of calculated risk-taking' is an example of an element that is multifaceted and can be tracked to a range of factors including, his reading and knowledge of theory in supporting active play, his tertiary education (both macrosystem influences), and even his networking with other experts, friends and family (microsystem influences).

Sarah's valuing of socialisation opportunities, drama and music

A range of individual, social and environmental factors also predispose and influence Sarah's support and values for active play with Helen. Her own context, experiences, and the social networks have also impacted on her views and the types of support she provided. A number of examples, outlined here, address the complex set of determinants that emerge from multiple environments that converge to influence her behaviours and values (Kolar & Soriano, 2000). These examples, highlight the value Sarah places on the social and creative aspects that she associates with active play, and her reasons behind needing to be a 'playmate' for Helen.

Sarah - *I'll suggest things like, "why don't we get some scarves?", and "I'll put some music on and you can do some dancing". Or "should we go for a bike ride?", or "shall we get out the scooter?" or "let's go outside to the swing and have a run around."*

These experiences, shared by Sarah, are quite different from Tom's support of active play. Sarah's family history, as well as her background in physical activity (micro-level influences), was less about competition and more about participation, socialising and having fun. Sarah's social nature and empathy for sometimes struggling to find her place in 'the team' is evidence of other significant factors of influence (located proximally to the micro-environment) that have emerged from her own experiences with physical activity.

More distal influences, including, Sarah's educational background training and love for drama and music, have influenced her values for the social engagement in these types of experiences. This has translated to the facilitated dramatic and musical experiences she provides for Helen, as well as her effort in transporting Helen to extra-curricular (ballet, gymnastics and Kindermusic music) classes, and meeting friends and families at the local park or organising times for Helen to play with her playmates. The next anecdote reinforces this.

Sarah - *The other thing is ballet, which Helen has been doing now for two years. Which I look back now and think, "How did we end up doing that?" Well that was because of the social connections with the other girls that we knew, mainly from playgroup. She really enjoyed the movement, but it was also an extension from Kindermusic, and it is also very social because lots of her friends go to the group that she goes too. So she really enjoys that and seeing all her friends.*

Sarah's reasons for including an extensive range of socialisation experiences was influenced by a significant determinant from the micro-environment, that of Helen being an only sibling. Very much an interpersonal determinant (See Figure 5.1), the point of Helen being an only child meant that she didn't have at her disposal other siblings to play with. Therefore, Sarah encouraged Helen's engagement in a range of social experiences, both from within the micro-environment of the family home, as well as from a range of other social settings. Within the more distal environmental system, Sarah was able to draw on theory, parenting experts, the media and other sources of social capital to support a range of experiences for Helen's active play and enjoyed these times as a 'playmate' with her. Sarah's own experience of playing with her sister in childhood may also have influenced her efficacy in being a playmate for Helen.

Sarah - *Yeah, I grew up and had a sister and we used to go out and play, but we didn't necessarily play with neighbours. We would play with each other. So here with Helen, in the absence of a playmate, I will be Helen's playmate when that needs to happen.*

Sarah's examples highlight the elements from various systems that converge to influence her behaviours and practices. For both Tom and Sarah, one of the most important features of using the PMEM model, was that it helped to understand that each level or layer of influence does not work in isolation, but influences, and is influenced by other determinants and processes. This supports Spence and Lee's (2003) point about changes that occurs at one level influencing, and in turn affecting other levels.

This section of Chapter 5 explored the role that contextual factors played in impacting on the Masons' parenting practices and values in supporting active play. The information discussed here confirmed three significant points: the first, was the existence of a unique range of contextual factors within the Masons' micro-environment; secondly, these factors and systems engendered particular values and influenced practices or behaviours within their domestic space. Finally, the PMEM model was a useful vehicle to employ to better understand the influence of these multiple contexts.

It is this ability to track experiences and to appreciate the influence of the micro and macro systems, as well as to acknowledge the complexity and interconnectedness of these multiple systems that were of most concern in this section. Applying a social ecological model of behavioural influences helped to better examine this data. It was identified that Tom and Sarah's personal upbringing exposed them to a range of life experiences.

An important finding was that from within the microsystem there was evidence of proximal influences, including the Masons' accessing ideas and support from their rich social capital of extended family and friends. These social groups offering a range of actions, behaviours, and often providing resources, that set up particular expectations about active play. Although the Masons had a deep appreciation for the importance of physical activity, there was evidence of the macrosystem impacting on their understandings and support for active play, particularly in terms of them accessing parenting information and advice from sources including the internet, professional books and experts. This knowledge informed their practice, but also their self-efficacy and confidence in providing experiences and making decisions for supporting Helen's active play.

Whilst there was evidence of the PMEM framework being challenged, specifically in relation to understanding the complexity of interconnecting systems of influence on behaviours, it emerged as robust in its ability to make sense of the various types of contextual influences that both Sarah and Tom brought to the micro-environment of the family home, as well as the social systems that they lived and moved amongst. These various systems of influence impacted at times on the way that each parent interpreted and supported active play with Helen. Yet, despite these differences, there was evidence that underpinning both approaches was the priority placed on active play, and the connectedness this had to opportunities to enjoy spending time together. To this end, findings presented here confirm Kolar's (2000) claim that, "parenting is situated within a broader social and cultural context and is subject to the influences of a multitude of complex variables" (p 58). In turn, data has addressed Research Question 2: "*How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children?*"

5.5 Determinants skewed by context

Previous chapters have defined determinants as being factors that significantly contribute or impact on a phenomenon or complex set of behaviours (Bracco et al., 2006; Gordon-Larsen et al., 2000). It has been asserted that parents significantly influence the health behaviours and values of children, yet a range of determinants may impede or facilitate the amount, type and quality of these behaviours (Hills et al., 2007; Müller et al., 2005). These multiple determinants can include personal determinants such as educational background, socio-economic status, work commitments, access to social capital and environmental determinants, such as neighbourhood safety and accessibility to parks. Determinants can be skewed to either motivate or inhibit parent support for active play, depending on the pervasiveness of a range of

factors and the uniqueness of context (Ball et al., 2006; Hertzman & Williams, 2009). With this in mind, the final section of this chapter utilises the PMEM model to provide insight into Question 3 by examining the extent to which *ecological factors (that sit both inside and outside the home), shape the way three determinants (time, perceived risk and the physical environment) were skewed to become either barriers or enablers of the Masons' support for active play.* Discussion takes place under these three headings.

5.5.1 Time

Whether it's driving children to swimming lessons, playing with them in the park, helping to make a cubby or giving an infant a massage, it all takes time. Time has been identified as being a common determinant or source of pressure for parental support (Baxter, 2010). Research suggests that time is also a key determinant in a parent's ability to support physical activity with their children (Quarmby, Dagkas, & Bridge, 2011; Smith et al., 2010). Yet, the determinant of time, and how it affects individuals is complex. This subsection explores how the determinant of time was skewed by a range of ecological factors that impacted on the Masons' micro-environment.

Within the Masons' busy household, Tom with his health and training business and commitments with sport, and Sarah working part-time at the university and in her role as mother supporting and facilitating, and Helen's extra-curricular requirements and daily schedule, there was still the prioritising of time for physical activity and active play. Several anecdotes are shared below that reinforce the priority given to active play by the Masons and the values that underpin the reasons for this.

The first anecdote shares Sarah's thoughts on the priority placed on supporting active play. She comments that she often sets aside other domestic tasks to facilitate and engage in these

experiences with Helen. *“We play every day! House cleaning takes a second seat next to supporting Helen with active play. I think it is more important for me to connect with Helen. So if I have a day at work and I get home before it’s too dark, we will always try to get outside for some play and I think that comes from values from my childhood which emphasised the importance of getting outside and playing until dark, getting some fresh air, getting some activity going.”*

Although Tom works long hours, he changes his circumstance to overcome time as a barrier, by purposefully scheduling his week around opportunities to engage with Helen in active play and develop her physical skills such as swimming. The second anecdote highlights the commitment and time devoted by Tom to support active play.

Tom- *We used to have ‘Daddy’s day’ every Thursday when I would take her swimming. That’s right from when Helen was very young.*

Sarah - *That was from birth. Right from when I went back to work when Helen was five months old.*

Tom –*We’d go and kick the ball. [In the park in the new development area at the top of their street]. Every time I’m home in the afternoon we walk to the park.*

Koplan, Liverman and Kraak (2005) talk about parents’ experiencing a range of pressures that get in the way of supporting their children. Many parents express this as ‘parent famine time’ or insufficient time to spend with children. Yet, the anecdotes and the examples discussed throughout this chapter show that the Masons set aside chores and work schedules to support opportunities for active play with Helen. There was of course a unique set of ecological factors that have impacted on the Masons’ determination to overcome the barrier of time to support Helen.

As highlighted in Section 5.2 and 5.3 these ecological factors were both proximal and distal to Sarah and Tom. At the micro level, most proximal to the Masons, a number of individual factors were evident. Tom was influenced by the modelling of his parents, his involvement throughout his life in competitive sport, the priority on skills and technique and the importance placed on ‘taking calculated risks’. Sarah’s childhood reinforced the importance of the social aspects of being active and having fun playing, as well as the importance placed on ‘having a go’, getting fresh air, and playing outdoors. Also, within the micro-environment, an important aspect of valuing active play was that these times were understood to be opportunities where the Masons could bond and spend time with each other. Finally, at a macro level, their ability to draw on all their tertiary education and extensive reading of professional literature on topics that addressed ‘child development’, as well as their access to other professionals, and their awareness of government mandates, were unique examples of messages that reinforced the importance of active play for young children.

Therefore, although time is often understood to be a barrier in supporting the active play of children, a range of social ecological factors skewed the way that time, as a determinant, was interpreted within the Masons’ micro-context. The value and importance placed on time by the Masons and reinforced in these complex settings, translated into both parents finding ways to ‘make time’ or prioritise their domestic schedule to support active play with Helen.

5.5.2 Perceived risks

A significant determinant embedded in the consciousness, and associated with parent support for active play, is that of perceived or real risk of danger to a child (Bagley et al., 2006). As parents, Sarah and Tom are bombarded from various socio-cultural platforms all raising awareness over issues about safety, potential risk and information about appropriate ‘parenting’

of young children (Dwyer, Higgs, et al., 2008). The Masons, like many other ‘Generation X’ parents, shared stories of these fears, and how they had filtered down to their micro-environment (Pain, 2006), to influence their behaviour and daily activity. Of particular relevance to this chapter was the difference in perceptions of risk experienced between Sarah and Tom. A number of examples of the Masons’ understandings of risk will now be interrogated, as well as discussion focused on exploring the reasons for these differences, and how social-ecological factors have skewed the way that Sarah and Tom responded to these fears within the micro-environment of the family home.

When Helen was young, Sarah felt that there was a need to ‘containerise’ her (Brown, 2009a) in order to safeguard her from the perceived risks of danger of the indoor home environment. Sarah explains her risk-avoidance behavior and the employment of the regular use of the playpen as something like a “security device”:

Sarah – *No, it was about management and safety and security for myself more so than for her. Even now I would justify the use of it, because I think of our house, and it’s a funny house with these sorts of stairs in one section and funny old clunky furniture and that kind of thing. I would probably still argue that it was quite useful, but I do remember thinking, because of the pressure from Tom’s family about, ‘oh you’ve got her in a playpen’, thinking “is this a good thing to do or not”? – But I look back at me and I know that the first 18 months, particularly, I was super cautious and the playpen was good for me.*

Tom and Sarah access a range of social capital (social support, networks and resources) from within the macro and micro system, to inform their ideas and advice on parenting. With this, comes mixed messages and pressure about what is deemed ‘safe’ or acceptable environments for children. Pain (2006) suggests that these types of messages have created a “risk conscious society” (p. 222). This complex set of factors have impacted on Sarah’s decision to use a

playpen for peace of mind in keeping Helen safe while she was doing housework. There was however, evidence of mixed messages in terms of perceived risk and safety, that Sarah struggled with that, could perhaps track back to her experience of play as a child, which was much less encumbered and controlled.

There was a distinct dichotomy in the way that Sarah and Tom perceived the risk of the indoor physical environment. To Sarah, this risk was real and although she felt pressure from Tom's family (influence from the microsystem) about the use of the playpen "*restricted to ...what is it...five foot by five foot space*", to Sarah this behaviour was justified to put her mind at rest. Yet, Tom didn't see the environment as a perceived risk, "*I didn't think it was a big deal*".

Although Tom recognised and supported Sarah's concerns, his background in physical activity, and the value he placed on physical activity, influenced the way he accommodated for Sarah's decision. Rather than leaving Helen to her own devices in the playpen, he decided to use this time to engage with Helen by getting inside and playing in the playpen. Sarah shared this event, "*I mean he used to sit in there and play with Helen. That was just the funniest thing. We have photos of him sitting in the playpen with Helen.*"

Tom and Sarah vary in their comfort levels and thresholds on risk taking associated with Helen's active play opportunities. Tom commented, "*Yeah, I take way more risks.*" Sarah responding, "*I take none.*" Sarah was much more cautious than Tom, at times having reservations about the types of resources and activities Tom and Helen would engage in, perceiving them as beyond Helen's current developmental level (e.g. Tom buying her a bike and Sarah thinking she was too young for one).

From my own observations made and the sharing of a range of stories by Tom and Sarah, it seemed that Helen didn't mind the difference in her parents' approaches to supporting her play, and Sarah's more cautious approach. She was very aware of the difference of opinion and approaches of both parents. Helen would seek out and enjoy different connections and active play experiences with each parent. Helen's interpersonal characteristics meant that she seemed to change her temperament depending on the varying parenting styles. For example, when playing with Tom she would challenge herself more, be more persistent in practicing skills, and feel comfortable participating in risky experiences such as body surfing, or learning to ride a big bike. Tom confirms this, "*Helen feels that apprehension, so she'll be more inclined to do more when I am around, particularly in the pool and things like that. And Helen will go right out in the ocean and we'll go out into the waves to body surf. She just jumps in the waves and Sarah really worries about that.*" Sarah continued, pointing out that "*Tom always encourages Helen to get up and have a go and would extend that far more than I would. Like I love her to have a go and have a try and everything else, but he will extend that and of course he has the skills to see what needs to be done you know. Where she really needs support or whatever, and he can step into that as appropriate. He's not at all a pushy father with things like that.*"

It was evident that Sarah and Tom had different understandings and thresholds of perceived risk that influenced their support for active play. These differences could be sourced back to both individual and sociocultural factors (Owen et al., 2000; Stokols et al., 2003). A number of ecological factors most proximal to the Masons, including Tom's higher threshold of perceived risk, can be attributed to his childhood background and history of sport and feeling more comfortable with physical activity, competition and taking risks. Sarah's more cautious

approach to risk could be tracked to her childhood, where physical activity was wrapped around playing outside and a less competitive approach to sport.

In most cases, due to the value placed on active play by the Masons, there were efforts to overcome the determinant of perceived risk. Sarah was often guided by Tom and his experience and knowledge of appropriate play and support for physical activity (systems of influence from the micro and macrosystem). On the basis of the findings presented, it is understood that the idiosyncratic nature of the Masons' context and micro-environment have influenced the unique way in which perceived risk was interpreted within the home and filtered down to the way that active play was supported with Helen.

5.5.3 The physical environment

Earlier in this chapter the features that define the physical environment that sit within the Masons' micro-environment were described. These environments were analysed in relation to how these spaces were used and the types of support that was provided by Tom and Sarah within these environments. Yet, theory supports the view that these environments, behaviours and practices do not sit in isolation, but are impacted by a range of ecological factors and determinants (Bracco, Colugnati, Pratt, & Taddei, 2006; Sallis, Prochaska, & Taylor, 2000). These determinants, that could include accessibility to resources, finance, weather, the size of the indoor and outdoor environment, a child's gender and temperament and parent knowledge of strategies to support play, can either enable or constrain parental support for active play. Discussion will now focus on the obstacles (barriers) within the physical environment that the Masons' experienced and how these obstacles were overcome, due to a range of factors unique to the Masons' ecological niche.

Whilst the physical environment was definitely conducive to supporting Helen's active play, there were a number of features (physical determinants) that impacted on the support, type and amount of play available to her. The four features that emerged from an analysis of the data were: the limited grass area in the backyard, the distance to some of the parks in town, the busy street that ran along the Masons' home, and the lack of young children within close proximity for Helen to play with.

Sarah: *We realised that she really didn't know what grass was, so we deliberately put in turf. We ripped out the tree and we put in turf so that she would have soft grass to play on.*

Discussion on the limited grass area in the Masons' backyard was addressed in detail in Section 5.1. The value that both parents placed on active play experiences for Helen influenced their efforts and the priority they placed on altering this environment and overcoming the initial barrier that was presented. The Masons also accessed a range of social capital from the micro and macro system (See Figure 5.1) to support them in making informed decisions about options for changes to the outdoor environment. From within the micro-environment the Masons' socio-economic status also enabled their landscaping efforts and their decision to pull out some pine trees and lay turf, all of which helped them to overcome what could have been a barrier to Helen's active play experiences.

Tom – *We just go to the park. Most of our stuff is in the park.*

The community in which the Masons reside offered access to a large number of parks. However, as pointed out by Davison and Birch (2001), as a result of urban sprawl, a number of neighbourhood parks and forestry areas are now situated a distance from the family home, meaning that the Masons either needed to walk a significant distance or drive to a park. The physical determinant of distance to the nearest park could actually be perceived as a barrier,

due the considerable effort required to supporting active play, yet it was not raised as a concern by the Masons. The Masons' home was also located on a busy street, so this required one or both parents to accompany Helen to the park to play. These two examples demonstrated substantial efforts to support the importance placed on these physical environments and pursuits that required them to walk approximately 30-45 minutes to the various parks in their neighbourhood, or to organise transport.

In order to understand the ecological factors that have impacted on Sarah and Tom's efforts to overcome these barriers it is important to delve a little further into the systems impacting on their micro-environment using the PMEM model (please refer to Figure 5.1). At a personal, micro-environmental level, these experiences were often seen as opportunities where both Sarah and Tom would catch up with friends, and enjoy the opportunity to network and for their children to engage in play. This is also an example of the rich social capital that the Masons had access to. As discussed earlier in this chapter, the value placed on visiting parks with friends can be understood by the importance Sarah placed on Helen socialising with other children (a micro-environmental factor). As Helen is an only child, often with limited opportunities to engage in active play with others within the home, the Masons believed it was important for her to connect with other children through social opportunities at the park. Finally, Sarah and Tom both valued playing in the park with Helen as an opportunity to bond and enjoy each other's company.

The high fence surrounding the Masons' yard offered protection against the traffic on the busy street in which they were situated. However, a consequence of the high fence was that it restricted Helen's ability to meet or easily play with local children and neighbours. This was another reason why the Masons chose to meet friends in the park or provide opportunities for

friends to visit. The Masons expressed that there were not many children around the neighbourhood that were Helen's age so this was another barrier of the physical environment within the Mason family home. Sarah shares these concerns, *"We have to, because we don't have child neighbours. All our friends live out of town and so we try to find a central location at one of the nearby parks. That's usually where we meet up and then Helen can play."*

Based on the information that has been explained in the previous paragraph, Sarah and Tom placed high importance on socialisation and active play experiences between Helen and other children of her own age and therefore were proactive in sourcing opportunities for Helen's friends to visit her at home, or for Sarah and Tom to organise times when Helen could visit her friends. The Masons' behaviours demonstrated the very social nature of their micro-environment and the rich social capital both accessed, and available to them (See Figure 5.1). 'Stranger danger' was not mentioned as a barrier by the Masons, although it is one of the main issues raised in a number of studies that was a concern to parents and in turn restricted their children's access to active play environments and experiences (Pain, 2006; Zubrick et al., 2010). Perhaps this also reinforces the Masons' strong links with the community and confidence in negotiating these obstacles in support of Helen's positive experiences.

The places and spaces that are located within the Mason's family home provide excellent opportunities for the support of Helen's active play. There were however, a number of determinants within this environment that could be perceived as barriers. Whilst these barriers were identified as determinants within the Masons' micro-environment, they did not deter the Masons in their support for Helen's active play opportunities. A range of social ecological factors were discussed that skewed the unique way these determinants were interpreted and in turn influenced the Masons in overcoming these.

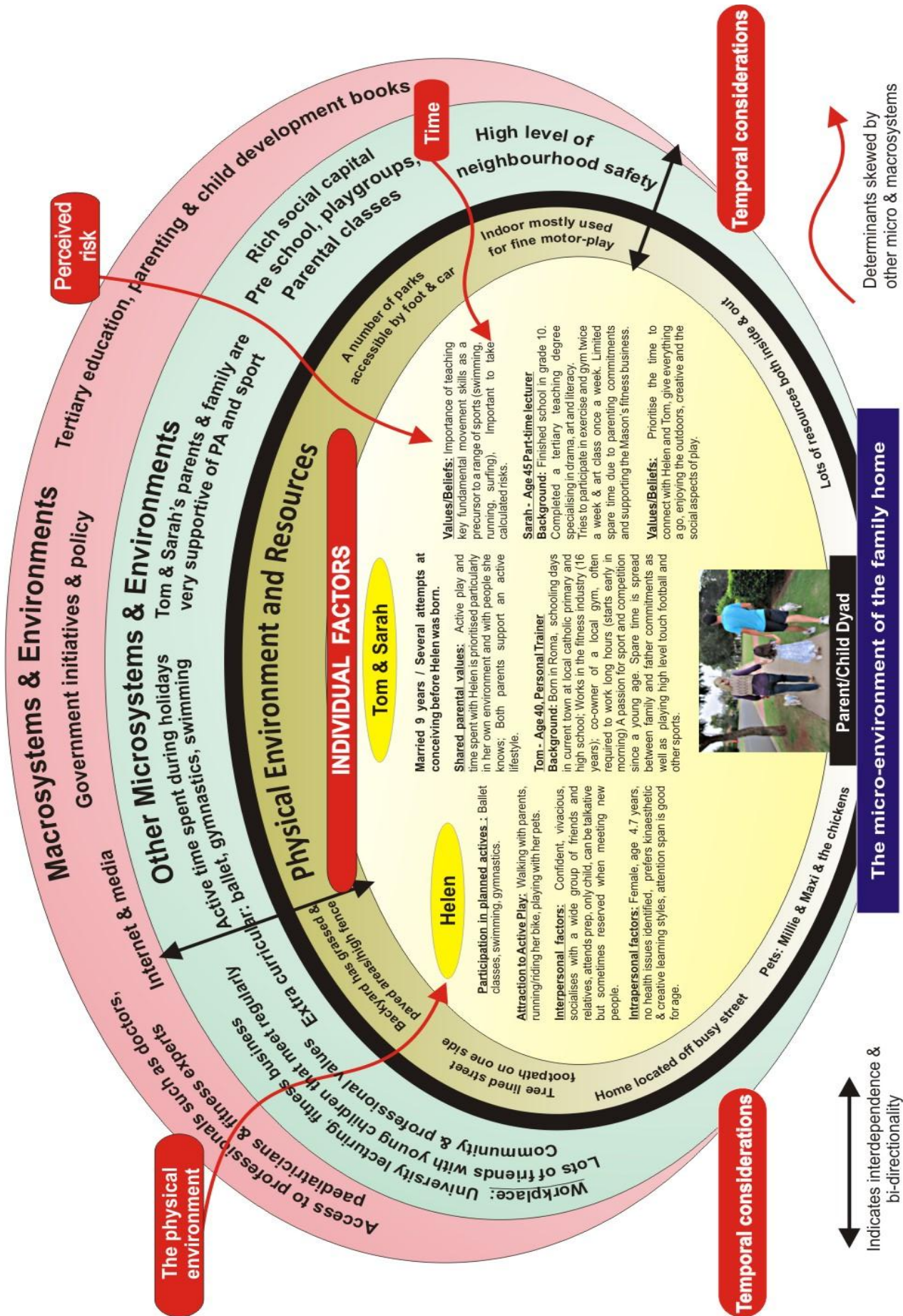
5.6 *Summary of the chapter*

The intention of this chapter was to explore an insider's perspective of the Masons' micro-environment and the subtleties of their thoughts, practices and behaviours within this domestic space. To this point, I have provided a detailed contextual overview of the family and revealed evidence of the high priority they placed on active play, as well as the environments, resources and behaviours that have supported these experiences. Using the PMEM model, based on social ecological principles, I have addressed how a range of individual and social factors have impacted on Sarah and Tom and their values, understandings and practices for supporting opportunities for Helen's active play.

It was the intention of this chapter to paint a picture of the Masons' unique micro-context. As the home environment is a significant place where health behaviours are established, examples specific to the Mason family were explored. It was highlighted that a number of determinants that impact on the Masons' micro-environment are influenced both by a range of conditions within, and external to their domestic space. Understanding these social-ecological factors, and their impact on the Masons' behaviours are not easy, as it is appreciated that these are influenced by a complex mix of contextual factors (Merlo, 2011). Yet, this chapter has hopefully presented a detailed picture of the uniqueness of this family, their love of spending time together, and the priority they place on being active.

Figure 5.1 The Masons' PMEM Model

THE PMEM Model of the Mason Family



Chapter 6 Meet the Hamptons



Image 6. 1. The Hampton family (Lucy & Georg with their children Susan, Simon and Howard)

The following reflection was written after my first meeting with the Hamptons. It captures a ‘moment in time’ and typifies a ‘day in the life’ of the busy Hampton family.

I was initially scheduled to see Lucy Hampton at 10:30am. However she contacted me half an hour before this to let me know that she had forgotten about an obstetrician appointment (Lucy at the time was eight months pregnant). She had only remembered it at the last minute and when she rang me, she was in the middle of running around frantically trying to organise herself and her two children for the visit. We rescheduled for 11:30am the same day.

I arrived at the Hamptons as Lucy was popping Simon, her eighteen month old son, into bed with his bottle. Susan, her four and a half year old daughter, was sitting watching a movie in the family room. Lucy offered me a tea and started to debrief with me on events that had occurred earlier in the morning. Lucy recounted, that she had had the “morning from hell!” She started off by packing the children up and racing to a doctor’s appointment. Having just arrived home, she was in the middle of organising lunch for the kids, when she and Susan had gone into the spare room for something. All of a sudden the door handle on the outer side of

the door came off, accidentally locking both of them inside. While this was happening, Simon was on the other side of the door in his high chair.

Lucy called out from the locked room and luckily the neighbours, two doors up, were getting into their car and heard her. They came around to try to let Lucy and Susan out, but all the doors of the house were locked, so the neighbours couldn't get to them. They rang Lucy's husband (George) who promptly came home and let them both out. This all happened before I arrived.

6.1 Overview of the chapter

The life-course perspective literature shared in Chapter 2 purports to the view that early health behaviours and experiences integrated into child and family routines manifest as beneficial or adverse expressions of health and well-being later in life (Lawlor & Mishra, 2009). Within this paradigm, parents are understood to be in a privileged position of supporting the physical activity behaviours, and particularly the active play practices of young children. They do this by providing opportunities, environments, resources facilitation, engagement and positive modelling of active behaviours (Crawford et al., 2010; Smith et al., 2010). This raises questions about why, if we recognise the role of parents and the family as critical leverage points in a child's health, there is limited research which investigates parents of young children and factors that influence their practices and values for supporting active play within the domestic space of the family home?

This chapter adopts a similar structure to that used in Chapter 5 and will build and refer throughout to the Hampton PMEM model (See Figure 6.1, located at the end of the chapter).

In this case, the model will contain factors and characteristics specific to the nature and

context of the Hampton family. The underpinning theory behind each of the sections addressed in this chapter articulates with discussion raised in the previous chapter. As such it is not the intention of this chapter to revisit or travel over territory already visited, but to raise for consideration information particular to the Hamptons' context and circumstances. Thus, the chapter consists of the following four sections:

- 6.1 Overview of chapter
- 6.2 The Hamptons' context
- 6.3 Active play experiences, opportunities and environments
- 6.4 Contextual factors impacting on parent beliefs, choices, knowledge and understandings of active play
- 6.5 Determinants shaped by context

6.2 *The Hamptons' context*

According to ecological systems theory, a change in individual behaviour is best explained by considering the context, or what Davison, and Birch (2001) refer to as a person's "ecological niche" (2001, p. 160). They continue to explain that "An ecological niche includes not only the immediate context in which a person is embedded, but also the contexts in which that context is situated" (p. 160). As the focal point of this research is the immediate context or the micro-environment of the family home and key individuals located within this domestic space, a detailed overview of the Hamptons' context is worth outlining at this point and will include information on the members of the Hampton family and details of the physical space in which they live.

6.2.1 The family

The Hamptons are a young and busy family of four, living in a tree-lined neighborhood centrally located near the centre of a town located in South East Queensland. You can get a sense of their busy life by the story shared at the beginning of this chapter. At the time of this

study there were four members of the Hampton family, Lucy (28), George (28), Susan (4 years) and Simon (18 months). Since then, Lucy has given birth to a beautiful baby boy named Howard (6 months) (Refer to Image 6.1).

The Hamptons have a strong sense of family and are committed to their faith. They shared many example of this commitment through their stories, action and parenting choices. For example, although life at the Hamptons was very busy they tried to eat their main meals everyday together. This meant that efforts were made to organise and pack lunches and bags for the next day, the night before, so that there was time to fit ‘family time’ in. Lucy explained, *“I have the bags and lunches packed the night before. I see breakfast time, all four of us, eating our breakfast together, and I’ve always made sure of that.”*

The children, Susan and Simon, share their time between multiple caregivers during the week. They are enrolled in Family Day Care twice a week (Wednesday and Friday). George’s mother looks after them on Thursdays and often picks them up after breakfast and the children spend the day at her house just out of town. On Mondays and Tuesdays Lucy looks after the children at home (Susan attends Prep, the year before formal schooling on these days).



Image 6.2. The streetscape



Image 6.3. The front yard



Image 6.4. The large grassed area in the backyard

6.2.2 The home and neighbourhood

The Hamptons' house is centrally located very close to the city centre in an older, established part of town. Although there are some modern homes in the area, most are beautifully renovated colonials that average between forty and eighty years old. Image 6.2 captures the sense of

coolness and peace you get as you drive along the

Hamptons' street. The roads are wide and tree-lined and the majority of surrounding properties are large, with many showcasing established gardens. As is evidenced in Image 6.2, there is no established footpath on either side of their street (this will be addressed later in further detail Section 6.4.3 as part of a discussion on the implications this has on physical activity opportunities).



Image 6.5. The Hamptons' paved driveway

The Hamptons' suburban house is quite spacious and sits on a slightly more than average size block. This is definitely an enabler for physical activity and active

play. As can be seen in Image 6.3, a solid fence with a gate surrounds a generous sized front lawn that the Hampton children can play behind. This provides peace of mind and helps alleviate Lucy and George's concern of the children accidentally running out onto the street. The backyard also has a decent size lawn that includes a large netted trampoline (See image 6.4). As captured in image 6.5, along the side of the house is a paved driveway and

entertainment area that provides a main place for Sarah and Simon to play and use their bicycles and push toys. A huge garage is located at the end of the driveway. It stores George's gardening equipment, tools and the children's large toys and bikes.

Indoors, the house has wooden floors that make it very easy to clean and a great surface for active play to occur. There are three bedrooms, a formal sitting area, a playroom and kitchen in the main part of the house. There is also a family room and additional bathroom and spare bedroom located down a few stairs off the kitchen and dining area.

6.2.3 The parents – George and Lucy

Lucy and George met when they were at high school and have been married for five and half years. George is twenty-eight years old and the eldest of three siblings. Originally from South Australia, George and his family moved into town when he was in grade 3. Whilst in South Australia, George and his brother and sister were home schooled. Having relocated, his parents found a Christian school on the outskirts of town that they were impressed with, and enrolled all three children there.

George works at a bank and is in charge of looking after ICT systems. He is regularly on call if any emergency happens at night or on the weekend. George's brother and sister work in mission and care positions for the church. One is presently in India and the other one spent a length of time in Haiti. Since childhood, George has loved participating and following any sort of codes that involved 'ball sports'. His favorites were AFL and soccer. During soccer season George is still involved in playing with a mixed team on a Saturday.

Lucy is the eldest of four siblings (with one sister and two brothers) all of whom grew up in the country 40 minutes outside of town. At the time of the first interview, Lucy was thirty-

one weeks pregnant with her third child. She was experiencing a few complications and the doctors had indicated that she may not go to full term. Lucy and her brothers and sister had all attended the same Christian school as George, which was located on the outskirts of town. They attended this school for all of their primary and high school education. On completing high school, Lucy studied at the local university and graduated with a degree in journalism. She currently works four days a week, two of those working in a marketing capacity for her local church, and the other two days working as editor of a young Christian women's magazine. In her childhood, Lucy was a runner and aged champion. Running is still an integral part of Lucy's life and daily routine, and she sees it as an opportunity to keep fit, but also enjoys this time to herself.

6.2.4 The children – Susan and Simon

Susan is a confident and very sociable four year old. She has been raised in a very loving and social environment. She has a passion for ballet and playing with dolls. Although she has a slight speech impediment, developmentally she is doing very well and is very articulate and loves to chat. Susan enjoys her own company, and even at the young age of four and half, she is quite strong willed, independent and very much her own person with her own 'developing' opinions on a range of topics.

At the age of eighteen months, Simon is a 'real little boy', full of energy and ready to discover and take on the world. He has a happy and easy going temperament and loves lots of cuddles and affection. Although Simon sometimes plays by himself, developmentally he is at an age where he seeks feedback and enjoys the company of playing with his older sister. He has a passion for all different sorts of balls, particularly the football and soccer ball. He loves any sort of truck, large or small, and enjoys spending time engaged in building projects (using

different sized blocks and Lego), handyman jobs and gardening work with his dad. One of Simon's favourite play spaces, and a store for many of his toys, is 'dad's big shed'.

6.3 Active play experiences, opportunities and environments

As discussed in the previous chapter, the family environment still remains a significant location where childhood behaviours and values are learnt. This includes experiences and understandings of active play (Pearson et al., 2009; Zecevic et al., 2010). Apart from a range of social players in a child's life that model and facilitate active play behaviours, children will also be influenced by the physical and temporal environment around them, including how their time is managed (Sallis & Glanz, 2006).

The purpose of this section of Chapter 6 is to explore the active play experiences, opportunities, resources and environments that were supported by Lucy and George Hampton within the micro-environment of their family home (Research Question 1). This analysis will also take into account the interconnectedness of this environment to that of the greater macrosystem (Dwyer, Higgs, et al., 2008), whilst also recognising the influence Susan and Simon have on these environments and experiences.

6.3.1 The provision of physical play spaces

The provision of physical play spaces was given a great deal of thought by the Hamptons, this included allocating a particular room (the play room) as the main play space, consideration regarding the children's bedrooms for rest and quiet time, whilst also making allowances in Susan's room for the inclusion of her dolls and playhouse. This subsection will analyse how a range of these particular spaces were used and understood as places that supported or inhibited active play, whilst also acknowledging the impact that Susan and Simon had in changing or interpreting these spaces.

The indoor environment

The Hampton home was ‘child-friendly’ and ideal for a young family, as it offered so many different places for living, relaxing and playing. Before moving into their home several years ago, the Hamptons invested quite a lot of time and thought in their decision to purchase. These decisions were motivated by a range of factors including; the size of the outdoor play spaces, the long paved driveway, the number of rooms, and amount of space offered indoors. In sharing the layout of their home with me, they explained that each room and area had a purpose. There was also evidence (gained through personal observation) of consideration given to keeping these spaces uncluttered and free from objects that were fragile or precious. This meant that the Hamptons were very comfortable with their two children moving around the indoor space knowing that there was limited likelihood of them getting hurt or anything breaking.



Image 6. 6. A collection of dramatic play toys

Reflecting on the Hamptons’ context using information gained through prompts from the CAT scan, personal observation, as well as photo documentation, it was evident that indoor play was regulated. George and Lucy considered it important that most of the toys and their children’s play occurred in the playroom, rather than the children’s bedrooms. A scan of the toys in the playroom reinforced that most of the toys did not support active play toys, but supported dramatic play

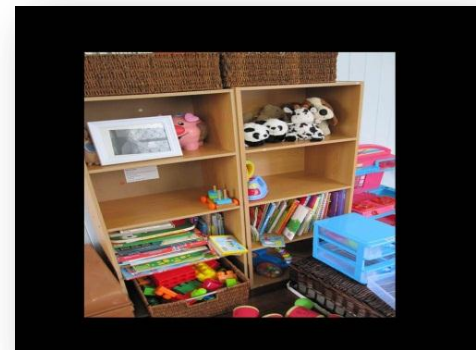


Image 6. 7. A collection of fine motor toys

(pretend play toys including resources to support ‘playing shops’, ‘playing house’,

‘pretending to cook’, ‘pretending to be at church’ – See Image 6.6) or fine motor/cognitive sorts of toys (like books, toy tool sets, puzzles and blocks – See Image 6.7).

The implications of this were that very little time was actually spent by the children participating in active play in this space. George and Lucy explained the reason behind their decision. They wanted the bedrooms to be used for quiet, restful activity, such as sleeping and reading and that they didn’t want the children to be distracted by their toys.



Image 6.8. The mattress – a great place to sleep or do somersaults!

Lucy commenting, *“I want to encourage the bedroom to be a place for sleep. Not that we don’t stop them from playing in there, but I don’t purposely put out lots and lots of toys in their rooms because it’s too distracting.”*

The next anecdote reinforces the Hamptons’ consideration for the layout of the indoor environment. In responding to my comment about the reasoning behind the mattress on the floor in Simon’s room (See Image 6.8), Lucy comments, *“We are just trying to put Simon*

down on the floor instead of in the cot. We started last night. My reason for putting the beanbags there and pillows is that we will sit there and read our books. Like a little reading area for Simon.” Although the



Image 6.9. Sally’s dollhouse for fine motor and imaginative play

Hamptons often had a plan for the type of activity that would take place in the various indoor spaces, often the children had other intentions for how these spaces were used. When asked about the decisions behind the

places where children played in the house, Lucy responded by saying, *“to be honest I do try to*

say that this is your toy room so try to play in there. But that's not always the case. It doesn't mean that I'm a control freak, but I'd like it that way. Unfortunately that's just not the way kids operate." An example of Simon using his bed and bedroom for another purpose, in this case enjoying active play, was observed during my second visit to the Hamptons, when Lucy and I spotted him doing somersaults and playing acrobatics on his mattress.

There was an exception made regarding the Hamptons' decision not to allow toys in the room, with the inclusion of Susan's dollhouse and dolls in her room (See Image 6.9). Lucy explains, *"I did put Susan's doll house in her room because I wanted her to have time to herself. We have also put her babies in her room because she is role-playing that she is having a baby! She's actually been playing in there quite a lot lately"*, Lucy explained. Lucy was very pregnant at the time of conducting this interview, so Susan had been role-playing and saying *"the baby is coming."*

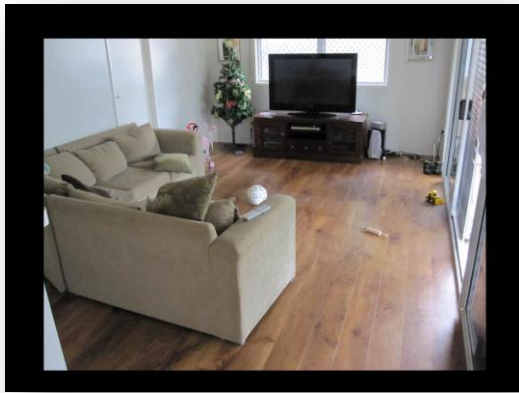


Image 6. 10 The television room with large L-shaped lounge

Another example of the cross purposes of indoor spaces was evidenced in the television and lounge room, which included a large L-shaped lounge (See Image 6.10). This was not a planned play space, however the attractiveness of the large open space, the bouncy lounge and the bunches of cushions

scattered on top of the lounge, proved to be too much of a temptation, particularly for Simon, who would build cubbies with all the pillows, bound from one side to the other or engage in rough and tumble play. George elaborates on this type of play, commenting that *"they take the cushions off and make cubby houses and jump off the couch onto cushions. At one stage*

we had a few mattresses in there and they must have pushed them up somehow and they were climbing up the cushions and then went down them like a slide.”

The information and anecdotes shared here, highlight the influence and ‘well intentioned’ regulation (Giles-Corti & Donovan, 2003a; Trost & Loprinzi, 2010) the Hamptons had on their children’s indoor active play and play spaces. Although the Hamptons strongly supported the importance of active play outdoors (as will be confirmed later in this chapter), they did not facilitate these types of experiences indoors. In many ways, this type of practice confirms a number of points from Karsten’s study (2005) regarding children’s use of space. First, in the Hamptons’ case, the children were definitely what she terms ‘outdoor children’, preferring to play outdoors rather than inside. Second, compared to several decades ago, the trend towards bigger homes and less children has meant that there is increasing indoor space in many modern homes available for indoor play, yet this type of play tends not to be ‘physical’ in nature. However, consistent with Bronfenbrenner’s (1979) research, Susan and Simon were also capable of impacting on the people and places close to them. This was evidenced in the way that they changed the intention, and use of particular spaces, based on their interests and at times, preference for active play. Dwyer and her colleague’s (2008) reinforce this position and comment about “the innate interactive influences of this dyad for children in the preschool-age group” (p. 2).

Although parents can be the enablers of active play, they also influence the sedentary habits and behaviours of young children. The next example highlights evidence of this behaviour and outlines the reasons behind their decisions.

Television time and the lounge room

Apart from the spontaneous active play that took place in the television and lounge room, this space was also the main place where sedentary activity occurred. In discussing how this space was used and, in particular, the Hamptons' television habits, George comments, *"They sometimes watch television in the morning after they're dressed and stuff. They watch TV to fill in the gap. Sometimes we also let them watch TV on Saturday morning if we want to spend a little bit more time in bed relaxing. Probably in the evening after their bath, that's probably the time when they sit down for half an hour and watch a movie."*

Lucy pointed out, that due the fact that both Simon and Susan were very active children, television was sometimes used to relax and calm the children down. It was also an opportunity to give the children and themselves a breather, or little bit of respite. Lucy comments, "Because Simon is 24/7 we sometimes needed him to calm down by watching television." George responds by commenting "It sounds terrible, but you do need that time."

The Hamptons' context supports the work of Dwyer et. al (2008), that confirm that there are a number of patterns of television viewing with one of these being that parents allow children to watch television in the morning so that parents can prepare for work and the morning routines. In the case of Lucy and George it was made very clear that television was given as a reward only when all their chores were done in the morning, including showering, having their breakfast and packing their bags. There were also times when the Hampton's used the television as a 'babysitter' (Dwyer, 2008) to interest and occupy the children's time so that the parents could sleep in, or relax.

The analysis of the indoor environment confirms research which indicates the limitations of active play experienced within the confines of this space, as well as the amount of regulation that often takes place in these environments in terms of parents supporting or inhibiting active play. Evidence did emerge however, which confirmed the influence that children can have on these places and spaces.



Image 6.11. Susan's big pink bike

The outdoor environment

Two of the most common physical environmental areas investigated in terms of predictors of young children's level of physical activity participation, are play facilities and the time spent out of doors (Hinkley et al., 2008; Timmons et al., 2007). The outdoor environment is also understood to be a place where large amounts of unstructured active play occurs, often in the absence of adults (Ginsburg, 2007; Veitch, Salmon, & Ball, 2008). This was definitely the case



Image 6.12. The reindeer head used for running and galloping

with the Hamptons, where both Susan and Simon gravitated to outdoor play at any given opportunity. The outdoor space consisted of two main areas, the paved driveway and undercover garage, and the grassed backyard area. These spaces tended to be used slightly differently.



Image 6.13. A collection of gross-motor pull/push toys



Image 6.14. Another example of a gross motor push toy

In order to facilitate discussion with Lucy on this topic, I shared with her a number of photos from my documentation of the toys that were located on the paved area outside. These included Susan's bike (See Image 6.11), a toy reindeer head on a pole used for running around with, (See Image 6.12), and a collection of push toys (See Image 6.13 and 6.14). Lucy responded by commenting, *"Ah yeah, Susan can ride her bike out there really well and she has the bruises on her knees to prove it."* Lucy explained, that most of the children's active play occurred outdoors on the grass and paved driveway.

The covered family area and combined driveway

The covered family area and combined driveway was a great space that not only supported 'family time' (as this space contained a large BBQ and outdoor eating area), but also provided a conducive space for Simon and Susan to engage in active play. As evidenced in the images (6.11-6.13), the outdoor paved area offered a space and surface for the children to enjoy gross motor experiences such as riding their push toys and bikes. For the Hamptons, this space offered the combined purpose of being a place where they could catch up and communicate with each other and have a drink or bite to eat at the table, whilst at the same time still being able to supervise and positively reinforce the children's engagement in active play. Evidence of this occurred prior to a BBQ at dinner time, during my second visit to the Hamptons.

George and Lucy were able to enjoy chatting with me while Susan rode her bike around us and Simon played with all his push toys and trucks.

The grassed backyard area was often used for playing ball games, supported usually by George. Most afternoons after work the children would ask George to go out and play soccer with them. Active outdoor play on the week-ends often included the children helping George with the gardening. Simon particularly, enjoyed ‘helping out’ and pretending he had his own whipper-snipper and mower.

The large netted trampoline

A large trampoline occupied a prominent place in the Hamptons’ backyard and was a major investment in terms of a resource to support active play (See Image 6.15). It was worth exploring why this resource was important and where the idea for its inclusion came from. Lucy explains, “*When Susan was two we bought it and she played on it heaps.*

The people that owned the house before us had the

same sort of trampoline and she really liked it.” When asked what types of active play occurred on it Lucy comments, “*She jumps on it and does somersaults and roly polys. Simon’s been up there a few times as well.*”

The issue of safety of the netted trampoline was not raised as a reason for the Hamptons’ decision to purchase this resource (Note: Perceived risk will be addressed later in this chapter). It was expressed that the children really enjoyed just jumping and having fun in this enclosure.



Image 6.15. Susan standing on the large netted trampoline in the Hamptons’ backyard

Limited opportunity to play with the next door neighbours

Although Sally and Simon participated in a range of outdoor play in the backyard and on the paved area beside the house, like an increasing number of other children, they usually didn't get the opportunity to play with the neighbourhood kids. Where in days gone by, at a very young age, children would often play at a neighbour's house and in their yard, this contemporary space of childhood is claimed to be increasingly regulated by adults (Karsten, 2005; Trost & Loprinzi, 2010).

A feature of the Hamptons' micro-environment, that was a barrier to supporting neighbourhood play, was a high fence and hedge that surrounded their house on three sides. This not only hindered visibility and ease of access, but also limited opportunities for them to build rapport and trust with neighbours. It was also explained, that the adults were really busy and didn't want the responsibility of having extra children in the home. In the following dialogue I am trying to understand Lucy's reasons for not supporting opportunities for her children to play with the neighbours.

Alice – *Do they have any friends that come over from around the neighbourhood?*

Lucy – *Well, next door they have two kids that are about a year older than mine, but we do have a bit of a policy that because we all (the parents) work, they can talk to each other at the fence there, but they can't come over. We get together at Christmas time and what have you.*

Alice – *So, on the week-ends can they go over?*

Lucy – *No, to be honest, I'm pushed. Having the other kids over here would be too much. We have other people coming over here quite regularly. I think it was a shared agreement with the neighbours.*

Alice – *Simon and Sally are comfortable with that? They don't push that boundary?*

Lucy – *I mean, yeah, Sally has asked, and we say no. They're not at that age. They still need constant surveillance. Maybe when they are 5, 6 or 7 they will be more independent.*

Alice – *So a lot of it has to do with the fact that both of you work during the week and therefore value ‘you time, child time and family time’? It is additional work to supervise as well?*

Lucy– *We are probably not close enough to be able to trust them. It’s not the same familiarity with them; we have been here 2 years. But in saying that, we’re always talking and chatting. I think it just comes down to more a coping mechanism, I feel pushed.*

Giles-Corti and Donovan (2003b) highlight, that the attractiveness and access to a range of environments can increase a child’s participation in both supervised and non-supervised active play. Spurrier et al. (2008) reinforce this and comment that “Higher outdoor playtime scores were significantly associated with greater backyard size and more items of outdoor play equipment in the backyard” (p. 5). This was also the case for Susan and Simon, where the outdoor environment offered excellent spaces to play, and the children were keen to spend significant time there.

Even at a young age, Simon and Susan often engaged in unsupervised play outdoors, yet as evidenced in the example shared about ‘playing with the neighbours’, this space was still highly regulated and controlled by parents both in their behaviours as well as in the way that the environment was designed (high fences and hedges). This control over the environment helped the Hamptons feel comfortable with the children playing in the well fenced-in yard where they could play freely, whilst providing peace of mind that the fence would stop the children going onto the street. Although this was not raised during the interview as an enabler for the Hamptons’ support of the children’s outdoor play, it was inferred in their actions to close the driveway fence when children were playing and their behaviour in feeling comfortable in allowing children to play outdoors unsupervised at times.

The large grassed area, paved driveway, and undercover area, provided opportunities for different types of active play, including playing with bikes and push toys on the paved surface, and different sorts of ball play (like soccer with George) on the grassed area. These sorts of experiences were particularly sought out by Simon who had an interest in any sort of ball (this will be discussed further in the next subsection). The outdoor garden area provided an excellent opportunity for Susan and Simon to enjoy helping George with the gardening. Finally, it was important for the Hamptons that these spaces offered the dual purpose of supporting active play for their children and offering an environment that facilitated family time. This is consistent with the Hamptons' family values that will be elaborated on further in Section 6.4.

6.3.2 Sarah and Simon's interest in active play and intra/inter personal influences

Welk's (1999) position on a social ecological perspective, confirms that individual, social and environmental factors "may predispose, enable and reinforce a child to be physically active" (Welk, 1999, 18). A number of examples outlined in the previous subsection have illustrated this, particularly in relation to the individual preferences of Sarah and Simon (refer to Figure 6.1, the Hamptons' PMEM model).

In the Hamptons' context, the purpose of an environment or resource would sometimes change or be used differently, depending on the individual characteristics of their children. The same was also evidenced in the types of toys that were chosen or purchased by Lucy and George or given to the Hamptons by family and friends. These toys may or may not have been of interest, or been something that Simon or Susan chose to play with. The next section shares a number of the children's intra and interpersonal characteristics and the influence these had on their interests and the types of active play experiences that they enjoyed.

Susan

Susan was four and a half years old at the time this research was conducted. As outlined earlier in the information provided that addressed the Hamptons' context and family, Susan was the older of two children, had a younger brother and was very independent, social and confident in nature. Although still very young, she expressed clear views of what she liked and how she wanted to spend her time. At the time of the interviews Susan was attending Prep (the year before formal schooling) two days a week.

There were two main forms of indoor play that Susan enjoyed: fine motor play with her dolls, playhouse and stuffed toys, and her keen interest in socio-dramatic or role playing. Her interest in socio-dramatic play is consistent with the type of play appropriate for her developmental age (Frost, Wortham, & Reifel, 2008). Another reason for Susan's enjoyment for this type of play and wanting to play 'mothers' and 'having a baby', can be attributed to her using dramatic play as a vehicle for processing and understanding social behaviours and events. At this time, she was trying to come to terms with Lucy being pregnant and soon to have a baby. Susan was working through this notion by role playing that she was also having a baby. Apart from her interest in dramatic play, Susan also enjoyed helping her mother with the household chores such as cooking, tidying, shopping and house cleaning.

Outdoors, Susan would ride her bike on the paved surface and when given the opportunity, loved riding to the park. She was also encouraged to play outside when Simon asked her to come and play with trucks and push toys. As mentioned previously, both Susan and Simon enjoyed playing outdoors with George, however, Susan didn't gravitate to ball play as much as Simon. Susan also enjoyed the extra-curricular pursuit of ballet and had just started attending classes.

Simon

Simon was eighteen months old at the time of interviewing the Hamptons. Although Simon enjoyed playing indoors, particularly with his blocks, farm animals and tool set, he often gravitated outdoors. Being of toddler age, Simon had a shorter attention span for play and would frequently move from one activity to another. One moment he would be ‘fixing’ something with his handyman toolset, the next he would be pushing one of his toy trucks or push toys up and down the driveway. His parents described him as ‘mad about balls’ and he would ask George to play ball with him as soon as he finished work each day. Lucy commented, *“He’s always kicking the soccer ball around by himself or with dad and if he’s got a ball there, he’ll be playing with it. He does it on the pavement. We also have these goal posts that we set up on the lawn for him, and he loves to play soccer with George.”*

George also mentioned that outside, Simon loved to ‘help out’ with the gardening, and was fixated on George’s whipper-snipper and mower to the point that George’s family bought him his own toy set for Christmas. Although Simon’s involvement in these sorts of experiences sometimes involved ‘watching his dad’, there was a lot of functional active role play that occurred when he was involved in helping him out. In referring to Simon’s love of gardening, George commented, *“Susan was really never into it at that age. Like she would follow you around, but he’s mad into it. Like, he will sit there if I trim the hedges and he’ll literally sit there and watch or want to help clean up.”*

Before ending this section on the individual interests and characteristics of the Hampton children, another example is shared, of how a toy, the ‘Elmo play station’ (See Image 6.16), was used differently by both Simon and Susan, due to differences in their individual

characteristics. This was not surprising given their different developmental stages and the influence this had on their varying play interests and attention spans (Berk, 2012).

The Elmo play station

The Elmo play station was an example of how a toy, that was given to the Hamptons by friends was used in very different ways from what it was originally intended. Simon only played with it for short periods of time and lost interest in it quickly, whereas “*Susan used it as a shop counter*”, Lucy commented. The short attention given to this toy by



Image 6.16. The Elmo play-station used by Susan and Simon in very different ways

Simon and the age appropriate, socio-dramatic play that Susan used this toy for, reinforce how children can influence the type of play that occurs within a given context. It also reinforces that most of the toys located inside did not support active play.

6.3.3 Social practices that support active play and an active lifestyle

Significant social learning about sedentary and physical activity behaviours, as well as predictors of childhood physical activity pursuits, are believed to be linked to the influence of a range of social agents including family, education and care settings. Parents are understood to influence active play behaviours through social support (e.g. facilitation, encouragement and praise), their active pursuits (modelling) and enjoyment in physical activity (Beets et al., 2007; Salmon, Timperio, Telford, et al., 2005; Zecevic et al., 2010). Additionally, parent bonding in shared active play, has been explored by some researchers and identified as a mechanism for exerting influence on childhood behaviours, and in particular the association between parental physical activity and youth physical activity (Dzewaltowski et al., 2008). The purpose of this subsection of Chapter 6 is to continue to explore issues in relation to

Question 1, by unravelling the stories shared to gain a context-dependent understanding of the social patterns that occurred within the Hamptons' micro-environment that supported the active play of their children.

Play supported through routines

Due to the Hamptons' work commitments, their support for play was often facilitated through daily routines. For Lucy, this meant integrating opportunities to be with the children as part of her daily routines, such as cooking, shopping and doing housework. She explains, "*I try to incorporate playtime into my routines, or setting the table for dinner, or into asking them to help me cook, or we'll go the park or have fun or morning tea at the park.*"

At one point Lucy commented, that she didn't have a lot of spare money to invest in extra-curricular activities for the children, so she would try to encourage them to join in routines with her. Although not an example of active play, Lucy explained in the next example how her support of cooking with the children impacted on the type of play that they continued in their own time. "*Yeah, I cooked with the kids and then they went into the toy room and then continued to cook in there.*"

Although George viewed grocery shopping "*as a chore*", for Lucy it was seen "*as an excursion*" and at times, an opportunity to extend learning with her children. George comments, "*I say to Lucy, why would you want to bother to take the kids with you?*" She responded saying that the children really got excited about going shopping with her and commented, "*I enjoy it with them because Susan goes and grabs the vegemite, she knows where the vegemite is, so we'll do lots of that sort of thing together.*"

George would often just go about his chores and routines and integrate active play into them. This tended to happen when he was outdoors involved in his yard work, or in the shed 'fixing'

something. He commented, *“We’ve only noticed over the last 3-6 months, any hammers, or every time I bring out the whipper-snipper, or the mower, he’s just bang right there wanting to help. And now when I clean up, I’ve got a bench in the shed there, and I’ve got to clean everything up, because he gets into all my tools, so I have to put it way up high.”* George facilitated this type of play by buying Simon some wood, some little tools, and a pretend hammer, at Christmas time.

The examples shared here provide a snapshot of how play was supported by the Hamptons. It also highlights again, that the main opportunities for active play occurred outdoors.

The use of encouragement for sustaining play behaviour

The Hamptons’ support for Susan and Simon’s active play was often in the form of facilitation. It was important, particularly with the children being quite young, to scaffold and sustain their involvement in play by using encouragement and by being present to provide reinforcement. This first example highlights Susan riding her bike and pretending to pay a toll as she circles the table each time. In this example, although parental engagement in her play was very limited (as her parents were being interviewed by me at the same time), the small amount of conversational reinforcement that was given (in this case by George) seemed to motivate Susan and Simon to continue their play. Simon also used this opportunity to go to the shed and grab some trucks out, while being supervised as he was doing this by his parents.

George – *You want to show mummy’s friend how you ride your big bike?*

Susan – *Look! Look! Excuse me* (Susan shows me her bike and how she can ride it).

Susan – *Wow, watch me this way* (Ringing bell).

George – *Hello, Neeeeee* (making sounds that encourages play). *Nnnnnneeee, nneee, look at you!* (Meanwhile Simon has wandered over to the big shed and is getting some trucks out).

George – *Look at you! Look at you!*

Susan – *Here’s some money* (Susan rides around the table and every time she gets to a certain point near her dad - she gives him a leaf that she pretends to be her toll fare).

George– *Thanks Susan that’s \$5 for that toll. Keep going.* (George gets some trucks out of the shed for Simon, and Simon pushes a big truck from the shed).

Susan – *Hereeeeeeeeeeeare! Toll fee. Bye. Dad here’s some money.*

George – *Thanks Susan, \$10 this time is it? It’s going up.*

More interaction continues as our interview continues.

Susan – *Ahhhhhhh, excuse me dad.*

George – *OK, here’s \$5 for you. Simon, where’s your truck? Go and find your truck.*

Encouragement, both direct and indirect, as well as praise, were nearly automatic forms of support for active play with the Hamptons. Cleland et al. (2009) confirms that this type of support can extend the involvement in girls outdoor play. Veitch (2006) notes that this type of support by fathers is an effective parenting strategy.

George’s love for soccer and football, and his passion for all types of ball sports, naturally flowed on to his engagement in active play with the children. Even after a long day at work, his love for soccer and the value he placed on the children and the family, meant that he would prioritise time to engage in play as often as possible. He would use this time to throw and kick the ball with Susan and Simon. These contextual factors of influence are unique examples of the Hamptons’ micro-environment (Refer to Figure 6.1). Lucy comments, *“When George comes home. He’ll take the rubbish out and feed the cat and then he’ll play ball. Most afternoons in the summer, he’ll find time to play with the kids.”* In responding to my question about the timing of his play with the children after work he commented, *“Simon had the soccer ball and he was ready to go, which was fine. And Susan was asleep in the car and I tried to carry her in, but she saw that we were going to play and she was off and ready to go.”* George’s support and engagement in active play has meant that the children have

developed a range of motor skills. George comments, *“I haven’t done too much teaching of techniques but Simon can kick with both feet already, it’s unbelievable.”*

George finds the outdoors relaxing and a place he likes to gravitate to after work. This space is therefore one of the most popular places in which he supports active play with the children.

He comments, *“Because I’m stuck indoors all the time I don’t like to spend a lot of time indoors when I get home. I prefer to be outside doing something. That tends to be where I hang out with them. Like the last time I did the hedge, obviously it drops all the stuff and they were picking it up, throwing it around and chasing each other around the yard. They weren’t helping me put things in the bin, but they were having fun.”*

The examples of George’s involvement in active outdoor play, support Beets’ (2007) comments about children being influenced by the explicit observation of and participation in what parents are involved in, and a “direct representation of the activation role” (p. 125). Although for many working parents, these types of experiences usually occur on the weekend, George and Lucy try to weave them into their busy days (The way time was managed by the Hamptons will be discussed in more detail in section 6.5.1).

The power of role-modelling

The development of physical activity behaviours is a complex multifactorial phenomenon influenced by a range of environmental, biological and social factors. Lucy and George have had a positive sporting background and continue to enjoy being active. It was particularly interesting to hear how they managed to fit sport and exercise into their busy lives and how this passion for physical activity filtered down to their engagement and support



Image 6.17. A very serious pram for keeping fit!

of active play with Simon and Susan.

Lucy was passionate about running, and even at eight months pregnant, was keen to fit exercise (even if it was walking at this stage) into her day before she got too busy. On one such occasion, her son Simon had woken Lucy up early in the morning (around 4:30am), and so she was up looking after him and doing a few house chores. She then set off for a brisk walk with Simon in the ‘serious’ pram (See Figure 6.17). Reflecting on the morning walk, George commented that *“Simon came bounding in this morning and he was happy. So he does see activity and once this baby arrives we’ll be out pushing the bikes and pram in the park and back into that again, walking with the family and stuff.”*

During another of my conversations with George about how he supported his children’s active play, he mentioned that during the soccer season the children enjoyed going to watch him play. He comments, *“Yeah, Susan really loves to watch. Simon, I think this year Simon will probably really get right into soccer. He’s right into it. He’ll be kicking the ball and chasing the ball.”*

Alice – *I don’t see a football anywhere around?*

Lucy – *I think he lost his AFL ball (his Sherrin) up a tree to be honest, last time we went out with the kids.*

What follows is the inclusion of ‘Heartfelt Moment 1 – Watching from the sidelines’. It highlights how George’s involvement in soccer and modelling of physical activity was integrated into the lives of the Hampton family. As mentioned in Chapter 5, this style of analysis helps to tell a different, more personal account of individual contexts. It shares this

through a personal lens that tries to capture the very ‘real’ side of each family’s approach to supporting active play.

Lucy and George’s commitment to physical activity supports Gustafson and Rhodes (2006) findings that suggest that parents influence childhood participation in physical activity through their own role modelling. Spurrier (2008) refined this further, and suggested that maternal modelling, in some cases, may be slightly stronger as a result of mothers spending longer periods of time at home with their children. While links between the modelling of parental physical activity and active childhood participation is still contested in some research, there are many examples to support the fact that Susan and Simon observed, on a regular basis, their parents enjoyment of physical activity and the ways in which these experiences were negotiated around work and leisure time. Whenever possible the children were keen to join in to whatever activity their parents were doing. The children may have also observed examples of ‘gendered’ physical behaviour or the place of sedentary behaviour and ‘screen-time’ in their lives. Regardless of the mechanism, the social practices, social support, norms and expectations regarding active play that occurred within the home confirm and reflect the expectations that ‘being active’ was valued by the Hamptons (Ritchie, Welk, Styne, Gerstein, & Crawford, 2005).

Heartfelt Moment 1– Watching from the sidelines

George - *I play soccer on a Saturday, so Susan from quite a young age would come and watch and walk around the edge of the field. We have friends that would come to the same game and she had friends at soccer. She would run alongside, as she gets bigger and Simon as well, they both love balls. Because it's social, it allows us to bring the kids and they can run along the side lines and stuff. Simon was probably a bit young last year, but this year he might get into it.*

George has always loved any sort of ball sports, particularly soccer and Aussie Rules (AFL). His love of AFL stems from growing up in South Australia. During soccer season he plays with a team on a Saturday. The family usually sits or 'run along the sidelines' and support him. It is often a great time for families to socialise and enjoy the 'banter' of the game.

It's interesting to listen to stories of how the Hampton children gained a passion for sport and love of active play, by being part of the physical activity their parents engaged, as they 'watched from the sidelines'. The sidelines could be defined in a literal sense, as being those lines that framed the parameters of the soccer field, the lines that the children watched from or ran alongside as they shouted words of encouragement for their dad as he played.

The 'sidelines' could also however be interpreted more broadly as being those moments where the Hampton children observed their mum bound in from a morning run and notice the positive change in her mood as being one of self-satisfaction, invigoration and contentment. It could be observing and gaining a wonderful sense of warmth when they joined the rest of their family as they walked and played at the local park. The sidelines may have also been interpreted as being involved in an outdoor clean up and listening to their dad hum along to a tune or casually chat to them as he worked in the garden or trimmed the hedge.

This may not be a conscious intention of George or Lucy, or enter into their minds as they go about enjoying these moments, however during these times when they are being active or playing sport, Susan and Simon gain a sense of the 'fun' and 'togetherness', of being active. They also gain an appreciation of the socialisation and friendships that often compliment these moments.

6.3.4 Accessing other micro-environments as a resource

As indicated in Chapter 5, this study had the main focus of understanding the practices and behaviours of children's active play supported by their parents. Yet, it is understood that these behaviours are impacted and supported by the various other people, systems and environments that sit outside the family home (the micro and macro system, see Figure 6.1 – The PMEM Model of the Hampton Family). This final subsection helps to further inform Question 1 by analysing a number of these environments and how they impacted on the provision of active play for Simon and Susan by their parents.

Lucy – *Susan rode all the way around Queens Park the other day with her big bike, it was amazing.*

A significant aspect of the physical environment, closely linked to the Hamptons' micro-environment, were two large parks a very short walking distance from their home. These parks were accessed frequently and supported a range of active play experiences. Until recently (due to Lucy finding it difficult to walk long distances because of her pregnancy), George and Lucy would usually walk with Simon or push him in the pram and allow Susan to ride her bike. The anecdote below shares a discussion by Lucy and George on the topic of their use of parks.

Lucy - *We'll go to the park or have morning tea at the park.*

Alice – *Is the park an asset for you here? Do you use it because it is close to you here?*

Lucy – *Yeah, definitely.*

George – *We meet friends there as well. It's just a nice walk and Susan can ride her bike and we'll walk with the pram.*

Lucy- *Yeah, exactly. At our last place we might not have been as active. We wouldn't go to the park as often and we had to get into the car.*

The Hamptons' use of the park is consistent with the research of Veitch, Salmon and Ball's (2006), and Davison and Lawson (2006), who determined that park use may increase if parks are easily accessible. The only obstacle that these journeys to the park presented was that there were no footpaths on several of the streets. The lack of footpaths could be viewed as an obstacle or determinant that impacted on these experiences (this issue will be analysed further in Section 6.5.3). In a number of ways, the Hamptons' neighbourhood could be classified as a resource, as it offered close access to a number of parks. It was perceived to be a relatively safe neighbourhood, and the environment was attractive, with shady trees and enjoyable surroundings, all of which made walking pleasurable.

Another significant resource for the Hamptons was their ability to access a rich source of social capital. I concur with Freeman's definition of social capital being a "product of interactions....embedded in social relations" (2010, p. 159). Freeman (2010) continues, "Social capital is generally assumed to be a central building block for social health as increased social capital is seen to be associated with increased well-being" (p. 159). The influence that these sources of social capital had on parental values, knowledge and understandings will be explored in detail in Section 6.4. However, at this point, I turn to analysing how this access to social capital, particularly with reference to how family and friends, were sources of support for the Hamptons in offering opportunities for active play.

As indicated in Chapter 5, these social environments are proximal to the micro-environment (See Figure 6.1). Kolar (2000) notes, that these sources of social capital include teachers, work colleagues, church members and community leaders. The Hamptons often gained their knowledge of ideas and acquired a range of resources for supporting play and physical activity from their close family and friends (including those acquaintances linked to their local

church). It was noted that many of the Hamptons' toys were passed on and given to them by friends and extended family, as was the case with the Elmo playstation (See image 6.16). These toys may not necessarily have represented things that the Hamptons would normally value or go out and spend money on, but many of them supported Susan and Simon's active play.

The Hamptons had an excellent relationship with both sets of in-laws. Their parents were only about ten minute drive from their home and loved visiting and caring for the children. Since the children were very young they had been looked after at least once a week by George's parents who live on acreage. During these times, the children were frequently involved in gardening and active play outdoors. George commented, "*Mum is a good outlet. They have plenty of space at their house. They get under the lemon trees and collect lemons with nanna. They also help with the weeding in the garden. Simon is massively attracted to the ride on mower.*"

Lucy and George's brothers and sisters also spend a lot of time with the children, particularly Lucy's younger sister who minds Susan and Simon regularly. Week-end gatherings, BBQ's, walks to the park and play in the backyard are all frequent occurrences with friends and family, including families with young children from their church community.

6.3.5 Summary of section

This section of Chapter 6 has reported on data collected on the ecological niche of the Hamptons. What has emerged from an analysis of these data is an appreciation of the following points. First, the Hamptons' home afforded a range of play spaces for both active and non-active play. Most indoor play was encouraged by Lucy and George to take place in the playroom, and the resources in this space facilitated primarily sedentary play. Often play

opportunities were wrapped around routines and times to bond and enjoy family time. The backyard and paved driveway encouraged a range of active play, often facilitated by George, particularly the experiences of ball play and gardening chores. Within these various spaces, there was evidence of Simon and Susan's characteristics and interests changing the type of play that occurred there.

Second, the Hamptons' micro-environment supported a range of social learning. Facilitated support in the form of encouragement and responsiveness helped to sustain active play and was particularly effective for the children at a younger age. Parent modelling of physical activity behaviours also impacted on Susan and Simon's understanding of the value and place that physical activity had in their lives. Finally, while the focus of this exploration was directed primarily at the micro-environment of the family home, the complexity of this environment (Australian Government Department of Health and Ageing, 2009; Dwyer, Higgs, et al., 2008) meant, that at any one point, a number of other environments could impact on the Hamptons' context. In their case, close proximity to parks was definitely an enabler for active play and the Hamptons' social connectedness with family and friends contributed to supporting opportunities, sources of information and resources that supported active play.

6.4 Contextual factors impacting on parents' beliefs, choices, knowledge and understandings of active play

As indicated in Chapter 5, a recurring theme of this thesis is the complexity and idiosyncratic nature of families that are determined by a range of precursor and precipitating factors (Jamner & Stokols, 2000). The section that follows provides an analysis of data that ascertains how a number of environments and ecological factors shaped the Hamptons'

behaviours, values and practices in supporting Simon and Susan's active play (Research Question 2).

6.4 1 Influences from within the micro-environment and the microsystem

Influences from within the micro-environment

In order to better understand factors that influence the micro-environment, we need to consider the context that individual lives are embedded in. An understanding of this context can be gained by referring to Figure 6.1 that illustrates the various micro and macrosystems that impact on the Hamptons. As indicated in Chapter 5, life experiences that occur longitudinally (across time) (Lawlor & Mishra, 2009), both at a personal level (micro-environmental levels), as well as within the microsystem that included friends and family, have a significant influence on attitudes and understandings of physical activity. This was consistent in Lucy and George's context, where a key factor impacting on their understandings and values flowed out from their own personality, traditions of physical activity participation and support and family times from their own childhood. When asked about where he got his ideas about parenting from, George commented "*Mainly, through mum and dad, and just watching and remembering things from my own upbringing.*"

Lucy and George both can recall positive experiences from their own sporting background and memories of enjoying being active as a child. The majority of George's participation in physical activity when he was younger revolved around any sort of sport involving balls. He was a very social child and comments, "*I represented my town in AFL (Aussie Rules). I enjoyed AFL, cricket, soccer and football.*" His love of AFL stems from growing up in South Australia, where this game was embedded into the culture of society. In a way, it formed the identity of who they were as a town and community. During soccer season George continues to play with a team every Saturday.

Lucy was also active in her school years and enjoyed running and represented her school in cross country. She comments, *“I was a runner in school and aged champion. I would love to run at school, longer distances, cross country. I started to enjoy it and then started to jog after school as well. In my teenage years I really started to run.”* These habits and behaviours, initiated in childhood, were still very much instilled in Lucy’s current daily routine, where she tried to get up every morning and run or go for a walk, often pushing Simon in the pram. She comments, *“If I have a walk a day or jog a day my love tank’s full.”* George supports this and responds, *“You’re a much happier person.”*

The influence of the micro-environment, through George and Lucy’s active childhood experiences and participation in sport, impacted on their attitudes and support for their children’s active play. This was particularly evident in their attitudes regarding the importance they placed on their children living active lives and limiting sedentary activity. An example of this is when George commented, *“I’d prefer them to be running around then to be sitting around the television.”*

Although Lucy and George shared a range of views regarding the value they had for physical activity, it was also evident in their practice. For example, George’s love of balls and the outdoors meant that he prioritised time in supporting these types of experiences with the children. Lucy’s childhood routine of ‘fitting training’ into her busy schedule, meant that she modelled the integration of times to be active herself, and facilitated times and environments for the children to actively play outdoors.

Influences from within the micro system (extended family and friends)

There were a number of examples shared by the Hamptons of how their actions, support and knowledge of active play were influenced by other social networks (located within the

microsystem – See Figure 6.1, The PMEM Model of the Hampton Family). As a young family, BBQ's and gatherings in the backyard or local park, were a common occurrence and an opportunity to enjoy each other's company, share a meal and swap parenting ideas with one another. In discussing these practices, George comments "*We mingle with a lot of people from church and learn a lot from them. We learn from each other and we look out for their kids and they look out for our kids. Every time we have these meetings and friends over there's that closeness. Friends are good role-models, they take an interest in our kids and vice versa. It's not unusual for us to have 12-14 people here. The children utilise the driveway a fair bit. They just grab out all the cars and they bring their bikes around and stuff. A lot of the kids are our kids age as well. They have a Creche at church as well and they look after the kids during church.*"

This example illustrates what Stone (2003) distinguishes as the Hamptons' access to a type of social capital, referred to as 'bonding social capital'. This includes members that already know each other, whilst also dependent on a relationship of trust and reciprocity. For the Hamptons, this network of friends and family provide a support and safety network for parenting and opportunities to share knowledge. For George, a lot of his knowledge is drawn from his own upbringing, networking with other parents and at times, gaining information from the media. Lucy also draws on her own childhood and her parents' practices, she comments, "*I think that mum was probably a straight down the line mum and time was always sparse because she was a working mum, but at the same time it was part of my character. Because mum wasn't there 24/7, now I'm very capable as a person not having to rely on parents 24/7.*"

This example does raise for consideration the impact that parental history and background has on influencing their approach to parenting and decision making. Evidence of this ‘sense of independence’ or encouraging to ‘play on their own’, was witnessed at the Hamptons where, even at a young age, Susan and Simon were encouraged to go outside and play by themselves. There were also examples of Lucy and George not ‘fussing’ over their children’s safety, and times when the children were encouraged to take ‘calculated risks’ (this will be discussed later in section 6.5.2).

There was also evidence of Lucy drawing on her social networks for standards and ideas about ‘mothering’. A number of Lucy’s girlfriends are full-time mothers who set very high standards for ‘best practice’, which include supporting active play. At times, Lucy expressed feeling slightly pressured by their ‘ideal parenting,’ and would get disheartened with trying to compare her approach to that of her friends, yet she did see value in their ideas and input. She commented, *“I’m so appreciative that I do have friends that take it to the nth degree, because that probably pushes me to think, you know?”* Although this didn’t necessarily directly impact on the Hamptons’ support for the active play of their children, it did flow over into their modelling of physical activity and the values and information that their children overheard. An example of this is shared when George commented, *“We had friends over last week and four weeks after having her baby she was off running again, so Lucy was encouraged by that.”*

6.4.2 Influences from the greater macro level (access and influence of social capital)

Apart from their own history of physical activity participation and the rich source of social support that influenced their values and beliefs (Campbell et al., 2008; Ziersch, 2005), a range

of factors from the greater macrosystem also influenced the Hamptons (See Figure 6.1 – The macrosystem). For example, Lucy’s tertiary background in journalism meant that she valued the medium of ‘print’ as a source of knowledge. Lucy felt very comfortable sourcing parenting literature and referred to these sources both during and after her pregnancies for her understanding and ways to support active play and learning with Simon and Susan. Evidence of this was observed when discussing with Lucy the importance of active play. Lucy commented, *“Probably from my understanding, from what I’ve read, that kids learn about their world from touching, feeling and experiencing through activity. So they gain their understanding of the world by experimenting and playing. And so if a child isn’t actively playing then they could be limited in terms of gaining a wider understanding of the world.”*

In this example, Stone (2003) would propose that Lucy was not only able to draw on ‘bonding social capital’, but also ‘bridging social capital’. This could include the ability to gain access to resources from other sources, including professionals and parenting books. An example of this was when it was raining (after a week or so of constant rain) and although Lucy had her own work to do and was about 35 weeks pregnant, she felt that it was important to facilitate some active play experiences with her children outdoors (in the paved undercover area).

Lucy and George commented, *“The other day it was raining and I was thinking “Ah, crikey, I’ve got a whole day with the kids and I’m exhausted and tired, I don’t know how to fill in the day.”*

George – *To do something different you needed to really focus and give them your time rather than doing the other stuff.*

Lucy- *And I was saying to George, “OK, 110% of my time today, like trying to think of creative things to do.*

Alice – *What sort of creative things did you think of?*

Lucy - *Like in the shed, I had a stop and go sign, so they were riding bikes. I would stop the music and ask them to stop. I was trying to think of games, but Simon was not quite at that stage, so I was trying to think of some creative ideas.*

There was an interesting example however, of when Lucy's valuing of books (that may have had a positive effect on her children's literacy levels) increased sedentary experiences for Simon and Susan, and was in effect, a barrier to active play. As discussed previously, Lucy valued opportunities for the children to read books in quiet spaces in the house. These opportunities were also seen as a way of bonding with the children and calming the children down before a nap. As discussed in Section 6.3.1, Lucy even created a space on the floor in Simon's newly arranged room, for books. George commented that he gained most of his ideas from his own childhood from learning and talking with his parents, and by talking to his friends and colleagues at work. The following comment shares his feelings about the value of gaining parenting information from books, *"I hate books. I can't stand reading stuff."*

A significant aspect of the Hamptons' lives was their strong Christian values (influence from the macrosystem – See Figure 6.1) and connection to the large social network of the church community (influence from the microsystem). Lucy was also editor for a young women's magazine supported by the church and worked in public relations for the church two days a week. To a large extent, both of these systems influenced their thinking on parenting and flowed over into their support for active play. This value was evidenced in the Hamptons' valuing of active play as an excellent opportunity of spending time with the children (this topic will be addressed in detail in Section 6.5.1). George commenting, *"We probably go to church. That is another thing we do as a family. We're all together and that's something we do as a family."* It also crossed over into the priority placed on active play, in terms of 'making time' to play together, including walks to the park, playing ball games with the

children, facilitating outdoor play like gardening, and including opportunities to participate in routines together.

6.4.3 Examples of the complexity and interconnection of multiple influences

As indicated in Chapter 5, the behaviours of parents and the impact they have on young children within the micro-environment of the family home are complex and idiosyncratic (Ball et al., 2006; Campbell et al., 2008; Koplán et al., 2007; Lawlor & Mishra, 2009). Most behaviours are influenced by a range of factors and environments that cannot be easily tracked to just one or several determinants. The final discussion in this section of Chapter 6 shares an example that highlights this complexity and the challenges of using the PMEM model for understanding the impact of a range of social ecological factors on behaviours and values. In this example, George remarked that one of the reasons that he valued and supported the children's involvement in active play was because he observed evidence of the children being better behaved after they were active for a period of time.

He shared the following comments, *"I'm just probably thinking that when the children are more active and you've come home and spent time playing with them after work and they've had more time to be active, I tend to think that they are a lot more calm and more relaxed at the dinner table - which might be half an hour later. So, rather than when they race home putting them straight into the bath and their jammies and straight in front of their meal where they tend to misbehave, it's better to go outdoors or encourage them to be active beforehand."*

He continued, *"Today was a classic example, where I got home at 3:30pm, so I was home when they got home. So I was able to play with them for an hour or so. At the dinner table we never had an issue, there were no issues tonight. I just noticed a massive difference; they were a lot calmer."*

The significance of this example was that it provided insight into the difficulty, or perhaps the multiple ways of interpreting, the influence of environments or social ecological factors on parent values. In attempting to understand George's values using the PMEM model, it was understood that George definitely noticed a range of psychological and behavioural benefits for supporting active play with his children, in terms of 'making life easier' at meal times and bed time, because they were tired and had expended a good deal of energy earlier in the day.

6.4.4 Summary of section

This section of Chapter 6 explored the impact of contextual factors on the Hamptons' values and understandings of active play. The preceding analysis has demonstrated that Lucy and George's life experiences, such as their positive childhood experiences in sport and physical activity, have influenced their attitudes and values in relation to active play, and were indeed evident in the way that priority was placed more on 'getting out doors', than other sedentary behaviour such as watching television. Moreover, the analysis has highlighted that the Hamptons accessed a range of social capital including 'bonding capital' (located within the micro-system) and 'bridging capital' (located within the macrosystem), both of which were rich resources to draw upon for parenting knowledge and influencing their values and attitudes towards active play. Finally, the preceding analysis has also confirmed the complexity of these factors in efforts to understand systems of influence, whilst also acknowledging that these factors are very much open to interpretation. These forces can in fact be interpreted by parents as either barriers or enablers for supporting active physical play with their young children.

Using the Hamptons' PMEM model (See Figure 6.1), three of these determinants: time, perceived risk and the physical environment, will now be analysed in further detail. Section

6.5 opens with another heartfelt moment, 'Heartfelt Moment 2'. This reflection shares the way that the determinant of time, can be skewed into an enabler (prioritised) if it is valued as 'family time'.

6.5 *Determinants skewed by context*

In the social ecological model outlined by McLeroy et. al (1988), health behaviours are described as occurring within a multi-layered context. At every level within these systems there are barriers and enablers. This study sought to examine the phenomenon of 'multiple layers of influence' a little further and was interested in understanding how ecological factors influence the way that determinants are skewed to become barriers or enablers of parental support for active play experiences and environments (Research Question 3).

Heartfelt Moment 2– Overcoming busy times by prioritising ‘family- time’ as an opportunity for active play

Popping children into bed for afternoon naps, running them to day care, packing bags and lunches, going to work and preparing for another baby, time is so precious at the Hamptons. With two parents working, two young children and another child due very soon, what hits you very quickly with this family is that life is busy. A good busy, not a chaotic or angry busy but a constant hum of busy.

The day often starts at 4:30-5:00am in the morning, with young children waking, wanting attention and their breakfast, and finishes late in the evening with Lucy doing chores, and perhaps a bit of planning for work and writing for a magazine of which she is editor. It is hard to contemplate where in this hectic schedule, Lucy and George would find time to support active playtime with their children.

For the Hamptons, the valuing of family time and their love for sport and physical activity, mean that they prioritise and integrate times for active play into their busy days. What might be classed as ‘mundane’ for some families are moments embraced by the Hamptons as an opportunity to spend time together. Whether it be making cakes and cooking together, picking up mulch in the backyard, routines like shopping and helping to set the table, George playing with the children outside after work before dark, going for family walks to the park, involving the children with outdoor chores, or Lucy spending a very wet and rainy day thinking of creative ways to keep her two very active children busy. All of these moments are not only opportunities to bond as a family but many experiences also supporting an enjoyment of active play.

6.5.1 Time

One of the reasons that parents identify for their inability to support the active play and their dependency on sedentary activities for young children, is the common complaint of not having adequate time (Clements, 2004; Gershuny, 2000). This is understandable, considering the increase of dual-earner families. Yet, Gauthier, et. al (2004) report that findings from a range of time-use research suggests that when parents aren't working, they are swapping other commitments, for spending more time with family and children.

Prioritising family time around busy routines and schedules

The Hamptons are similar to a lot of busy young families. They often start the morning with Lucy waking early, doing a range of chores and perhaps slotting in time for a walk or jog before going off most days to work. Meanwhile, a typical morning would see George waking up, looking after the kids and getting them ready for the day. Yet, the Hamptons valued 'family time', and so efforts were made most mornings to have breakfast together before going off to work, nana's or kindy. Dinner was also seen as an important time to be together and catch up on the day and enjoy a meal. As highlighted in 'Heartfelt Moment 2' and in Section 6.3.3, because of the Hamptons' priority for family time, their routines and Lucy and George's facilitation and engagement in active play, were often motivated by opportunities to be together as a family.

These busy daily routines, to some extent, regulated the amount of time allocated for indoor and outdoor play. In the mornings the children usually occupied themselves, indoors. Susan and Simon often followed their parents around or '*got to watch a little TV*'. Lucy explained that time for sedentary activity in their daily routines usually occurred when she was "*making beds after breakfast*". During these times the children could go down to "*the spare room and have a play*" or would follow her around the house. If they were organised in the morning she

would say to the children “*if you are all dressed and have had your breakfast you can watch TV for 10 minutes before we go.*” But she explained that TV wasn’t something that was encouraged every morning.

Afternoons at the Hamptons appeared to be the main time for active play. George would prioritise his time to come straight home from work, so he could ‘play with the kids’ before dark. George said, “*Simon and I will kick the ball around the backyard here. Susan and I will have running races around the trampoline.*” Although George mentioned that, “*It comes back to time*”, he would ‘tax’ (Gauthier et al., 2004) his time from other activities or tasks, because these experiences were valued as important opportunities for the children to be active as well as opportunities to spend ‘quality time’ with the children. Both Lucy and George do point out however, that the week-ends, particularly Saturday, were more conducive in supporting active play. George commented, that even if Simon was sleeping, “*as soon as the mower or whipper-snipper started he’d be into it, bang!*”

The Hamptons, are similar to many families, in finding the balance of work and family problematic (Human Rights and Equal Opportunity Commission, 2005). Yet, within the microsystem, including the social practices with extended family and friends and the church community, the importance of active play and ‘spending ‘quality time, and in particular the intimacy of ‘family time’ with children, were all values that were reinforced (factors from the micro and macro level). At a micro level, Lucy and George both had jobs that offered flexible work arrangements which may have enabled additional support for active play (Press, 2006). George was often able to flex off early or accumulate hours and roster time off, whilst Lucy could juggle work so she could sometimes ‘work from home’. These, and numerous other

social ecological factors, have impacted on the priority placed on active play and enabled the Hamptons to overcome the determinant of time.

6.5.2 Perceived risks

In recent times critical commentary in a range of social science literature and popular media has reported on the emergence of a crisis discourse and an interest in children and risk, brought on by moral panic and concerns about stranger danger, mobility in public spaces and fear of injury (Charles & Louv, 2009; Malone, 2007; Pain, 2006). The effect of parental concerns of perceived risk is argued to have translated into environments for children being spatially restricted and highly regulated (Clements, 2004; Karsten, 2005). This has led to terms like ‘helicopter parenting’, ‘gladwrapped children’, containerised kids, and ‘paranoid parenting’, gaining traction to describe the behaviours of parents and the effects they are having in supporting the active play and mobility opportunities of children. The analysis of data shared in this subsection seeks to use the PMEM model (Figure 6.1) to interrogate the stories shared and experiences explained by the Hamptons, to better understand the social ecological factors that have influenced their behaviours and interpretations of the determinant of ‘perceived risk’.

It was observed that during times of active outdoor play, Lucy and George didn’t hover over Simon and Susan. Several examples were observed, where both would support opportunities for children to learn from their own mistakes and minor accidents. The Hamptons shared how the parameters of safety and ‘risk taking’ were negotiated during active play. Playtimes were often used as opportunities for values to be reinforced such as ‘try your best’, ‘take informed risks’ and ‘get up when you’re knocked down’. In this first example, George has just observed Simon falling down on the pavers. He does not instantly get up and go to Simon’s

rescue, but just calmly asks him if he is alright and encourages him to hop up. George commented, “*Oh, you right Simon? You right buddy? You right?*” Simon is then observed to pick himself up without crying and continue his play.

In the next anecdote George and Lucy elaborate on their understandings of risk:

George – *They’re both risk takers. Probably when they were first born there was an uneasiness of not knowing what to do. However, I think that as we become more familiar with it we understand where they’ll be and we know when they are just tired and they are going to run into each other. Simon will knock his head quite regularly. You do get used to it. You know sometimes it really scares the living day lights out of you. There are times when they’ve knocked themselves and you say, “oh my goodness,” But there are times, like the other night, when we were sitting there and Susan did the graze on the arm and she had a big cry and that was purely just because she was tired and it was late and we were sitting here having dinner and we even had a doctor sitting here with us.*

But anyway she just bounced straight up and we tend to expect that with them, that they will just bounce back in a lot of cases.

Alice– *I’m also just wondering whether because of your own experience with sport, you kind of know that it comes with the territory.*

Lucy –*Yeah, like I remember on a hockey field or during a run and I remember the point when you felt really terribly sick but you pushed yourself.*

George – *I’d prefer them to be running around doing that than to be sitting around the TV and there’s risk to that also, to be sitting in front of the TV forever in a day.*

The next example shares discussion on the Hamptons’ rationale for buying a bigger bike for Susan.

George – *It’s probably too big, but she’s handling it really well and she rides it down to the park. It’s definitely too big, but she can reach the peddles. She can get them to go, but she has fallen off a couple of times.*

At that moment in this conversation, Susan falls over on the pavement (because she is wearing thongs that are too small for her) and she cries for a second.

George – *Ah Susan, you're right? Up you hop!* Just then Simon bumps his head again.

George – *Oh watch your head buddy, that's your head again, fifth smack today.*

The perception of 'risk' is a complex one and cannot easily be tracked to any one social ecological factor. The Hamptons' interpretation of risk was not so much about 'stranger danger', but more about their children's involvement in active play causing injury. Yet, they understood that with independent active play comes a degree of risk of injury.

Within the microsystem, the influence of having a large social network, and a significant level of social integration, contributed to the Hamptons not raising concerns over 'stranger danger'. Prezza, Alparone, Cristallo, & Luigi (2005), refer to the effects of these networks in terms of supporting greater independent mobility. Additionally, the social influence of what Valentine (1997) refers to 'normative expectations', where the Hamptons witnessed examples of their friends' children experiencing a certain amount of autonomy and independence in their active play, would also have been a factor that contributed to their decision making and values regarding risk and risk-taking.

6.5.3 The physical environment

Although the physical environment is only one of a multitude of factors associated with the physical activity of children, ecological models of health reinforce that it does have the ability to shape these experiences and opportunities (Davison & Lawson, 2006; Veitch et al., 2010). As outlined earlier in this chapter, the Hamptons' home offered a range of places for both indoor and outdoor play. However, most active play was enjoyed by Simon and Susan in the backyard and paved driveway. In discussing the physical environment, there were very few aspects of perceived barriers mentioned by Lucy and George. Yet, there were a number of determinants related to their physical environment that could have limited their support for

active play experiences. Using the Hamptons' PMEM model, these will now be discussed and interpreted.

The Hampton family had experienced a number of significant downpours of rain so things were very wet, lush and in some places overgrown at the time of conducting these interviews. Of consideration therefore, was that the weather and the time of the year may have impacted on the options that the Hamptons had available to them to commit to supporting physically active play, particularly outside. In discussing the topic of the recent wet weather and whether this had deterred the children's play, George commented, *"If the weather is bad, especially if there is a week of rain like they go nuts because they haven't had time to go outside and play. But lately, I've decided to try to take them out in the rain a bit. I get them to take their shoes off so they were running around in the rain and having fun. We talked to the neighbours, kicked the ball with Sam. I was home an hour and a half earlier than normal because I started early. I was buggered, but Simon is at that age at the moment where he wants to kick the ball around, so we enjoyed doing that in the rain for a while. And then I went inside and Susan was playing mummy with me and put me to bed with blankets and just mucked around. So at the dinner table tonight it was the best it had been in weeks. They did sit there calm and ate their dinner."*

Another example of efforts to support children's active play during a rainy day was discussed earlier in Section 6.4.2, where Lucy provided a number of creative outdoor undercover experiences that involved the children riding their bikes around with miniature stop signs and traffic signals.

Finally, an environmental determinant that presented a challenge, was the lack of footpaths in the neighbourhood. This particularly affected the pushing of prams and Susan her bike to the local park. The lack of footpaths forced the family to use the road for several blocks and could have been a key barrier for their trips to the park. However, due to the valuing of active play, the Hamptons found ways of overcoming, what could otherwise be perceived as a barrier, to support these experiences. The next anecdote shares Lucy's response to a question I asked regarding this issue.

Alice – *I notice there are no footpaths on this street at all. I'm wondering whether that changes anything with regards to your access or use of prams? Does it discourage any sort of activity?*

Lucy – *It probably doesn't discourage walking, but it definitely discourages riding the bike down to the park.*

Alice - *So it doesn't discourage your walking, but as far as encouraging children's activity, luckily you have the driveway.*

Lucy – *Yes, but the fact that she has to ride on the road would definitely increase my fear of taking Susan down to the park with her bike. It could be a barrier.*

Alice – *You weighed up the barrier and you've decided as long you are supervising, you will take that risk?*

Lucy – *Yeah, we still go the park regularly because the kids enjoy it and it's great to be there as a family. Generally, Susan rides her bike because the park is only ten minutes ride away. But I think if there was a path, we would probably go even more frequently.*

Several studies highlight that environmental factors, such as access to parks and play spaces, as being significant environmental factors that influence walking behaviour (Crawford et al., 2010; Tilt, 2010). Yet, although several environmental factors have been identified that could have been considered determinants for the Hamptons, a range of social ecological factors (outlined in the previous two sections) influenced their choice in creatively overcoming these obstacles in order to provide active play opportunities for their children. That data has

reinforced that a range of social ecological factors, that are unique to them and their micro-environment, appear to be called into play whenever they are faced with a determinant.

6.6 Summary of the chapter

“Just as children develop in an environment of relationships, families function within a physical and social environment that is influenced by the conditions and capacities of the communities in which they live”(Center on the Developing Child at Harvard University, 2010, p. 12).

The quote above captures the essence of points argued in this chapter regarding the socially patterned and environmentally influenced behaviours of the Hampton family. These behaviours and environments are unique to their micro-environment. The purpose of this chapter has been to explore the mechanisms of parental influence in order to gain an insider’s perspective of how Lucy and George support active play (Research Question 1); How a range of social ecological factors influenced their values and knowledge of active play (Research Question 2); and which ecological factors influenced the way a number of determinants were skewed to become barriers or enablers of their support for active play (Research Question 3).

Specifically, the following points have arisen as key findings. The Hamptons’ home offered some excellent places and spaces for play. The outdoors (including the backyard and paved driveway and entertainment area) were popular places for bike and push toy play, different types of ball play, and the children helping George with his outdoor chores. The physical environment, both inside and out of the family home, was designed so that a range of risks were eliminated, and the children could play in relative safety, offering Lucy and George peace of mind. The proximity to parks meant that these spaces were accessed for a range of

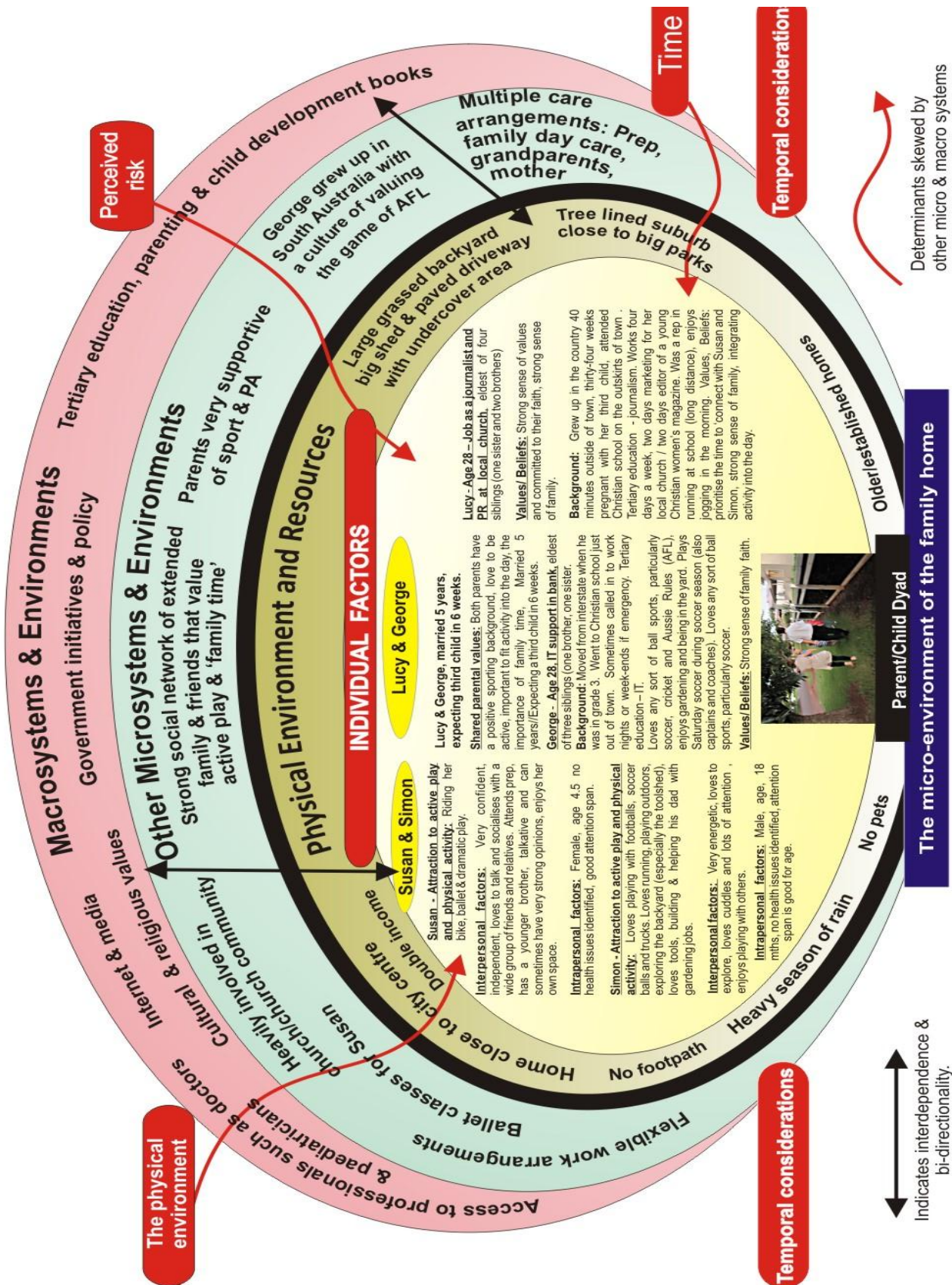
active play. There were examples of Susan and Simon altering the intentions of spaces and places for active play, however often what may have been a sedentary area, was interpreted differently by the children as opportunities for them to enjoy active play.

A range of play was supported through routines, particularly the yard and gardening routines that George facilitated. Support through engagement and facilitation were particularly effective strategies with Susan and Simon being of a young age. Although it was difficult to directly attribute the behaviour of ‘watching from the ‘sidelines’ to support active play, consistent modelling was regularly observed by the Hampton children. Lucy and George’s positive background in sport and physical activity has influenced their support for active play. The rich social capital of extended family and friends offered not only a form of support for active play in terms of resources and ideas, but also influenced the Hamptons’ values for active play and ‘family time’.

Finally, the examples and data analysed in Chapter 6 reinforces the complexity that exists in ascertaining ecological factors that influence parental values, understandings and support for active play. What has emerged from the data is the idiosyncratic way that determinants are interpreted by a family. In the case of the Hamptons, determinants that may be perceived as obstacles by others were hurdles that they addressed and proactively overcome, due to the value that they placed in supporting their children’s experiences in active play.

Figure 6.1 – The PMEM Model of the Hampton Family

THE PMEM Model of the Hampton Family



Chapter 7 Meet the Calmings



Image 7.1. The Calming family (Patricia and Matthew and their children Tiffany and Jeffery)

I first meet Patricia Calming on a busy midweek afternoon. Having just arrived, a car pulls up and Patricia excuses herself, explaining that she needs to go down and let a family of a student know that Matthew, Patricia's husband, has had to cancel a guitar tutoring

lesson with their son, as he has had to go off to the hospital to support a sick friend. I used this time to pop my things down on a table in the lounge room and grab my camera. I noticed the two children, Tiffany and Jeffery, engrossed in watching a DVD of a movie called 'Boundin', and decided to take a photo of this moment (See Image 7.2).

I also used this time to scan the physical environment, and form my first impressions, whilst extracting what I thought was a small plastic lid out of Jeffery's mouth. At this moment Patricia zooms back into the lounge room apologising for the delay, whilst expertly multitasking as she rewinds the movie back to a spot deemed important by Tiffany. The interview is peppered with interjections from the children while Patricia manages to maintain her conversation with me.



Image 7.2. An afternoon scene at the Calmings - Tiffany and Jeffery watching a DVD of a movie called 'Boundin'

Tiffany calls out to her mum in frustration as continues to she attempt to use the DVD remote to locate a particular spot in the movie. Patricia comments, “It’s OK! Which spot do you want me to rewind to?”

Meanwhile I am tried to maintain our interview.

Alice – *So Matthew is a music teacher at school?*

Patricia – *Yeah he works at ~. After school he’s busy playing in a band in the performance of ‘High School Musical’ and then there is also the musical he is organising at his own high school, so he helps run all that. Then he has his music tutoring after school.*

7.1 Overview of the chapter

The previous two chapters investigated the busy lives of the Mason and Hampton family, and the type of environments and support provided for their children’s active play. Initial interpretations from the data analysis revealed that both families were embedded in a unique set of circumstances, environments, and by the social milieu that have influenced their prevailing beliefs, values, and practices (Australian Institute of Health and Welfare, 2011; Jamner & Stokols, 2000; National Preventative Health Taskforce, 2009).

This chapter introduces the third and final family, the Calmings. It continues to employ the theoretical framework and PMEM model (outlined in Chapter 3), the data analysis strategies established in Chapter 4, and is substantiated by the literature outlined in Chapter 2. The intention of these efforts being to inform the three research questions and to advance ‘the frontier’ regarding an exploration of the interplay of unique contextual factors and external determinants that occurred both inside and outside the case.

7.2 *The Calmings' context*

As indicated in the previous two chapters, a critical aspect of gaining a window into the lives of children and their active play behaviours is an appreciation of the context in which this occurs. This section of Chapter 7 helps to compose a picture of the Calmings' context, including information on the family and its members, where the home is located and details of its layout.

7.2.1 **The family**

There are four members of the Calming family, parents Patricia and Matthew, and their two children, Tiffany and Jeffery (See Image 7.1). Patricia and Matthew were high school sweet-hearts and started dating when they were attending the same high school. Matthew now works at the same school, located just around the corner from where they live. Patricia and Matthew have been together for eighteen years and married for eight. Patricia is a 'stay at home' mum, who is currently trying to set up a home-based business. Matthew is employed as a music teacher at the local high school. They live on a busy street on the Northern side of a town, situated in South East Queensland.



Image 7. 3. A picture of front of the Calmings' house

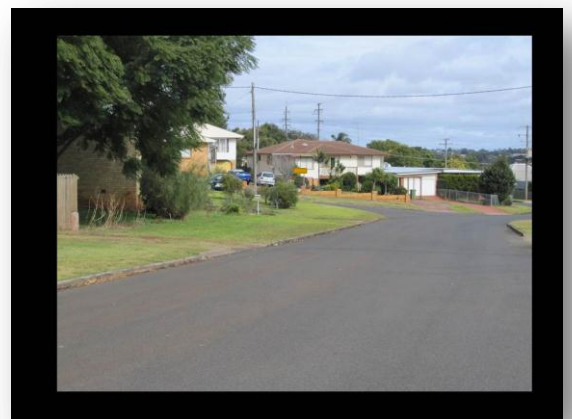


Image 7. 4. The Calming house located on the corner where several streets converge

7.2.2 **The home and neighbourhood**

The Calmings live in a modest four bedroom suburban home in an older part of town, close to the city centre, where their chamfer-board house sits perched on a corner block (See Image 7.3). The front yard is

occupied by a concrete driveway and garage, a flourishing collage of untamed shrubs and a small patch of grass. The Calmings' house is quite similar in style and size to others in the neighbourhood, with most built in the early 1950's. They all tend to have small front yards, a decent backyard and many still have the traditional low wire and wooden fence that divide one yard from another. The streets are fairly wide, but unfortunately several streets converge like a juncture at the front of the Calmings' house, making it very dangerous for the children to play out the front (See Image 7.4).

7.2.3 The parents – Patricia and Matthew

Matthew leads a very busy life that primarily consists of his full-time job as head of the music department at the local state high school, where he spends the school day teaching a range of traditional and contemporary music industry subjects. His afternoons and evenings are packed with a range of extracurricular activities including guitar tutoring, coaching cricket, playing guitar in a musical production, coordinating his own school musical and playing in a band that is just about to release a CD and film clip.

Patricia is a busy 'stay at home' mum who lives life at a whirlwind pace. She has a Bachelor Degree in Visual Arts and before having children, worked as an art teacher at the local TAFE (adult technical school). In her spare time she is a professional artist and sculptor. As a full-time mum she spends her time running Tiffany to and from Prep each day, attending playgroups, volunteering at Tiffany's school and doing a plethora of other domestic duties. Patricia is very creative, particularly in graphic arts and drawing in a range of media. She has also recently started her own children's art material business that she hopes to build up so she can continue to work from home.

7.2.4 The children – Tiffany and Jeffery

Tiffany is a sociable and articulate four and a half year old. She attends Prep five days a week at the local state school. Tiffany is very creative, loves to draw and paint, and has a vivid imagination which includes inventing stories of magical sea creatures (An illustration of one of these can be seen in Image 7.5). Tiffany has recently been diagnosed with Asperger's, one of the symptoms of this being that she tends to get frustrated easily if given



Image 7. 5. The magical jellyfish created by Tiffany using chalk on concrete

too many directions or choices at once. Socially, she relates much better to adults than to children of her own age. She has a high verbal memory of nearly 98%. She also finds gross motor movements a challenge and has low core body strength, which makes it difficult for her to balance, ride bikes and engage in a range of gross motor movement, particularly climbing or any sort of movement where strength is required. Being of an above average height for her age, Tiffany is sometimes clumsy in her movements and has a tendency to bump into objects, much to her annoyance! These challenges have impacted on her confidence to participate in a range of active play experiences.

Jeffery is Tiffany's younger brother (19 months old). He is a gentle child with a very peaceful temperament. He attends a playgroup with his mother several times a week and spends the rest of the week primarily with his mum, his aunty or at his grandma's place. He enjoys dramatic play, loves spending time playing in the cubby house, or pretending to cook with the toy oven and kitchen set at his grandma's. Both children tend to play really well together even though there is a two year age gap and significant developmental differences.

Jeffery's interpersonal skills are well developed, and he sometimes demonstrates better social emotional skills than Tiffany.

7.3 Active play experiences, opportunities and environments

For young children, active play takes place in a range of contexts, including the home environment, playgroups, care and education settings, with extended family and friends, and at the local park. How this play is supported, and the determinants of physical activity behaviour, are likely to look different in each of these contexts (Giles-Corti, Broomhall, et al., 2005). For this reason, this next section of Chapter 7 explores the types of play environments, experiences and opportunities that were supported within one of these contexts, the micro-environment of the Calmings' family home.

7.3.1 The provision of physical play spaces The indoor environment

The combined lounge and television area, as well as the area around the dining table, were the main places the Calming children spent their indoor time (See Image 7.2). There were several corners of the lounge room where large plastic boxes and shelves were arranged. These contained a selection of books, soft toys as well as fine motor and manipulative toys, such as different types of blocks (See Image 7.6). When not used for eating, the kitchen/dining room table, and space around this, were used for craft and art experiences. Patricia also used this area if she had an art project on the go. These materials and resources were arranged in a series of labelled containers on shelves for ease of access (See Image 7.7).



Image 7. 6. The play mat and the toy boxes arranged around the lounge/TV area

Tiffany and Jeffery had their own bedrooms where reading was encouraged, or where they played with their soft toys and teddies. One of the main reasons given for the exclusion of other types of toys, or play in these spaces, was to avoid accidents or a chance of Matthew and Patricia tripping over if they needed to attend to the children at night. The Calmings also had a fourth bedroom, referred to as the ‘toy room’, where all the children’s spare toys were stored (See image 7.8). This was usually a great place for sedentary play to occur. However, recently this area was so full of toys that there was no space left for the children to sit or play.



Image 7.7. A collection of materials stored in boxes near the dining room table for arts and craft creations

Within the lounge room, the television was a prominent feature and would often be on in the background while children were engaged with toys and manipulative materials. The main times the Calmings identified for children’s television viewing, was before or after Tiffany attended Prep. These times were understood by the Calmings to be opportunities for the children to ‘chill out’, while also offering a bit of respite so Patricia and Matthew could catch up on events of the day. Patricia elaborated on television viewing, “*the TV is on quite a lot of the time, but if it’s on*

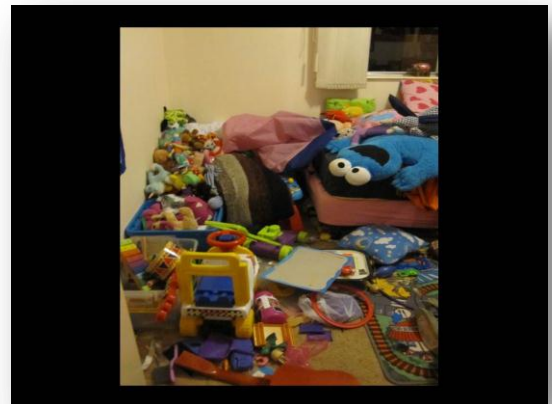


Image 7.8. An extensive collection of toys in the ‘toy room

when the kids are watching it, it is always on ‘kids’ stuff’. Even shows like Sunrise, or whatever, can be fairly explicit, especially the ads, so we usually try to keep it on ABC Kids or

something like that in the mornings and in the afternoon. If there isn't anything on we'll put a DVD on. I might mention that they don't usually just sit and watch it. It's usually on in the background while they're playing with their toys."

While most of the indoor experiences outlined by Matthew and Patricia were sedentary in nature, several examples were shared that reinforced their commitment to facilitating and supporting their children's interests and efforts in active play. They also mentioned examples of the children changing the way a space or place was used for active play. Matthew said, *"At the moment they are playing hide and seek in the house and really have fun hiding in the cupboards in the bedrooms. There is a little part of the cupboard that they can get in and out of."* Patricia extended on this and commented, *"Jeffery has taken to jumping on the beds or sitting and bouncing on the beds. We don't mind if he has fun doing this."*

The Calmings referred to helping to set up an indoor obstacle course and enjoyed discussing with me how the children loved to jump over chairs, crawl inside home-made tunnels (made of chairs covered with bed sheets), and swing and climb on a climbing frame that used to be located in the middle of the lounge. Patricia explained that the climbing frame served the dual purpose of being used for drying clothes, as well as an active play resource. The Calmings both referred to the inclusion of this prominent feature in their lounge room in an endearing way, and not as an inconvenience. They commented,

Matthew – *For a whole year we used to have a climbing frame in the lounge room.*

Patricia – *Yeah, we used to hang the clothes over it. Well, I was going to get it out recently for Jeffery, but it is just a bit too high for him at the moment because he could climb to the top and then maybe fall from the middle. It's just a bit too high. Tiffany used to climb around on it. She'd sit on top of it, like while she was watching television, and do the little monkey swing things (laugh). We've got that little mattress there, those two mattresses and if they are*

doing gymnastics or playing we often set them up so they've got them to fall on. So we really use this as an obstacle course and that's what these blankets are here for. They go over and under the table.

Matthew – *They set up blankets over the table.*

Reflecting on the Calmings' context, it was evident that although significant efforts were made by the Calmings in supporting indoor active play, most indoor play experienced by Tiffany and Jeffery was sedentary in nature. This is consistent with theory identified in the previous two chapters that reinforced that most active play occurs outdoors and not within the restricted space of the indoor environment (Thigpen, 2007).

Although Matthew and Patricia explained that the children did not usually 'just watch' the television, it still dominated the main indoor leisure and play space. While the television may not have 'replaced' Tiffany and Jeffery's opportunity to play, findings consistent with Johnson and Klaas (2007), was that television viewing, to a certain extent, did alter the type of play which occurred to be that of primarily fine motor manipulative play (this issue will be discussed further in Section 7.5.3).

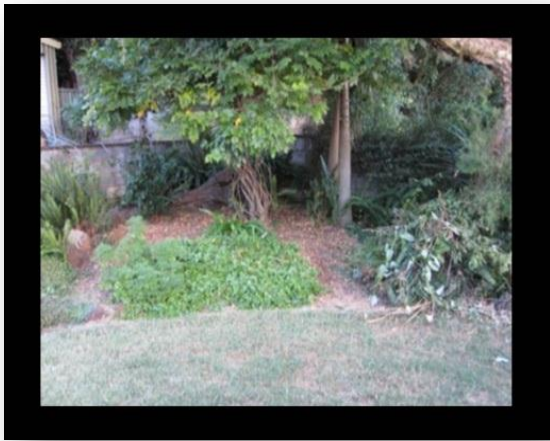


Image 7. 9. One of the spaces in the back garden where children enjoyed playing and creating

The idiosyncratic approach that the Calmings adopted to support play indoors was admirable, both in the type of experiences supported and resources provided within this environment (these are linked to a number of micro-environmental influences, discussed in more detail in Section 7.4.1). Although it was appreciated that their actions, and type of

support provided, would influence the type of play and the way the children engaged in play, Patricia and Matthew made a concerted effort to avoid regulating the type of experiences in which the children were involved in. Instead, they saw themselves as ‘resource managers’ who facilitated play (yet in some ways the lack of restrictions on television viewing seemed to contradict these efforts a little). Patricia’s interest in art and creativity also appeared to influence the types of experiences that were supported within this space.

Out the back

For the Calmings, the backyard was a wonderful respite from the business of the day. It gave way to the unleashed pleasures of discovery and imagination. Patricia and the children would often go outside after Tiffany finished Prep for the day. After a long winter, they had been busy trying to tame the garden and turn it into a sort of magical imagery play sanctuary where ‘Tassie devils’ co-existed with little chicks and butterflies (See image 7.9). Patricia had also been busy on a project, making some small sculptures of the Tasmanian ‘devil’/tiger out of clay. The children were looking forward to placing these in various nooks and crannies in the garden (See image 7.10). Tiffany referred to this special area as “*the woods cubby.*”



Image 7. 10. A special nook ready for the addition of one of Patricia’s sculpture creations

Patricia saw outdoor play in the garden as an integral aspect of the children’s active play experience and was committed to making it a special place for them (Patricia’s values and how this influenced her support of active play will be explored later in section 7.4.1). The children had already been using a number of the established plants in their creative play, like adding them to pretend cakes, or playing fairies in between the shrubs. They had also been growing a range of other plants that they could pick and use.

This included recently planting some beans and enjoying the growth of gigantic pumpkins that had overtaken a significant space in the backyard. In reference to the giant pumpkin and their gardening pursuits Patricia commented, *“Yeah, they were growing over the other side of the fence, but I had to cut them down because I was worried they would pull the fence over. We’ve also been planting the sorts of flowers that self-seed or that have flowers that the children can pick. That’s why daisies, lavender and the herbs are all good. They loving making pretend cakes and adding the flowers on top.”*



Image 7. 11 – An image of the toy cubby, climbing frame, slide and the sandpit

Although the children liked to help Patricia mulch, prune and plant with their own gardening tools, they were also happy to occupy themselves while she was gardening. This was usually an active time for the children, where they busied themselves playing in the sandpit and climbing and sliding down the equipment, while having fun running around and chasing the cat (See Image 7.11). Patricia also commented that, *“every now and then if the towels are on the line they’ll run while they pull them round in circles.”* Outdoors, Jeffery also experimented and tasted a variety of garden delights, including the odd worm from the worm farm!



Image 7. 12. Jeffery enjoying a spot of gardening on the concrete veranda

The concrete veranda, located in the backyard immediately outside the house, was a favourite place for the children to engage in outdoor play (See image 7.12). Like an artist's canvas, the concrete areas were often used by the children for drawing with large pieces of chalk. A whiteboard also stood in this area and was a favourite spot for Tiffany to create and draw. Patricia would often contribute to their creative play by making different manipulative concoctions like slime, playdough and goop (a gooey concoction made with cornflour and water and placed in a large plastic tub).

Outdoor play supervised and regulated by parents

Although Burdette (2005) has expressed concerns that children “no longer play”, this was not the case with Tiffany and Jeffery, where evidence from this study supported that both children enjoyed a diverse range of play opportunities and active play outdoors (p. 46). The children's interest in active outdoor play, and the length of time engaged in these experiences, could be attributed to the Calmings' efforts to create what Spurrier (2008) refers to as “interesting outdoor environments” (p. 8).

Yet, for Tiffany and Jeffery, these spaces and opportunities always occurred with adults present or under adult supervision. This was by no means a negative reflection on the Calmings, purely an observation that reflects a growing trend of changes which are occurring within the micro-environment of many family homes where ‘Generation X’ parents (children of baby boomers), have become known as the ‘fear generation’ operating out of a ‘protectionist paradigm’(Gibbs, 2009; Malone, 2007). Part of the reason for the Calmings feeling the need for the children to be supervised, related to their concerns for the type of children that lived in the neighbourhood and particularly next door (additional details on the topic regarding the Calmings' perceived fears will be addressed in Section 7.5.2). The

implications of this concern was that, unlike in past generations where children may have played with fewer restrictions, limits or boundaries (Tranter & Sharpe, 2008), for Tiffany and Jeffery these spaces were shaped and regulated by adults (Karsten, 2005).

7.3.2 Tiffany and Jeffery's interest in active play and intra/inter personal influences

Jeffery was at an age that Tiffany enjoyed playing with him. Jeffery's interest in being active, and the success he was experiencing in coordinating his running and gross motor movements, seemed to have a positive effect with his sister. Although Tiffany, because of her Asperger's, found these movements difficult at times and would often become frustrated with her body's inability to move in the way she desired, she would often persist because of the 'fun' element that she experienced with her brother. The Calmings shared how the differences in the children's ability to participate in gross motor play became quite obvious when they would take the children to the park. During these times they noticed that Jeffery, even at young age, was able to participate in a range of movements that Tiffany was not able to do at his age. Matthew commented, *"even on the slippery dip I'd be more worried about her than him, and that's when I started to wonder if there may have been an underlying reason for this."*

At four and a half, Tiffany enjoyed creative play experiences. She had a well-developed ability for fine motor activities such as drawing, painting, collage work and loved the medium of playdough. Because of her excellent memory retention, she had recently taken to singing and reciting all the words to popular songs, while spontaneously breaking into dance. Patricia mentioned that these types of experiences usually happened just before bed and seemed to be a way for her to release pent up energy. Patricia shared the following comment, *"at the moment she loves Queen, she's hooked on Queen and she can recite Bohemian Rhapsody off by heart, she really enjoys the Muppets version of the song as well."*

Jeffery would also pick up on the fun of singing and dancing, the Calmings mentioning that he would often copy or attempt to participate in whatever Tiffany was doing, even though he was much younger than her. As mentioned earlier, the sandpit and cubby house were Jeffery's favourite spots for active play. He also enjoyed building and manipulative experiences such as playing with blocks and 'CLIPO' (peg-covered shapes that easily connect together).

The children enjoyed a wide range of play interests with a number of these being active in nature. It was clear, that while Jeffery learned new skills and picked up a range of behaviour from Tiffany, it was also advantageous for her to play with him, as she would participate and extend on experiences that she may not have otherwise engaged in. The Calmings mentioned that a wonderful aspect of the children's' relationship was the mutual sharing of experiences and support. They pointed out that it was obvious that there was a reciprocal type of learning that occurred, with the children often scaffolding off each other's learning. Finally, another benefit of the two children playing together, mentioned by Patricia and Matthew, was the social skills that Tiffany observed from her brother. Patricia commented, "*One of the big things that I think she has learnt from him is how to interact with other kids. When we go to other kids houses she often watches how he acts and will mirror this.*"

The Calmings pointed out that there weren't any real noticeable differences in relation to the children's gender and the type of play they participated in. Both children enjoyed being involved with each other's play experiences. The only noticeable difference was that Jeffery seemed to be more interested in physical activity. Yet, on reflection, the Calmings suggested that this could have been attributed to Jeffery being at a developmental stage where he

enjoyed learning and engaging in a range of gross motor experiences, and yet his nature was actually that of being quite a calm and quiet child.

7.3.3 Social practices that support active play and an active lifestyle

When I first met Patricia, she had been busy trying to organise a football night for family and friends. A large part of sport for the Calmings was ‘watching it’ in the company of others. Prior to one of these events, Patricia would make up ‘Welcome to the footy comp’ packs, full of an assortment of themed memorabilia. She would also decorate the house with streamers, organise adult ‘party games’ for them to play, and set up a sweep that would include everyone contributing a small amount of money for the duration of the football season and then betting each week on which football team would win the weekly match.

During the football season, friends would gather every few weeks and enjoy a night of watching a match on television, while they had a few drinks and some dinner. This example of the Calmings’ social practices reinforced the role that family and friends played in ‘modelling’ behaviours and reinforced attitudes that were wrapped around physical activity and sport. The next section of this chapter builds on information shared earlier in this chapter, and outlines the type of social support the Calmings provided for the active play, as well as the support provided by the greater microsystem.

Different types of support offered by Tom and Sarah

Although Patricia and Matthew both enjoyed spending time with the children, each had quite different ways of engaging in play with them. I confer with Alderman, Benham-Deal and Jenkins (2010) in suggesting that parents, and in this case the Calmings, were pivotal in influencing the type of play that occurred and the children’s behaviours and attitudes towards physical activity.

Most of the play opportunities supported by Patricia occurred in the afternoon when Tiffany was home from Prep. Patricia also tried to spend quality ‘one on one’ time with each child. With Jeffrey, this usually occurred when he was attending playgroup sessions. During these times, Patricia would actively involve herself in different sorts of play with him including building with blocks, sand play, dramatic play and playing chasey. Her time with Tiffany was spent on more creative pursuits, such as collage and fine motor art experiences, making things together to put in the garden, or to add to her creative play.

Matthew’s involvement in play often required him trying to slot these moments in between his teaching commitments and his extra-curricular pursuits after work. These opportunities usually occurred before bed, dinner, on the week-ends, or during the school holidays. Matthew usually spent time with the children engaged in reading or in sedentary play, like building with blocks or cooking in the kitchen together (the children particularly enjoyed making pizza and biscuits with him on a Friday night). Although he mentioned that he liked to be involved in rough and tumble play if he got the chance, he admitted that because of the children’s ages, he usually didn’t really play actively with them. He did mention that he took them to swimming lessons on the week-ends and that when the children were older he could see himself being more involved in taking them to cricket training, football or junior sports. This supports Alderman’s et al.’s (2010) findings that point to the type of support and relationships that parents have with their children, in terms of active play patterns, changing over time as children mature and develop.

Support through facilitation

Both Matthew and Patricia had a wonderful respect and talent for supporting their children’s play. However, unlike the Masons and the Hamptons who would frequently model physical activity behaviour as one way of supporting their active play, this type of social support was

not as evident by the Calmings. Yet, there were definitely a range of social support mechanisms adopted, that usually occurred through parental encouragement, and facilitation (providing equipment and resources). Both these methods were still valid in being positive influences on the behaviour of their children (For additional detail on the type of support the Calmings provided for active play, please refer to ‘Heartfelt Moment 2’).

Patricia was particularly strong at accessing social support, and reflected on ideas gained from a range of sources to facilitate play in many different ways, often creating environments that extended upon the children’s interests by adopting a role similar to that of a ‘resource manager’. Examples were shared of times when the children were interested in playing with something and there was not a resource to support it, so Patricia would make it for them. The hand-sewn bilby in Image 7.13 shows one of Patricia’s creations to support Tiffany’s interest in Australian animals. While efforts were made by the Calmings to facilitate active and gross motor experiences, a significant proportion of their efforts were in providing manipulative toys and materials at the ‘right time’ to extend or scaffold play.

The focus of these experiences was more often on creative and sedentary fine motor experiences than on active play pursuits. Finally, the type of parental support provided by the Calmings, shaped



Image 7.13. The hand-sewn bilby that Patricia created for Tiffany

but was also reshaped, by the interests, learning, personality, and the developmental characteristics of Tiffany and Jeffery (the children being referred to in ecological terms as

‘active agents’) (Bronfenbrenner, 1977, 1979). This resonates with the work of Dwyer and her colleagues (2008) on the interactive influences and interrelationships that exist between the parent/child dyad, in this case referring to the impact of this relationship on active play behaviours and physical activity practices which occur (See Figure 7.1).

7.3.4 Accessing other micro-environments as a resource

Press and Skattebol (2007) point out that, although families provide a range of social and physical resources to enhance children’s health and well-being, “The reality is, that what families provide for children is subject to a number of interactive influences” including workplace entitlements, education and care systems and a range of other social support, including the extended family” (p. 10). By far the greatest ‘resource’, or asset identified by the Calmings was that of friends and extended family or, ‘the clan’ (part of the larger social system located in the microsystem - refer to Figure 7.1). Fields (2003), sums this up succinctly when he commented that, “relationships matter” (p. 2). This valuable asset, often referred to as an aspect of the Calmings’ ‘social capital’ (Stone, 2003), was an aggregate which combined the care and support of the Calming children, with resources for supporting active play as well as the values, beliefs and behaviours which underpinned these. Patricia reinforces this when she remarked, “*my aunties and uncles as well as our parents love buying things for the kids. If they just see something, and they think that it looks good for a kid, then they just buy it and we end up with it.*” The first of the Calmings’ heartfelt moments titled, *Support from ‘The Clan’*, captures my thoughts and feelings regarding the richness of social capital to which the Calming family had access to (Please now refer to the following page).

Heartfelt Moment 1– Support from ‘The Clan’

Patricia: *My aunty just lives up the road and she always used to look after Tiffany Tuesdays and Thursdays when I was working. Even now that I’m at home, she looks after Jeffery for me on Tuesdays and when Tiffany finishes Prep I go and pick her up and drop her up there. Before dinner they walk them back down here and they have dinner with us. On Wednesday night, every week, they go to their grandmas, my mum, she lives up the road as well. Every Sunday, the children and I visit my grandma out of town and there are another couple of my aunts and uncles out there that often drop in and enjoy having breakfast with us. While we’re out there Tiffany and Jeffery get the opportunity to play with their cousins and run around out in the big backyard.*

The Calmings shared a number of stories of being surrounded by ‘their clan’ of extended family, comprising of their parents, brothers and sisters, aunts, uncles and their children. In reflecting on how this close knit group of people played an integral role in the care and socialisation of the members of the Calming family, it reminded me of how similar this was to traditional cultures where it was ‘the clan’, rather than the immediate family, that was responsible for nurturing young children. Hence the reference to ‘it takes a village to raise a child’.

At these intersections of family life, there appeared to be a blurring of the boundaries between what is understood as the micro-environment of the family home and that of the greater microsystem. These cultural fronts, wrapped in traditions and customs, where the Calmings spent a great deal of their time, not only offered moral and emotional support, but also a strong sense of belonging. These environments, and the people located within them, would often model, support, and share their understandings of and values for the health and the physical activity of young children. Patricia and Matthew’s family would often provide a range of equipment and resources to support Tiffany and Jeffery’s play and were always giving the family toys for the children to play with at home. Time spent with extended family would often include walks to the local park, errands to the post office and shops and their involvement in daily routines. All of these practices offering opportunities for supporting play, some of which were active play opportunities.

7.3.5 Summary of section

Data explored in this section of Chapter 7 has highlighted how the Calmings supported active play experiences and environments for their children (Research Question 1). This occurred on multiple fronts, first, through the provision of environments that offered physical spaces and places to play; second by the type of social support provided by Patricia and Matthew; and finally, by accessing a range of support from outside the micro-environment of the family home. Positioned within this mix of factors, sat the parent/child dyad and the ever present impact the children had on their experiences. This process of changing and shaping the way that experiences and play was accessed, fits within of the ecological model proposed by Bronfenbrenner (1977, 1979) where reference is made to reciprocal causation and where individuals and the environment both create and exert a combined impact on each other as members interact.

The next section of this chapter continues to utilise a social ecological framework to help make sense of a range of contextual factors that have influenced the Calmings' decision making, values and attitudes towards active play. This includes the environments from which they have drawn their knowledge and information, and the influence of their own childhood and childhood experiences of participation in sport and physical activity (Research Question 2).

7.4 Contextual factors impacting on parents' beliefs, choices, knowledge and understandings of active play

As argued in previous chapters, a broad range of ecological factors are understood to impact on parent behaviours and beliefs about physical activity. Investigating the inter-relationships, and influence of these social and cultural factors that emerge from both within, and beyond the micro-environment of the family home, makes intuitive sense, if we are to better

appreciate parent decision making in supporting active play opportunities with young children.

7.4 1 Influences from within the micro-environment and the microsystem

Influences from within the micro-environment

Apart from the Calmings influencing Tiffany and Jeffery's attitudes and behaviours towards active play, the attitudes, knowledge, values and beliefs of the Calmings' own parents were also a source of influence, and at times validation of their behaviours. The Calmings' history and background experiences in physical activity participation as well as a range of other interpersonal and sociocultural factors were also of significance.

Matthew was a very active child growing up and participated in a range of sports. He played a number of sports at a competitive level, including field events (shot put and discs), and was selected for several regional teams for cricket and rugby union. Although, more recently, he had been busy with work and extra-curricular commitments, Matthew had been attempting to integrate exercise with his walking to school and home each day. Most Sunday mornings he also tried to make time for golf, and looked on these sessions as a bit of a ritual, and personal time to himself. He was also heavily involved with coaching an under 14 school boy's cricket team. It is worth mentioning, that while Matthew was conveying this information to me, his whole body language and mood changed to one of excitement and passion. Sport, was definitely something he enjoyed, when he had time to be involved.

Patricia's sport commitments and history were very different to Matthew's. When discussing her current involvement in physical activity, she said that she did not have any interest in going to the gym, or 'traditional exercise', and would rather get her exercise out in the garden (doing mulching, digging and weeding), or doing 'functional exercise.' Patricia was also the

type of person that was always on the move and would never sit still for very long. She mentioned that she was still feeding Jeffery, which she believed helped “*keep the weight off.*”

She did mention, that when she first started dating Matthew, they were involved in playing football three to four times a week and she really enjoyed that because it was mixed teams and really social. In sharing her memories of participation in sport and physical activity as a child, Patricia commented, “*I didn’t play a lot of sport when I was a kid, mainly because my brother was the one that was supported with Saturday sport, so there was never a lot of time for my parents to drive me around as well. I did watch a lot of Saturday sport on television. When I got to high school I really got ‘put off’ (referring to being turned off sport), mainly because of an incident that happened where I was treated really unfairly. At that moment I decided I wasn’t really interested in it anymore.*”

It was difficult to identify micro-environmental links between Patricia and Matthew’s personal history with physical activity (influences from within the micro-environment) and the values they adopted in supporting their children’s participation in active play. As the children were only quite young, Matthew’s passion for sport was not yet evidenced in his support of active play with the children, however as they matured in a year or so, his support could emerge in a more facilitative role of perhaps coaching their sporting team, or driving them to training.

The main value that emerged regarding the Calmings’ support for play (not necessarily only active play) was the importance of ‘being involved’ and wanting to ensure that the children were provided with opportunities to enjoy their childhood, while learning and having fun. A number of Patricia’s interpersonal characteristics, including her talent for art and flair for

creativity, have impacted on the Calmings' 'style of parenting' and the way they facilitated their children's play (this was discussed earlier in Section 7.3). However, their passion for play, understood and valued as a 'vehicle for learning', prompted me to write a second heartfelt moment.

Heartfelt Moment 2 – A passion for play

Nothing seemed to 'faze' the Calmings. Their domestic space was constantly filled with the creative clutter of childhood play things, and of Jeffery and Tiffany running in the house or using the lounge or bedroom for their play pursuits. Why? Why did they make these allowances? I believe it was linked to their values! Patricia tried to explain it to me. "Because this is what I want to do, it's not like I'm stuck here. I really, really love being a mum. My philosophy is, 'a clean house is a sign of a wasted life'. I believe that if the house is clean, I have too much time on my hands. If I have time to clean up, then I should have been doing something else. It's actually a pretty organised mess. Most times we know where everything is, that's why there's storage containers for everything."

The Calmings had a very relaxed and flexible parenting style. Their supportive approach to active play and creativity meant that they made great allowances within the home environment for this to occur. Patricia was genuinely excited about her days with the children and the type of play that she would facilitate or engage in with them. She had learnt to adapt the physical environment in response to her children's interests and needs. Hers and Matthew's values and beliefs, and her need to cope with the ongoing pressures and responsibilities of being a 'stay at home mum', underpinned their practice and provision of resources for the children in regards to active play.

While Matthew was supportive and tolerated the state of 'disarray' that he was often confronted with when he arrived home, it was Patricia who was particularly supportive of this approach. A great example of this was the climbing frame that lived in the lounge room for over a year. It served the dual purpose of being used to dry clothes, but was also as a very important active play resource. The

Heartfelt Moment 2 – continued

reason behind its presence, and the setup of the indoor environment, were explained in terms of being 'safe places' where the children were encouraged to explore and use freely. The Calmings referred to these places in an endearing way and not one of regret or inconvenience.

Patricia explains their shared values by commenting, "I think one of the main things with me is providing children with a range of resources to support their experiences and for them to learn through experiences. I think that everything they play with, they learn from. We own all these toys and all this stuff here, and I'd rather it be out and all over the floor being used, than putting it away in the cupboard and then the children constantly asking us to get something out for them. I'd rather things were used and played with well and truly, but it can get a bit crazy around here (laugh)."

Influences from within the micro system (extended family and friends)

Earlier in this chapter, a detailed overview was shared of the place extended family had in supporting the Calmings' care for their children, and the wonderful sense of 'family' that was evident in their weekly routines (refer to Heartfelt Moment 1). Although no reference was made by the Calmings, particularly related to values and attitudes expressed by their extended family in relation to health or active play, there did seem to be a mutual valuing by the Calmings about the importance of play and providing quality experiences and resources for Tiffany and Jeffery. This was particularly evident in the resources that they provided for play and their engagement in these experiences with the children.

Mention was also made in Section 7.3 regarding the social ritual linked to 'watching sport' in terms of having 'footy parties'. Patricia commented, "*we have as many parties as possible, because last night was the footy and so we either go to our friends or we go to my mums, where my aunties and uncles all pop over to watch the footy.*" Although Matthew follows

sport religiously and keeps his eye on the game during these occasions, Patricia doesn't really care about football and mentions, *"I just run around and do the party stuff, and it's really embarrassing actually if you don't know who's won the game and you've got to kind of sneak off and find out on the internet."*

For Tiffany and Jeffery, their exposure to the social modelling (Felsher, Derevensky, & Gupta, 2003) of 'watching sport', may have been just as powerful an influence or type of social learning (Bandura, 1977), than that which was gained by observing the actual 'physical modelling' of physical activity participation by their parents and other adults. Purely by being present in this type of social context, social behaviours would be observed and subtle messages communicated that could include: watching sport is social, is linked to food, fun, and even perhaps the drinking of alcohol. Although the Calmings mentioned that due to the children being quite young they didn't necessarily sit and watch the game for any particular length of time, they did participate in this social tradition by often wearing the team colours or perhaps a 'Bulldog'¹⁶ beanie', or even being 'painted up' (a full face paint in team colours) like a Bulldog.

For Patricia and Matthew, their participation in this specific 'reference group' (located within the microsystem), which included interactions with friends and family, as well as cultural values that were reinforced during these social occasions (located within the macrosystem), meant that these socialising mechanisms (Denham, 2002; Kayitsinga, Martinez, & Villarruel, 2009) and values were seen as the 'norm'. To what extent these relationships and rituals affected their values and attitudes, and shaped their behaviours towards their understandings

¹⁶ The Footscray/ Western Bulldogs are one of the teams in the AFL (Australian rules) football competition based in Melbourne.

and support for active play, are not easily defined. Yet collectively, it would have an impact in shaping their children's attitudes and behaviours.

7.4.2 Influences from the greater macro level (access and influence of social capital)

As indicated in previous chapters, although the micro-environment of the family home is a critical leverage point for influencing and supporting health behaviours, these practices and values do not emerge in a vacuum, but within a system of relationships linked to the micro and macrosystem (Denham, 2002). The Calmings were excellent at accessing help, ideas and information from social systems more distal to the micro-environment of the family home.

Drawing on sources of information from the media and professionals

A growing feature of contemporary popular culture is the ability to source knowledge, parenting information and be influenced in terms of ideas and values from further field (Kayitsinga et al., 2009). In many cases, access to these resources cut through and across geographic boundaries. This opens up the scope and potential of accessing social capital that is in contrast to what Coleman (1997/1988) had in mind when he refers to the erosion of social capital due to "*strong families and strong communities ... much less often present now than in the past*" (p. 93).

Patricia constantly sourced information about parenting, creative ways to support her children's play, and researched strategies to best manage Tiffany's motor development and social behaviours, from her reading on the internet and from a range of books and parenting literature (refer to sources from within the macrosystem of the Calmings' PMEM model - Figure 7.1). She particularly valued the internet because of the currency of information she could access in this medium. Patricia's social nature and interpersonal skills also helped her to network effectively with other parents as valuable sources of information, like those from

Tiffany's school and Jeffery's playgroup. She commented, *"I talk a lot and I like to find out what other people do and I like to listen to everyone's ideas."*

Matthew's parenting ideas and support for active play tended to be gained from theory embedded in his tertiary training in teacher education, or through networking with other colleagues and professionals at his school. Matthew shared his understandings on the importance of play, *"I mean they brought in a whole extra year of school to focus on that sort of thing and have made it largely a play focussed, discovery focussed, style of learning because they acknowledge that there is not enough of that going on. All that sort of play makes more connections in the brain. I studied psychology for a year as well before I changed over to Education. Their physical activity happens when they are outside playing with Patricia. It happens when they are running around in the garden, playing in the sandpit, doing that sort of thing. And then they play pretty physically sort of inside the house, as well as climbing over stuff, running around chasing each other around the house, or we chase them around the house, that sort of thing."*

In sharing and discussing ideas with Matthew and Patricia about where they sourced information from to support Tiffany's difficulties with motor development and balancing, the topic of 'brain gym' and exercises for connecting the left and right brain was mentioned. They were both able to contribute to this conversation based on their various methods of sourcing information from the macrosystem. Matthew commented, *"I actually read a lot about it at University and now that Patricia is helping Tiffany with a range of these experiences I can see some gradual improvements."* Patricia responded, *"Yeah the brain gym stuff, that's what we've been looking at on the internet. There's a few great books on that topic too. I think that since she's been at Prep and has used the climbing equipment and*

balancing beams. It has helped a lot in her ability to cross the midline and connect the left and right brain, because that is the sort of thing she finds hard.”

The Calmings were also comfortable utilising and accessing professional advice from health and medical experts to inform their understandings of children’s learning and development. They found this particularly valuable for understanding Tiffany’s behaviour. Patricia commented, *“Yeah, so we decided to take Tiffany to the most amazing chiropractor. He noticed her development and behaviours really quickly and started doing a lot of exercises with her and giving us ideas of how to support her at home. He also referred us to a paediatric kinesiologist and I have learnt heaps of exercises and ways of supporting both Jeffery and Tiffany in their development. I think we try to do the absolute best we can and part of this is researching what the latest thinking is on these things.”*

7.4.3 Summary of section

This section of Chapter 7 explored the impact of multiple environments and social ecological factors on the Calmings’ behaviours, values and practices for supporting active play with their children. The preceding analysis outlined that although the Calmings were influenced by factors from their own upbringing and childhood experiences of participation in physical activity, they were also informed by a range of complex interactions from within the micro and macro system. Although Denham (2002) points out that these contextual influences can often negate, or be a “game of tug-of war”, referring to the “balancing-rebalancing that occurs as family systems interact with their embedded contexts”, this wasn’t evidenced with the Calmings (p. 6-7). On the contrary, they (particularly Patricia) seemed to seek out like minded friends, families and experts who often reaffirmed their values regarding health and the types of support provided for their children.

Moreover, the analysis has highlighted that the Calmings not only sought support and were influenced from within the microsystem, but also from larger social support systems. A range of beliefs about child development, play, health and behaviour were gained from the perspectives of professionals, such as chiropractors, the internet and parenting books. Both Patricia and Matthew were confident in negotiating through a range of information sources and various health professionals, to seek out questions for the parenting support they required. Yet, as Edwards (2005) points out, other families (from the working class or low social status) may have felt less comfortable and perhaps may have been confronted with their own set of barriers and enablers in reaching out for these types of social capital.

Consistent with the previous two analysis chapters, the final section of Chapter 7 now explores the uniqueness of the Calmings' family and how their context and a range of social ecological factors influenced the way three determinants (time, perceived risk and the physical environment) were skewed to become barriers or enablers of their support for active play experiences and environments.

The next section of this chapter starts with another Heartfelt Moment shared on the next page.

Heartfelt Moment 3 – A snapshot of time: The ebbs and flows in the Calming household

It's been another busy day at the Calming household. Matthew has worked all day teaching music at the local high school and then teaching music after school with individual students. For the last few months he has also been busy with a school musical after school and at nights. Patricia has just finished a busy week-end of making playdough (100 bundles) to sell at the craft markets and then has sold a few more bundles to the local playgroup parents. It is now 7:45pm on a Thursday night and both children are still not asleep.

I have arrived to the final visit to the Calming household, and the place is crowded with toys and paperwork. Dirty dishes grow in several piles in the kitchen and I hear the sound of stories being read to the two children in separate bedrooms. Tiffany is settling into bed with Patricia reading her stories. Matthew has just sat down on the lounge with Jeffery and is reading him a 'Wiggles' book. Matthew is obviously very tired, but he spends a long time reading and pointing to various characters in the Wiggles book. "Where's Dorothy? Where's Henry the Octopus? Where's Captain Feather Sword? Where's Murray? Where's Anthony? Where's Wag the Dog? Where's Jeff? He's not asleep is he?" Both parents, particularly Matthew, look exhausted and I am feeling terrible guilty about imposing in their space and denying them the opportunity of sleep.

7.5 Determinants skewed by context

7.5.1 Time

Time, and the way that parents spend time with their young children, is an important determinant in terms of their capacity to support child health and well-being (Press & Skattebol, 2007). As shared in the introduction to this chapter, the fast pace in which Patricia moved about her day and responded to multiple requests is an accurate reflection of the busy life for the Calming family. Every day brings with it new tasks and demands that erode the time available to them. In between breast-feeding Jeffery, and driving Tiffany to Prep, there were errands to run, activities planned and people to visit. Through the bustle was a sort of loosely organised structure that supported spontaneity and creativity. Although every ounce of time was accounted for with the Calmings, there were multiple factors that impacted on

Matthew and Patricia's prioritising the support they provided for their children's active experiences. A snapshot of their day was shared in Heartfelt Moment 3.

As Press (2007) suggests, "raising children is not purely an individual enterprise. The choices parents make in relation to their commitments to work and family are heavily influenced by a range of factors external to the desires and aspirations of individual family members" (p. 14). Reflecting on this statement in relation to the determinant of time, it was evidenced that due to the idiosyncratic nature of the Calming family, they were often able to overcome time as a barrier, because of the support they were able to access from family and friends (from within the microsystem), as well as ideas and resources they accessed from the macrosystem (Refer to Figure 7.1).

As discussed in the previous two chapters, proximal to the micro-environment of the family home, the value and importance placed on play, particularly in relation to it being understood as an integral part of learning in childhood, meant that time was prioritised for these types of experiences at the Calmings. This often meant that setting aside housework or efforts to keep the house tidy, in order to support the children's interests in indoor and outdoor play.

7.5.2 Perceived risks

Unlike the two other families in this study, it was the Calmings who raised the topic of fear and concerns for their children's safety. Results from Dwyer. et. al (2008) and Irwin. et. al (2005), confirmed that increasingly a range of perceived fears were identified as obstacles for supporting children's physical activity participation. Patricia and Matthew expressed similar concerns, and these had significant implications in their support for their children's experiences with physical activity and active play. It particularly restricted the time and the location of where play occurred, and the parents' commitment to their supervision.

This concern was unexpected, as the Calmings were passionate towards the children's play, and usually very relaxed in their style of parenting. Yet, both parents shared strong opinions and became quite emotional when discussing their concerns. In response to my request for the Calmings to elaborate on their thoughts, Matthew commented, *"I think it's a symptom of society, it causes people to be scared of their children playing outside. It causes them to be paranoid. You just don't let your kids play out on the street anymore. You just don't know. Like one of the reasons we let them play in here (referring to the lounge room and other indoor play spaces) so much is because we're just not willing to open the back door and let them go out there and play in the backyard. Even if they are fenced in, you're not game to do it. You know, we live in ~~~ after all!"* Patricia commented, *"Yeah, and we know that from the street people can see them playing, they would be out there by themselves in view of everyone."*

The Calmings provided a bit more background context to their immediate concerns, explaining that there was a family who lived two doors up that didn't treat their children very well and who had been involved with several incidents where the police had been required to attend to domestic concerns. They explained, that it was a common occurrence where the parents were often heard yelling with inappropriate language, and arguing with the children, and that wasn't something the Calmings wanted their children to listen to. Patricia commented, *"You like to be out there with them to let them know that those sorts of comments and words are not right."* These concerns emerged as significant barriers in their ability to support active play. It also stopped the children from being spontaneous, and following through with their interests in outdoors play, if Patricia or Matthew weren't available to supervise during these times.

The Calmings also mentioned that they were aware of increased risk and evidence of examples of dangers to childhood safety from the news and things they heard on television. Patricia said, *“Yeah, it’s just right there and it’s in your neighbourhood. You just don’t know, like it’s that thing of you see stuff on the news and you hear things these days and you just know too much of what could possibly happen. You don’t want to live like that, but at the same time we’re definitely influenced by what we hear in the media and the neighbourhood we live in. It means that we need to be outside with them for peace of mind.”* Matthew pointed out that these messages may often be subtle and didn’t necessarily impact on their immediate decision making regarding the restricting of the children’s outdoor play. He elaborated, *“Possibly, not directly that I’ve noticed, or to the point that would consider encouraging them to stay inside”*. Dwyer’s (2008) findings also reinforce the fact that media stories can exacerbate parental concern for children’s safety and was a barrier in parental support for physical activity with their children.

As noted by Stokes (2009), fear is often socially constructed from a number of potential sources, including that of the community and culture. These can shape the perceptions, attitudes and values of parents in terms of interpreting, and restricting the environments in which children play. The extent to which these factors decreased child-driven active play opportunities in the Calming household was determined by a range of unique social ecological factors operating at the micro and macro level (Refer to Figure 7.1). Consistent with Gill’s (2007) position, it was evident that due to the Calmings’ valuing of play experiences, they were prepared to go to great lengths to overcome obstacles based on their perceived fears regarding the ‘safety’ of their children, in order to continue to support active play experiences.

7.5.3 The physical environment

As consistently argued throughout this thesis, the micro-environment of the family home is recognised as a context-specific location for facilitating or hindering health and health behaviours, including the active play opportunities of children (Campbell et al., 2008; Trost & Loprinzi, 2010). This chapter explored the contextual details of the physical environment of the Calmings' domestic space and how this space was supported by Matthew and Patricia and used by the children as opportunities for play. I turn now to examine the last determinant explored for this research, that of aspects from the physical environment. Several examples from within the Calmings' domestic space were interpreted as barriers in supporting active play, yet these obstacles were skewed because of a range of social ecological factors.

A significant environmental barrier identified by the Calmings, was the inability to use the front yard as a play space, as it was a juncture for several streets converging. While this could be a factor that could have inhibited active play for the children, this challenge was proactively addressed by Matthew and Patricia's style of parenting (micro-environmental influences), their commitment for supporting the children's interests, and by facilitating creative spaces and places to support active play both indoors and in the backyard. Their access to the great social resource of extended family was also useful in drawing upon regarding ideas for opportunities of different types of play spaces for their children.

Although the lounge room space was identified as a conducive space for Tiffany and Jeffery to play and active play did sometimes occur within this environment, the presence and prominent feature of the television altered this environment and the way that playtime was influenced. Examples were discussed earlier in this chapter of the type of support and

resources provided by the Calmings to facilitate and support their children's interests within this environment, yet most of this play was sedentary in nature.

As the previous section of this chapter has indicated, the 'perceived fears' of allowing the children to play independently in the backyard was another barrier that was linked to the physical environment. As noted, an appreciation of the Calmings' context-specific behaviours and their ecological niche in which they were located, have helped to better understand influences from micro and macrosystems on their value system, and in turn gain an appreciation of how these factors have impacted on the importance they placed on active play. Collectively, these factors have enabled the Calmings to overcome any perceived or real barriers. What has emerged was the Calmings' commitment to their children's' play experiences. Patricia's remarks encapsulated this passion, "*Because this is what I want to do, it's not like I'm stuck here. I really, really love being a mum.*"

7.6 Summary of the chapter

This chapter explored the 'lived experiences' of the Calming family. Their stories have provided a detailed perspective of the subtleties of their thoughts and interactions and how these have impacted on their beliefs, choices, abilities and behaviours for supporting or deterring opportunities for active play. Conceptually, the chapter was guided by social ecological principles (Stokols, 1992) and the adoption of the PMEM model. This model has helped to comprehensively understand the effects of the physical and sociocultural surroundings on the Calmings' support for Tiffany and Jeffery's active play.

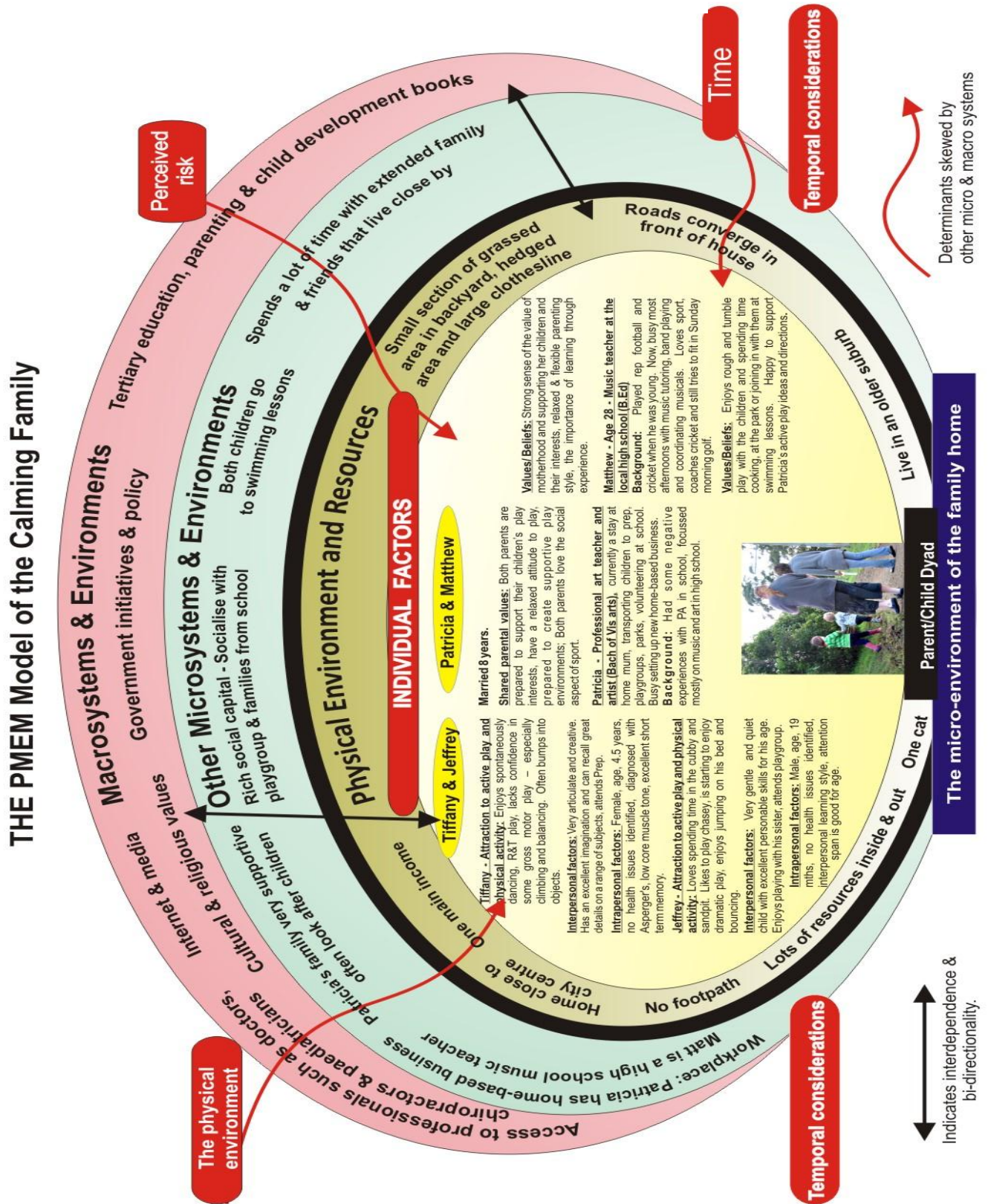
An analysis of the Calmings' context has reinforced that Tiffany and Jeffery's environment exerts an enormous influence on their health and well-being patterns. Their parents, and the

micro-environment of the family home, have provided opportunities as well as several barriers in their ability to access active play opportunities and experiences.

A recurring theme in this chapter was the Calmings' unique approach to supporting play and their relaxed and flexible parenting style. They did this by providing a range of social support mechanisms, which included parental encouragement and facilitation, often adopting the role similar to a 'resource manager', methods that definitely had a positive influence on the children's play behaviours.

A number of precursors, precipitating factors and systems have influenced Patricia and Matthew. These are unique to the Calmings and included: where they source their information on child development and the importance they place on childhood, health and active play (Kolar & Soriano, 2000). As noted earlier in this chapter, a crucial element in the Calmings' ability to care and support their children was access to their 'clan', and other social networks. These social groups subtly influenced the way play was understood, supported and prioritised. The analysis of these data reinforced the extent to which individual, social, and physical environmental factors, have shaped their behaviours regarding their support of active play within the micro-environment of the family home.

Figure 7.1. The PMEM Model of the Calming Family



Chapter 8: Staking one's claim on new territory

“Even when empathetic and respectful of each person's realities, the researcher decides what the case's own story is, or at least what will be included in the report. More will be pursued than was volunteered. Less will be reported than was learned” (Stake, 2003, p. 144).

8.1 Introduction

In the introduction to this thesis, I shared the valuing of context and how a life experience transformed the importance I placed on the idiosyncratic nature of individuals, families and communities. This heightened appreciation of ‘context’ has pervaded all aspects of my research journey and subsequently influenced the way I choose to explore phenomena. In this study, a critical aspect of this exploration was a focus on understanding the realities, and the stories, of three families with young children. This required me to ‘walk in their shoes’ and to see these domestic spaces ‘through their eyes’.

In Chapter 1, I detailed the problems and the gaps in the current body of knowledge. I outlined, that at the time of conducting this study, the field of health and physical activity was trapped in a discourse dominated by positivist research, and that data on physical activity levels and sedentary behaviour of older children, did not translate to younger children birth to four years. The positivist paradigm in which this type of research was positioned was also limiting attempts to better understand the complex lives of individuals, families and communities and the ecological factors that influenced parental values, practices and support for the active play of young. This position overlooked the nuanced determinants unique to a particular environment, location, community, group of people or individual, and the impact these had on behaviours, practices and values.

Two areas were noted that were worthy of further investigation. The first, recommended that future research focus on investigating the role that active play has in establishing long and short-term health outcomes for young children; the second, was the importance of investigating the role significant adults play in supporting young children's experiences of, participation in and environments for active play, and the social ecological factors that impact on their behaviours and beliefs. The second of these points was then identified as being the main focus for this study. Three research questions emerged:

Question 1: How do parents support the active play experiences, and environments of their children (birth to four)?

Question 2: How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children?

Question 3: How do ecological factors influence the way that determinants are skewed to become barriers or enablers of parental support for active play experiences and environments?

This chapter focusses on the synthesis and distillation of key findings and understandings from this study and is divided into three parts.

Part 1 – This part presents significant findings that emerged from seeking answers to the three research questions and draws on the data outlined in Chapters 5, 6 and 7 (from the Mason, Hampton and Calming family). Rather than summarising the idiosyncratic details of each family, that were clearly addressed in the previous three chapters, this current chapter focusses on a number of other important points that emerged from reflection and analysis of the data, and helps to further inform the three research questions of this thesis.

Part 2 – This section turns attention to ways in which this research has made a significant methodological and conceptual contribution to knowledge.

Part 3 - I conclude this chapter, and indeed this dissertation, with a number of recommendations for intervention practices and strategies, as well as several suggestions for future research that could build upon the work that was at the heart of this study.

8.2 Findings: Addressing the research questions

This section of Chapter 8 will report on a number of additional findings that help to answer the three research questions of this study.

8.2.1 Research Question 1

How do parents support the active play experiences and environments of their children (birth to four)?

Research Question 1 was successfully addressed by intensively studying the data from three separate families which included observations, photo documentation, environmental scans (assisted by the Contextual Audit Template) and semi-structured interviews. The collection and interpretation of conversations with parents, and the stories they shared in relation to their meaning-making of parental support, choices, and environments in providing active play opportunities for their children within the domestic space of the family home, formed an integral part in gaining insight into this question. Five key points emerged from these findings: the limited space for active play indoors; the influence of the child on the dyad of parental support; the effectiveness of various types of parental support and parental interest; and the utilisation of resources from outside the micro-environment of the family home.

Limited space for active play indoors

Each participating family had their own unique approach for proactively supporting indoor play (See Figure 8.1. Q.1 A summary of active play experiences, opportunities and environments), however, active play opportunities within these spaces were limited. For example, although Tom Mason would occasionally engage in rough and tumble play in the bedroom with Helen, or Helen would perhaps dance on the mat near the kitchen or in the

lounge room, most of her indoor play was creative and fine motor in nature. Within the Hamptons’ indoor environment, active play was designated to the playroom, and although Simon and Susan would alter and at times turn other indoor spaces into active play opportunities, including the lounge and bedroom, most play was sedentary in nature. Finally, the Calmings were probably the most supportive in their facilitation of indoor play, even to the point of including a climbing frame in the lounge room. However, the inclusion of a number of boxes filled with fine motor manipulative toys and craft materials, as well as the presence of the television in this main play space, resulted in the majority of the children’s play being sedentary in nature.

The Masons	The Hamptons	The Calmings
<p>Indoor play spaces Limited spaces for active play; mat area accessed for dancing; bedroom & lounge room used for R & T play. Most play env. supported fine-motor & manip.; lounge room main area for sedentary behaviour including tv viewing.</p>	<p>Indoor play spaces Spaces planned and regulated by parents; particular spaces for particular play; playroom main place allocated for active play; most toys supported fine motor play indoors.</p>	<p>Indoor play spaces Flexible in spaces for active play indoors. Provide large pieces of equipment to support active indoor play. Television influenced type of indoor play. A range of fine motor manipulative experiences supported.</p>
<p>Childhood influence & interests Helen’s strong opinions on the play she wanted to engage in; Often chose not to use particular types of outdoor equipment such as the outdoor play house; Loved playing with intricate toys</p>	<p>Childhood influence & interests Simon’s interest in balls. Indoor active play often occurring in ‘non designated’ leisure spaces, such as the bedroom and lounge room. Susan’s interest in her dollhouse and barbies</p>	<p>Childhood influence & interests Tiffany’s physical developmental delays due to Asperger’s. Tiffany and Jeffery learning off and being influenced by each other. Tiffany’s interest in creative and fine motor play.</p>
<p>Social practices and support Reinforced active play as fun & valued, part of everyday life; Tom’s involvement - ‘task oriented’ (focused on practicing a skill such as hopping, ball handling or learning to surf or swim) and ‘rough and tumble play’ (RTP); Sarah’s role of a playmate participated in dramatic play (playing fairies & dress-ups) or facilitation. Socialised at parks.</p>	<p>Social practices and support Play supported through routines like gardening, cooking & house cleaning. Scaffolded play by using encouragement & being there to reinforce efforts (direct & indirect). George engaged in ball play & gravitates outdoors after work, enjoys gardening with the children. Children often ‘watch from the sidelines’ praise were nearly automatic forms of support.</p>	<p>Social practices and support Modelled the social aspects of sport – ‘footy nights’. Parents had a respect and talent for scaffolding and facilitating play. Patricia helped create environments and support children’s play similar to a ‘resource manager’. Provided a range of manipulative and fine motor resources that supported play.</p>
<p>Support from outside the micro-env. Accessed a range of other environments such as holiday destinations, homes of family & friends, extra-curricular experiences and parks. Links to professional colleagues provided ideas. Tertiary education was a great source to draw on.</p>	<p>Support from outside the micro-env. Accessed parks within walking distance from their home. Social connectedness with family and friends contributed to opportunities, sources of information and resources for active play. Close links church community helped ideas and resources to support play.</p>	<p>Support from outside the micro-env. Strong links and support from ‘the clan’. Confidence in accessing professionals and sourcing information from books and online. Patricia’s social nature helped in networking social networks such as playgroups & school.</p>

Figure 8.1. Q1 – A summary of active play experiences, opportunities & environments

The influence of the child on the dyad of parental support

Within the three micro-environments studied, there was evidence of these places and experiences being shaped and reshaped by the parent/child dyad. The children, as ‘active agents’, often accessed resources, and adapted their environments, to suit their own interests and needs, which were either inline or contradictory to the way that parents ‘deemed fit’, or had in mind for these places or resources to be used (Refer to Figure 8.1). A unique set of determinants, based on children’s, interests, learning, personality, and developmental characteristics, emerged in all cases as factors that influenced parental support for active play and the bi-directional patterns of influence.

For example, Helen’s temperament, gender, likes and dislikes, were all determinants in influencing the types of play that she chose to pursue and the play spaces she utilised. This was particularly evidenced in her disinterest with all the props and dress-ups Sarah made available to her, and her lack of interest in resources provided by her parents, such as the outdoor cubby that became more of a ‘storage shed’ because it was not a place in which Helen was interested in playing. Another example was the ways in which Tiffany Calming’s motor difficulties impacted on her decision to often avoid active play, and follow more creative pursuits, even though Patricia facilitated a range of active play resources and opportunities.

Parent support and parental interest

Each set of parents employed various socialisation strategies in the form of parental support (encouragement and facilitation) and interest (involvement and role modelling) for the active pursuits of their children. These social processes vicariously emphasised a range of socially patterned behaviour and values about health, physical activity and sedentary behaviours. While research linking parental modelling of physical activity and active childhood participation is still a contested area, and in some research understood as being indeterminate

(Sallis et al., 2000), as ‘an observer in context’, and listening to the events that unfolded in each micro-environment, I noted a number of opportunities of the physical pursuits of parents being entwined with domestic routines and presenting effective positive role modelling. This supports a small, but growing body of research, that suggests the potential moderating role of parents modelling physical activity and the influence this has on the active play behaviours of their children (Hennessy, Hughes, Goldberg, Hyatt, & Economos, 2010).

Apart from the modelling of healthy behaviours, all families demonstrated other examples of social support including various types of involvement and engagement. For example, the Masons facilitated Helen’s participation in physical activity with resources, supportive environments, and by driving Helen to friends and extra-curricular pursuits. Tom’s involvement included ‘task oriented’ activities (focused on practising a skill such as hopping or learning to surf or swim) and rough and tumble play, whilst Sarah’s involvement was more like a playmate, engaging in games like ‘What’s the time Mr Wolf?’ and ‘Simon Says’, or dramatic play such as playing fairies and dress-ups. The Mason’s reasons were linked to the priority they placed on active play, socialisation, and the fact that Helen was an only child; the socialisation aspect of active play meant that the social aspects of active play were sought out in a range of environments.

A significant aspect of social support and parental practice identified in this research was that these opportunities were often entwined with ‘family time’, or ‘building relationships’ (bonding). The types of relationships that occur between social mechanisms and the active play behaviours of young children have not been investigated in any studies to date, yet the association between ‘quality family time’ or ‘having fun’ with significant adults, and the impact these experiences have on instilling values, habits and physically active behaviours,

makes intuitive sense. Although it was difficult to categorise, or place these practices into either of the two main categories identified by Welk, Wood, and Morss (2003), ‘engagement’ appeared to be the ‘best fit’. For example, the Masons demonstrated ‘engagement’ when they all enjoyed playing in the park together. Patricia Calming, involved herself in playing hide and seek in amongst the bushes in the backyard with Tiffany and Jeffery, whilst in the case of the Hamptons, the children enjoyed active domestic routines in the presence of parents, especially gardening in the backyard with George.

Support from outside the micro-environment of the family home

It was noted earlier in this study, that limitations needed to be placed on its scope, in order to ensure manageability of this research. In relation to parental support for active play however, all three cases confirmed the complexity of this issue, and that these behaviours, by their very nature, didn’t occur in a vacuum, but extended beyond the scope of the micro-environment of the family home to various other social spaces and environments. These factors of influence on parental behaviour and support for active play, were ever present, and were therefore acknowledged within the PMEM model for each family.

For example, the Masons accessed a range of other environments, such as holiday destinations, homes of family and friends, extra-curricular experiences, and parks in supporting and providing different types of active play opportunities and experiences. The Hamptons, made good use of accessing a number of beautiful parks located near their home to support a range of physical experiences. Lucy’s tertiary background in journalism meant that she valued the medium of ‘print’ as a source of knowledge. The Hamptons also benefitted from strong social networks with family, friends, and links to their church community, for knowledge on ideas and resources. A strength of the Calmings’ efforts in support for their children’s play

were their close links to their ‘clan’ and the confidence they had in accessing professional information and support when required.

Closely linked to this aspect of the research, was parental access to social capital. This surfaced as a significant factor that impacted on the strategies that families utilised to facilitate and support active play with their children. This was not a factor that was originally anticipated, but emerged from parent responses and the stories they shared during the research process.

Social capital is often integrally linked with a range of resources such as economic status, cultural and social connections (Kayitsinga et al., 2009; Putnam, 2000). This was consistent with all three families who were able to draw upon their own range of resources, including financial, socially advantaged backgrounds, education, social status, and connections to culture and the community. Strong connections to family and community are understood as bridging social capital (Stone, 2003; Ziersch, 2005). To varying degrees, these factors were in themselves a ‘mechanism’ that assisted the families, often providing an advantage to effectively access social capital in terms of parents feeling comfortable communicating with professionals and friends, sourcing information, and networking with others within the community. All of these sources were embedded within and beyond the micro-environment of the family home, and crucial in helping parents to navigate through decision making processes and, to a certain extent, increasing their confidence and self-efficacy in parenting practices and support for active play opportunities.

8.2.2 Research Question 2

How do multiple environments and social ecological factors influence parental behaviours, values and practices for supporting active play with their young children?

A recurring theme of this thesis was acknowledging that families are complex and idiosyncratic and that their behaviours, practices and values are determined by a range of precursor and precipitating factors (Jamner & Stokols, 2000). In this study, a better understanding of these influencing factors and their impact on parent values, behaviours, decision-making and practices regarding active play for their young children, was successfully achieved by addressing Research Question 2. The focus of this question was located within an interpretivist paradigm which acknowledged that the realities of individuals are socially constructed and emerge from the way they engage with their world.

The PMEM model, adopted for this research, was valuable in helping to make sense of parent stories and the range of data collected to explore this question. An analysis of these data was addressed in the previous three chapters, therefore at this stage additional findings pertaining to Research Question 2 will be discussed.

Acknowledging the complexity of influencing factors

It is appreciated that exposure to life experiences occur longitudinally, across time and the life-course (part of the Chronosystem). These are both at a personal level (micro-environmental level), as well as from within the micro and macrosystem. In this study, it was evidenced that the experiences and the social milieu in which parents moved and lived within, had a significant influence on their attitudes, understandings, and values, which in turn affected how they supported and understood active, physical play.

A range of values emerged from discussions with parents regarding their support for active play (Refer to Figure 8.2. Q2 – Influences on parental values, behaviours & practices, located

on the next page). These included the value of spending quality time with their children, the valuing of ‘family time’, the importance of getting outdoors, of ‘giving everything a go’, the value of children enjoying childhood, of learning and having fun and the value of the social aspects of play. Factors influencing parent behaviours, values and support for active physical play were often not neatly defined and would frequently reflect the complexity, inter-connectedness and duality of relationships among these multiple layers of influence (Lawlor & Mishra, 2009).

The Masons	The Hamptons	The Calmings
<p>Values</p> <ul style="list-style-type: none"> • Support an active lifestyle . • Importance of teaching key fundamental movement skills & task-oriented experiences. Prioritise the time to ‘connect’ and bond. Give everything a go, calculated risk taking. Enjoy the outdoors, creativity and the social aspects of play. 	<p>Values</p> <ul style="list-style-type: none"> • Integrating activity into the day. • Importance of family time. • Committed to their faith. • Strong sense of family. • Prioritise the time to ‘connect’ . • Support calculated risk taking. • Go outside and play by themselves. • Active play leads to better behaviour. 	<p>Values</p> <p>Value play as a vehicle for learning.</p> <ul style="list-style-type: none"> • Importance on conducive environments for play. • Social aspect of sport. • Motherhood, enjoying time with children. • Strong sense of the value of motherhood • Flexible parenting style. • The importance of learning through experience.
<p>Influence from the micro-environment Intra & interpersonal attitudes, interests personality. Tom’s interest in sport. Sarah’s interest in social & creative aspects of play outdoors outdoors.</p>	<p>Influence from the micro-environment Intra and interpersonal attitudes, interests personality.</p>	<p>Influence from the micro-environment Intra and interpersonal attitudes, interests personality. Patricia’s interest in creativity. Matthew’s interest in music, cricket. Patricia very social and avid networker.</p>
<p>Microsystem History of support by parents in sport and encouragement to be active, play outdoors. Tom’s parents involved in sport. Tom’s peers also involved in sport. Sarah’s background – ‘give everything a go’ and ‘be involved’. Drew on rich social capital from family and friends, resources provided and support by family and friends. Networking with other parents.</p>	<p>Microsystem Positive experiences of own sporting background and memories of being active. George was involved in ball sports and social aspect of sport. Lucy involvement in running. Strong links to family and friends and local church community. Lucy at young age encouraged to be independent. Most of George’s ideas sourced from parents and childhood experience.</p>	<p>Microsystem Matthew active child growing up and participated in a range of sports. Patricia’s negative childhood experiences. Social ritual of watching sport and social celebration linked to sport. Strong links and support from family.</p>
<p>Macrosystem Networking with Tom’s professional friends, sports industry and medical experts. Tom and Sarah’s tertiary background, research and reading of child development and parenting literature. Parenting resources (books, brochures and promotional material) and information from prenatal classes.</p>	<p>Macrosystem Lucy sourced books and media/internet as a reference for parenting education and information. Policy recommendations, parenting resources (books, brochures and promotional material)</p>	<p>Macrosystem Strong links and support from ‘the clan’ . Confidence in accessing professionals and sourcing information from books and online. Patricia’s social nature helped in networking social networks such as playgroups & school. Excellent ability to source information via books, internet, professional about child development, health and behaviour.</p>

Figure 8.2. Q2 – Influences on parental values, behaviours & practices

A positive feature of adopting the PMEM model in helping to analyse the data for each family in relation to Question 2, was that it helped illuminate that factors located within the various systems or layers of influence were complex. These factors were not always easily tracked, didn't necessarily occur in isolation and were also bi-directional and influenced by a complex set of determinants and processes. In turn, each of these factors and systems engendered particular values and impacted on the various practices and behaviours within particular domestic spaces, which were often difficult to track to any one determinant.

Parental values influencing investment in supporting play experiences

Another significant point to arise out of the analysis of data which informed Research Question 2, was that each family, in their own way demonstrated great commitment to supporting their children's play, and physical activity experiences. As indicated in the previous three chapters, this commitment was shaped by a range of social ecological factors all impacting on the extent to which parents valued and understood the importance of play/active play. These values, in turn, influenced the extent to which parents were prepared to overcome barriers, and to modify their behaviours, and the micro-environment of the family home.

An example of this was the Hamptons' valuing of family time or opportunities to 'bond'. Factors that may have influenced these values could include their strong links to the church, the historical reinforcement of these values from their own upbringing, and the reinforcement of these values from family and friends. These values flowed over into their strong commitment to engaging and facilitating active play opportunities within domestic routines, to negotiating work hours so that time could be set aside to play with children in the afternoons, and to structure outdoor environments so that 'leisure spaces' were integrated with outdoor play areas. The Calmings' understandings of play as an important part of learning,

and the value they placed on creativity, meant that Patricia and Matthew were motivated to embrace these types of experiences and make great allowances in their support and facilitation for play.

8.2.3 Research Question 3

Question 3 –How do ecological factors influence the way that determinants are skewed to become barriers or enablers of parental support for active play experiences and environments?

Koplan, Liverman and Kraak (2005), refer to parents experiencing a range of pressures and barriers that get in the way of them supporting their children. This was also the case in this study, where each set of parents identified not only a number of challenges that played a role in their ability to support and provide quality environments or experiences for active play, but also demonstrated unique strategies to address these determinants. In exploring their responses more deeply, what emerged, was that in each case there was a high level of commitment and priority for altering environments, prioritising time, and overcoming perceived fears and concerns for child safety when engaging in active play.

Time

Consistent with literature that outlines caregiver barriers for supporting physical activity (Dwyer, Higgs, et al., 2008; McIntyre & Rhodes, 2009; Press & Skattebol, 2007), time was identified by each family as impeding on their ability to support and engage in active play with their children. Yet, an inter-related web of unique social ecological factors impacted on the way that household tasks, and child rearing commitments, were negotiated to support ‘time’ for active play. Closely linked to parental prioritising of time, were the values they associated with the importance of active play. Parents saw active play as an integral component of their daily lives, found ways to integrate opportunities for play, and facilitated and set up environments for active play for and with their children.

For example, within the Masons' busy household, domestic tasks and work commitments were set aside to purposefully schedule opportunities to engage with Helen in active play, and develop physical skills such as swimming. As highlighted in Figure 8.2, a number of ecological factors both proximal and distal to Sarah and Tom, impacted on their prioritising of time.

The Hampton family linked active play to 'family time'. This meant that efforts were made to 'find time' or 'prioritise time' in order to enjoy each other's company. George would prioritise his time to come straight home from work, so he could play with the kids before dark. The weekends, particularly Saturday, were opportunities for supporting active play. These were times when the Hamptons would often gather with other friends and children for BBQ's and play, or when Susan and Simon would join George outdoors to help him in the garden, or perhaps as a family, they would walk down to the local park to enjoy playtime together. It was appreciated that influences from the micro-environment, including the children's intra and interpersonal characteristics, and the Hamptons' own upbringing and positive experiences in physical activity, influenced the priority placed on, and commitment given to active play. Within their microsystem, including the social practices with extended family and friends and the church community, the importance of active play and 'spending 'quality time', and in particular the intimacy of 'family time' with children, were all values that were reinforced (factors at the micro and macro level).

Perceived Risk

In each case, parents shared stories of ways in which they were bombarded from various socio-cultural platforms (Dwyer, Higgs, et al., 2008), and how this filtered down to their micro-environment (Pain, 2006). This in turn exacerbated concerns and raised awareness over issues about safety, potential risk, and 'appropriate' parenting. Whilst acknowledging

the complexity of this socially constructed phenomenon, what was of interest in this study was the extent to which each family was willing to let this determinant dictate where, when and how active play was supported.

For example, Tom and Sarah Mason had access to a range of social capital (social support, networks and resources) from within the micro and macrosystem. These sources offered advice and ideas on a range of parenting topics, including supporting children's play and physical activity. Bundled with this information came mixed messages, and a range of cultural expectations, about what was deemed to be 'safe', 'normative behaviors' (Christakis & Fowler, 2009), or acceptable environments and activities in which children should participate. This complex set of factors impacted on Sarah's decision to use a playpen for peace of mind in 'keeping Helen safe', while she was doing housework and studying. In many ways, this was in direct opposition to other values she may have held in terms of the importance of Helen engaging in a range of quality play experiences.

Although Tom recognised and supported Sarah's concerns, his background in physical activity, and the value he placed on these experiences, influenced the way he accommodated for Sarah's decisions. Rather than leaving Helen to her own devices in the playpen, he would often use this time to engage with Helen by also getting inside and playing with her. Tom and Sarah varied in their comfort levels and thresholds of risk-taking associated with Helen's active play opportunities. These differences can be sourced back to both individual factors and sociocultural factors (Owen et al., 2000; Stokols et al., 2003). A number of ecological factors most proximal to the Masons, including Tom's higher threshold of perceived risk, can be attributed to his childhood background and history of sport and feeling more comfortable with physical activity, competition and taking risks. Sarah's more cautious approach to risk

could be tracked to her childhood, where physical activity was associated with playing outside and a less competitive approach to sport. In most cases, due to the value placed on active play by the Masons, there were efforts to overcome the determinant of perceived risk.

It was observed that during times of active outdoor play, Lucy and George Hampton didn't hover over Simon and Susan, rather, they would encourage them to learn from their own mistakes and minor accidents. Their approach to supporting active play was underpinned by the value of the children being risk takers. In the Hamptons case, the issue of understanding the origins of their understandings of risk was a complex one and was not easily tracked to any one social ecological factor. Indeed, several factors impacted on their positive response, linked to their own involvement in sport, where, because both of them had experienced a certain amount of injury in their own involvement in sport, appreciated that it 'came with the territory'. Their perception of risk was also associated with the normative expectations associated with the responses of the Hamptons' friends who had children of a similar age.

It was noted in Chapter 7, that the Calmings were the family most concerned over issues of perceived risk. A range of points were noted, including concerns over children playing out the front near a dangerous road juncture, concerns in witnessing or overhearing inappropriate language while playing in the backyard, and concerns of children being observed playing by other adults within easy view of the backyard. As indicated previously, in the Calmings' case, their response was unexpected, because of the relaxed manner in which they approached their support of their children's play. Rather than letting these concerns inhibit Tiffany and Jeffery's opportunities to play, the Calmings were prepared to go to great lengths to overcome these obstacles. Again, these can be tracked back to a number of factors including: the importance they placed on their children's learning through play, their own childhood

experiences of play, as well as cultural and extended family influences on Patricia's understandings of the importance of 'motherhood' and the implications of this for facilitating opportunities for play.

The Physical Environment

Whether it be poor weather conditions such as downpours of rain, the limited grass area in the Masons' backyard, the distance or lack of connectedness of footpaths to local parks, homes located off busy streets, or the limited number of young children to play with within close proximity of the home, each family identified aspects of the physical environment that in some way inhibited their ability to support active play experiences. This is consistent with ecological models of health that reinforce the significant impact that the physical environment has on opportunities to live an active lifestyle (Giles-Corti, 2006; Stokols et al., 2003; Zhu & Sallis, 2011).

Research has identified, that the issues mentioned by parents regarding determinants from the physical environment, were all examples of common or daily experiences that many families living in modern urban communities would experience as part of what is classified as aspects of the built environment (Sallis et al., 2006). In their own ways, each family studied was able to overcome determinants within the physical environment, often turning them into enablers, rather than barriers of physical activity opportunities. On reflection, if the environmental concerns which the parents faced were more adverse, such as that of living near to a freeway, or living in a ghetto or in a community that was unsafe because of high crime and gangs, their ability to alter, change or overcome these determinants would have been too difficult a challenge. Even if parents were motivated, or were influenced positively by other social

ecological factors such as a positive childhood history, or participation in physical activity, these types of barriers could prove to be too much of a challenge.

It is also important to emphasise that the three families who participated in this study were not from low income or racial/ethnic minority populations, nor was there any evidence of any social/emotional upheaval (although this was purely observational and not part of the CAT scan). The relevance of this point being, that any number of these risk factors or adverse determinants, may have altered the way that parents prioritised, or responded to the three determinants outlined in Research Question 3 (time, perceived risk, and the physical environment), and indeed would have impacted on their ability to support their children's access to an active and healthy lifestyle (Zhu & Sallis, 2011). In understanding this issue through Maslow's hierarchy of needs (1968), a range of adverse personal and environmental experiences would have also influenced the priority placed on the importance of active play and parental support for these type of play experiences.

Data indicated that another significant factor that supported parent efforts in all three families was strong social cohesion. Each family was able to draw on links to social capital, whether this was from extended family, friends, their extensive reading background, their tertiary education, networking with other professionals and child health specialists, or close ties to the church community. These social networks, and various other types of social capital, helped parents to make informed decisions and provide ideas and options for overcoming the various environmental barriers they experienced.

These various types of support could also be understood as increasing the perceived confidence levels of parents, which in turn would flow over into more positive levels for

supporting physical activity. An example of this was demonstrated by Patricia Calming, where her strong connectedness with family and the community, her background in tertiary education, and access to various other types of social capital, impacted on her interpersonal skills and levels of confidence in communicating with professionals. It also influenced her ease and feelings of comfort in negotiating through various other channels of social networks within the community, and using this knowledge to support her children's learning and engagement in active play.

8.3 *Significance and Implications*

8.3.1 Conceptual Significance

Case study is about refining and even building theory (Stake, 2005). This section of Chapter 8 outlines how this study has contributed to, and refined aspects of the conceptual theory of social ecology.

The development of the PMEM model

The PMEM model was a significant conceptual contribution. Specifically developed for this study, the PMEM model helped in extending an understanding of the theoretical characters of the ecological model, whilst building upon a strong evolution of ecological models, particularly the work of Bronfenbrenner (1979, 1992) and Stokols (1992, 1996). These theorists and the PMEM model were all concerned with shedding light on the complexities of individuals and subtleties of the everyday. The PMEM assisted in helping to make sense of the significant sources of environmental factors which influence parent understandings and practices for supporting physical activity behaviours of children within the family home. The model was robust enough to consider the elements that converged to influence parental behaviours and practices in supporting active play within this environment, whilst also offering a mechanism to help understand the interconnectedness of these factors and track

these practices to the wider systems that impacted both directly, and indirectly, on the lives of the parents and children.

Implications: Adopting a version of the PMEM model would enable researchers to explore and better understand a number of ecological factors from various systems of influence. The PMEM is an excellent framework for providing clarity of understanding the power of the environment in the lives of young children and families. The model is robust enough to apply to a range of behaviours and situations, including parental support of children with acute health issues, mental illness or terminal cancer, environments of maltreatment. A strength of the model is that it provides an effective mechanism for supporting and comprehensively understanding individual and collective health and wellbeing.

The conceptualisation of the micro-environment

The conceptualisation of the micro-environment, located within the central concentric circle of the PMEM model, is noted as the second contribution to social ecological theory (See Figure 8.3. ‘The family home’ – an example of the micro-environment). Building upon the early work of behavioural and ecological theory, particularly the early work of Bronfenbrenner (1995) and his reference to the microsystem, this thesis’ contribution to this enterprise lies largely in the conceptual inclusion of the micro-environment as a significant addition to the social ecological framework. The inclusion of the micro-environment enabled research to gain a heightened appreciation of context as well as the social and environmental influences on the individual/s located in a specific location. The micro-environment was a significant conceptual addition to other social ecological studies conducted to date as few, apart from the work of Dwyer et al. (2008), have localised this aspect so intentionally. Yet, its consideration and inclusion was not only a necessary and an integral component of the

PMEM model, but underscored the importance of considering the contextual nuances that operate on and are embedded in the lives of individuals and give meaning to their thoughts and actions.

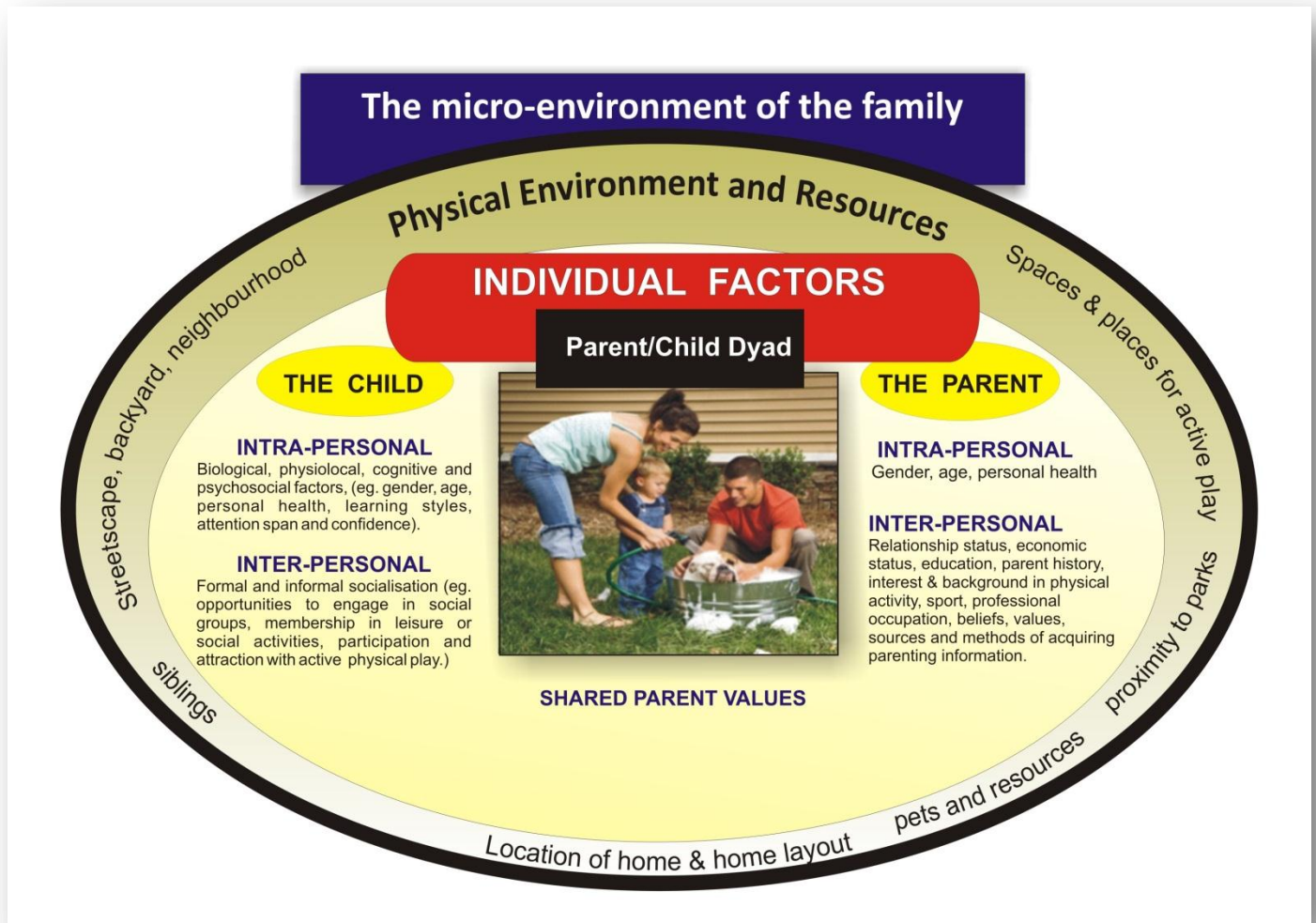


Figure 8.3. 'The family home' – an example of a micro-environment

Implications: The micro-environment of this study (See Figure 8.3) necessitated the need to include the parent/child dyad as the central element (borrowed from the work of Dwyer et al, 2008), because this domestic space is a significant location where health behaviours and values are reinforced. However, others may find value including different combinations of individuals or dyads within this central focus. The inclusion of the micro-environment within social ecological research would enable teams in a range of fields to focus on this contextually

nuanced environment, whilst also appreciating the complexity and influence of other systems, including the chronosystem, micro and macrosystems on this environment. Just as importantly, the inclusion of the micro-environment within a social ecological framework would help to make sense of data in terms of understanding experiences, behaviours, values and practices of individuals and the various influences unique to an individual or group.

The inclusion of the parent/child dyad

The inclusion of the parent/child dyad, focussed on families with young children within the micro-environment of the family home, is understood as this study's third contribution to conceptual theory. A unique aspect of the parent/child dyad conceptualised for this research, was that the parent and child were nested at the heart of the micro-environment of the family home. Within this setting, not only was the physical environment and the relationships of support for active play investigated, but also the multiple influences of other systems on parent practices and behaviours.

Investigations using dyads as a unit of analysis are not a new component of research, and have been used to effectively understand the context, behaviours, interactions, and relationships amongst individuals in a range of disciplines including family studies, education, psychological studies and health sciences. However, whilst conceptually numerous studies have adopted a framework that includes the child/child or the adult/child dyad to explore influences on health behaviours and types of support, limited studies have chosen to investigate the influence on and parent support of active play behaviours for very young children (Dwyer, Higgs, et al., 2008; Ruiz, Gesell, Buchowski, Lambert, & Barkin, 2011; Trost & Loprinzi, 2010).

With a particularly strong social ecological focus, this study built on the work of Dwyer et al. (2008) who's work explored the attitudes, values, knowledge and understanding of parents and carers of preschool-age children (i.e., 3–5 year olds). Their work helped to ascertain factors that influence active play behaviours and the types of support provided. The conceptual contribution of the parent/child dyad in this study raised the profile on the need to account for influences on young children's opportunities for active play within the micro-environment of the family home, both in terms of being influenced by their parents, family and the multiple environments in which the home was nested within, whilst also acknowledging the impact that the child has on the parent/child dyad and these environments.

Implications: The inclusion of the parent/child dyad within the micro-environment of the family home, offers great potential for others planning to investigate active play environments with young children, particularly in terms of understanding the unique way that various determinants impact on families.

Ecological factors causing the skewing of determinants

This study has raised for critical consideration the notion of a more idiosyncratic approach to understanding factors affecting health behaviours. This leads onto the final area where this study was able to contribute conceptually to social ecological research. It was argued that social ecological models need to account for ecological factors not only influencing determinants, but the possibility that these may be skewed to become barriers or enablers of individual behaviour, values and practices. The PMEM model created for this study enabled data to be analysed and to help confirm this premise. It confirmed that a range of ecological factors, that sit both inside and outside the micro-environment of the family home, can skew determinants in becoming either a barrier or an enabler, depending on the nature of each idiosyncratic context (Giles-Corti, Broomhall, et al., 2005).

Implications: A heightened appreciation of this phenomenon, and exploring factors impacting on the skewing of determinants, would provide great insight into critical leverage points for intervention strategies both in the field of health research and in other fields such as environmental planning.

8.3.2 Methodological Significance

This study makes several significant methodological contributions. These are: the application of CHE principles to support rapport and trust building; adopting a strength-based approach when researching with participants, and using the CAT scan as one of the tools of data collection.

The value of applying CHE principles and techniques

The methodological utility and the ethical and political appropriateness of the ‘CHE’ principles of Connectivity, Humanness, and Empathy, were convincingly evidenced as part of this doctoral study and emerged out of a need to establish rapport and a human connection with participants. These principles were a significant methodological contribution that served to strengthen the active process of ‘dialogism’ throughout this research by employing effective techniques to help to break down initial communication barriers, whilst building connections, mutual trust, and clarity of expectation. At the same time, this process helped to both listen to participant stories, as well as connect with and learn from them (Denzin & Lincoln, 2000a; Freedman & Combs, 1996; Krathwohl, 1998; Maxwell, 1996; Merriam, 2002).

For researchers positioned within an interpretivist paradigm with a naturalistic focus, a critical step in the data gathering phase is listening to the stories of others and establishing a special bond or level of ‘connectivity’ with the participants (Ellis, 1995). Specifically, with regard to data collection and analysis, adopting an approach to data collection and the interview process

whereby history, experience, values and views are acknowledged and validated (Dickson-Swift et al., 2007) on all sides, helps to maximise the authenticity, relevance and rigour of the data collected and the process employed to collect them.

Implications: Interviews are a popular qualitative methodological approach, either alone, or in combination with other qualitative methods. Others adopting qualitative research methods, would benefit from employing some, or all of these techniques, to help gain a heightened sensitivity to the rapport building process, and the value between researcher and participant as being one of a shared learning platform. Relatedly, data analysis based on the CHE principles is more comprehensive and robust because it takes account of the widest possible range of viewpoints and representations of interpretations of the complex phenomena being investigated. More broadly, adding the CHE principles to the armoury or resources that researchers bring with them into the research field will contribute to the processes and outcomes of that research. Finally, adopting the CHE principles ensures that the interview process is beneficial to both parties and helps to negotiate through the critical juncture of an ethical and effective interview relationship.

Adopting a strength-based approach when researching with participants

As noted in Chapter 1 and discussed in detail in Chapter 4, this study embraced a strength-based perspective. Firstly, it underpinned the axiological perspective from which this research was conducted and framed and secondly, it built on an approach or philosophy adopted by researchers and practitioners in a range of disciplines, including education and health, which value the knowledge that individuals, groups and communities ‘bring to the table’ (Brown, 2009b; Chaskin, Brown, Venkatesh, & Vidal, 2001; Sanders & Munford, 2009; Tesoriero, Boyle, & Enright, 2010).

Methodologically, researchers adopting a strength-based approach view themselves as learning from and with participants (Denzin & Lincoln, 2000a; Krathwohl, 1998; Merriam, 2002). This perspective recognises that participants have at their disposal their own set of enablers and potential (Dockett et al., 2009; McNeil, 2010; Sanders & Munford, 2009) and through this lens researchers tap into the resources and rich potential of individuals and communities (Dockett et al., 2009; McNeil, 2010; Rinaldi, 2005; Sanders & Munford, 2009). Adopting this perspective not only impacts on the kind of data collected from participants, but also the questions asked. A key to this approach is to harness and be open to gathering the implicit and explicit resources used and strategies that participants have at their disposal and within their own context (Campbell et al., 2008; Ziersch, 2005).

Implications: Perhaps the most significant methodological contribution that adopting a strength-based approach makes to research is that it enhances the potential of the CHE principles. It does this by moving the focus of the interview away from being an atmosphere of interrogation and impersonal data collection, to one that includes interactions where participant history, experience, values and views are acknowledged and validated (Dickson-Swift et al., 2007). When approaching data collection with participants in this manner, participants immediately recognise the difference in relationship from one of researchers 'being the expert', to one where there is a 'shared learning' platform. Others wishing to gain a high level of respect between themselves and participants, may also choose to adopt this perspective whilst complementing this approach with using the CHE principles to support their specific research endeavours.

The contextual audit template (CAT)

This research has emphasised the necessity of gaining a contextual understanding of the micro-environment of the family home and illuminating the 'lived experiences' of parents and

children (Brown, 2008; Oers, 1997). Acquiring this type of information required employing a number of data collection tools that would focus on gathering authentic stories and direct accounts of parent experiences, value and knowledge of active play.

The contextual audit template was used as one of the tools to help alleviate some of the complexity of gathering contextual details of people's lives. It was a useful prompt for reviewing and making notes on aspects that needed to be investigated and raised with parents during the interview process. Part of the CAT process was conducting an environmental scan (ES). This drew on work conducted in several other research projects, as well as other studies I had previously conducted in early childhood and educational organisations (Brown, 2009b). Scanning techniques, utilised by Egger et. al and Swinburn, et. al (2007; 1999) for diagnosing and dissecting obesogenic environments, were also incorporated into the design of the CAT. Techniques and important categories used, such as in the ANGELO framework, were modified for this study to help make sense of children's access to and parents' support for active play environments in the home (Swinburn et al., 1999) (See Appendix 4).

Implications: It is suggested that the contextual audit template, 'the CAT,' contributes methodologically to research in three ways. Firstly, its development draws on existing frameworks and environmental scans all concerned with supporting the investigation and gathering of rich data in context (Pring, 2000). The collection of contextual data is achieved by employing tools that comprehensively investigate a case or phenomenon in a specific time and context, where participant stories and other data collection techniques provide insight into the worlds of the participants being researched (Stark & Torrance, 2005). Secondly, the contextual audit template can be a useful tool for helping to draw attention back to the focus of gathering 'context dependent' data that can in turn better support the interpretation and

reconstruction of people's stories and the situated nature of human behaviour (Denzin & Lincoln, 2005; Hurlburt & Knapp, 2006; Warr, 2004). Finally, in combination with a range of other quality data gathering methods, 'the CAT' helps to legitimate and strengthen the authenticity of interpretation of data and in turn aid in the trustworthiness of a study.

8.3.3 Contribution to the field - Possible directions and implications for parents, professionals and policy

The current study illuminated and comprehensively described the contextual factors impacting on parental ability, influences and choices in supporting opportunities for children to access active play opportunities in the home. This information has implications for designing and targeting high impact leverage points for intervention programs (Jamner & Stokols, 2000) and delivering appropriate educational and support materials to meet the needs of parents and families.

Just as the factors that influence parent decision-making and support for aspects of children's health are complex and occur in a dynamic manner, interventions and strategies also need to utilise a range of ideas that draw from multiple disciplines. The sharing of information and health messages with parents needs to be promoted in multiple ways (both direct and indirect) and through multiple contexts. There also needs to be recognition of the diversity of families, located in diverse homes, in diverse neighbourhoods moving through and within a social milieu where a range of barriers and enablers exist. Considering these various factors and drawing on the findings and the extensive literature and theory that underpinned this study, this section of the chapter now directs attention to a number of recommendations for ways in which future work could build upon the research done to date to more effectively support parents in optimising opportunities and environments for their children to engage in active play within the home context.

The critical role of parents – beyond a ‘one size fits all’ model

The research gathered in this study supports a body of literature reinforcing the critical role that parents play in influencing the behaviours, practices and values of young children (Australian Government Department of Health and Ageing, 2009; Campbell et al., 2008; Trost & Loprinzi, 2010; Lawlor, 2009; Merlo, 2011). Considering this, it is even more important that strategies target parents and families as a first step in an integrated approach for supporting the short and long term health behaviours and development of children (Center on the Developing Child at Harvard University, 2010).

In the words of Dwyer and his colleagues (2008), working with parents with young children may require a “different framework or lexicon” that extends beyond a ‘one size fits all’ approach. Consideration should be given to an approach that is much more targeted to early intervention of health behaviours and health promotion (Giles-Corti, Broomhall, et al., 2005; Glass & McAtee, 2006; Stokols, 1987), if strategies and recommendations, such as activity guidelines for young children, are to be both meaningful and effective.

At the micro level, a useful starting point for effective health promotion and interventions strategies would be one that considers the uniqueness of ways that health behaviours are interpreted based on the nuances of the micro context of the family home and the idiosyncratic nature of families (Ball et al., 2006; Franks et al., 2005; Liu & Hannon, 2005; Salmon, Timperio, Telford, et al., 2005; Stokols, 2000). This increased awareness of diversity of family contexts would help to inform health promotion and active play strategies for parents of young children and be more insightful into the challenges and perceived barriers among this important group. For example, health messages could promote active play through routines, work with local communities in ensuring and providing safe

environments for play as a step in helping to overcome parental fears, and wrapping play around family time with slogans such as, ‘Have you had your 30 minutes of family active play today?’. Further elaborations on a number of these suggestions are outlined below.

Implications

1. Consideration should be given to adopting a strength-based approach that recognises the first-hand experience that families have, and the impact of social ecological factors, on the health behaviours of children. Harnessing this knowledge of current domestic practices and meaning making of families, particularly with regard to their strategies for overcoming negative determinants of health behaviours, would help in better designing effective health promotion interventions.
2. Suggestions and interventions should emphasise the importance of active play for learning as well as health. Many parents are ready to hear about, and would find motivation in knowing that active play is a vehicle in the optimum support of healthy brain development, particularly in the first three years of life. This could potentially be a strong motivator for increasing parent valuing of opportunities for prioritising these environments and experiences.
3. An inexpensive approach for promoting active play opportunities to parents of young children within the home context is linking these experiences to domestic routines such as children helping to wash the car, garden and clean the house (in their own way!). Also providing parents with ideas on how children can participate in active play during busy times of the day when parents are engaged in getting ready for work or making the dinner, could provide a strategic alternative rather than them perhaps suggesting more sedentary options, such as screen-time pursuits.

4. Provide parents with information and ideas that reinforce the power of modelling as a way of promoting and setting positive examples for both eating and physical activity habits for their children. This could include not only leading by example, but also encouraging children to watch or join in planned active experiences or sporting opportunities with them.
5. Many parents value the importance of family time, therefore consideration should be given to wrapping active play and physical activity experiences around moments for family time. This could include reinforcing that playing actively together provides excellent opportunities for bonding to occur and could include experiences such as rough and tumble play, baby massage, weekly family park visits and playing in the backyard as a family (even if it is only for short periods of time).
6. Promote active play ideas and experiences that parents can facilitate or provide materials so that children can have fun by themselves, with their friends or with their family. These intervention strategies need to reflect that the contexts of families, and the active play experiences of young children, are very different from those with older children.
7. Provide a range of ideas for active play experiences that young children can participate in outdoors with and without parents. Additionally, there is a need to provide parents with a range of information that would help to better inform them about the differences between real and ‘perceived danger’ of outdoor play, in order to help alleviate their concern regarding outdoor play experiences and environments.

Possibilities of future research to extend on this topic

Future research may wish to implement community and contextually-based interventions using participatory-based action research to explore and provide further insight into ways in which families with young children experience the impact of social determinants in their domestic spaces and strategies they utilise for overcoming real and perceived barriers of various health phenomena.

Building relationships, networking and social capital

This thesis has highlighted that families are “not an isolated entity”, but are “connected to and embedded in” larger social networks of relationships and multiple systems of influence (Kayitsinga et al., 2009, p. 2). This web of systems can inform the practices, norms, expectations, understandings and values of parents regarding aspects of health. It was also indicated that a parent’s ability to access potential resources and social networks (including extended family, care settings and community environments) is a strong determinant impacting on their ability to support and instil positive health behaviours, such as active play in children (Putnam, 2000).

Building on social and human capital research, social scientists such as Christakis and Fowler (2009) have raised for consideration the power of ‘connectivity’ and maximising the potential of social networks, or ‘connectedness’. Their research explored the phenomenon of living in an interconnected world and the influence that connected networks have on reinforcing ‘norms’ and influencing anything from the probability of those connected by social networks being overweight due to having close friends or family that are overweight, to increasing their chances of making positive health choices, to other social behaviours such as close friends influencing each other’s emotions, voting preferences, taste in music and choice of movies.

Implications

1. In recommending areas for future interventions, consideration should be given to targeting the social processes in family environments and the types of information and resources parents have access to including: economic, social, cultural, institutional, and those sourced from the built environment. Programs may consider focussing on providing a range of easily accessible information and links to parenting groups and family activities such as various family activity days, local playgroups, meet and greets, coffee mornings, dad days and BBQ's, promotions for family-friendly parks, walking maps and other related networking opportunities and community information for families.
2. A number of ideas and strategies shared as a result of the current study could add and contribute to existing and plans for future physical or virtual 'parent hubs'. Along with the services and information already being distributed and shared in these hubs, additional information on the importance of active play could be shared and linked to other community information, raise the profile of active play blogs, websites and online discussion groups (such as www.progressiveeducation.com), or provide support information on parenting including: well-being strategies for busy families, links to health professionals, promoting incentives such as free medical checks and maternal health clinics, and also providing current information on positive parenting styles and health behaviours.
3. Consideration may also be given to utilising social networking sites, such as Facebook, for intervention and building networks and information dissemination linked to community sites. These various types of support, and links to other families with young children, may increase the confidence levels of parents, which would in turn flow over into their support for active play experiences, perhaps even overcoming a number of barriers that inhibit active play and physical activity. Social connectedness may also potentially help to counter perceived fears of neighbourhood safety.
4. Understanding the influence of social networks such as close friendship groups, or friends of friends of friends, as well as the potential of how these 'connected networks'

flow through to, and can be utilised to not only support but provide positive influences with health behaviours, is a worthwhile intervention consideration. This could include investigating ways to build networks between positive role models and family and friends within the community. These strong community networks and community-based initiatives have the potential of being the frontline of active play information dissemination. Researchers and community support services should more actively embrace and from a strength based perspective utilise the potential resource influence families and parents are to not only further research, but as an powerful aspect of social capital for other families, particularly when trying to instil positive behaviour changes. This type of approach also has the potential to help those families that are not as well equipped to navigate and access a range of these services and resources (Halfon et al., 2010).

Possibilities of future research to extend on this topic

Future research may wish to further investigate the active play behaviours of young children, or explore how families generate and mobilise social capital in supporting their decision making and ability to support active play behaviours, as well as the strategies they used for resource seeking. This requires researchers to investigate and gain a deeper appreciation of local, cultural and contextually-based information. Social ecological models would support this type of research by providing a framework to examine both the multiple environments and factors that impact on health behaviours and values.

An interdisciplinary approach to working with families

In the words of Halfon (2010), “Government alone cannot transform the healthcare system. It is the actions of individuals, clinicians and families that will bring about true change” (p.18).

In line with social ecological principles, this study has reinforced just how complex the issue of family health behaviours are. This complexity requires multi-pronged solutions and approaches that consider the range of factors influencing parenting and family behaviour (e.g., personal, organisational, community, government policy).

What does this mean? Strategic implications

1. Positive health development requires the removal of sector imposed boundaries to allow for more integrated approaches to community health programs that incorporate a range of experts and disciplines including social workers, clinicians, educators, town planning experts, and local government, in designing context specific support and interventions.
2. Strategies for supporting families through context based initiatives need to be coordinated, yet approached from multiple and nested levels of influence. This approach needs to be bi-directional, including working from the 'bottom up', by working directly with families, and 'top down', by aligning government policy agendas such as child support incentives and financial parenting support packages.

Possibilities of future research to extend on this topic

In order to more fully understand the complexity of families, and explore multiple factors impacting on a range of health behaviours which occur within the home environment, future research needs to overcome parochial boundaries and adopt a social ecological approach. This multi-disciplinary approach should draw on experts from a range of fields and disciplines such as education, public health, environmental psychology, exercise science and sociology. For example, instead of investigating 'screen time usage' and its impact on active play behaviours of young children from purely a social science perspective, interdisciplinary research could explore a phenomenon such as this from a range of angles which would require the combining of theoretical perspectives for investigating phenomena of health. The benefits of this type of research would see a greater focus on understanding environmental factors which influence families and the home environment implicit within the various systematic levels and multiple interpretations on intervention strategies.

This research project was undertaken in homogeneous settings with the Masons, Hamptons and Calmings. All families were from Anglo Australian middle class backgrounds. This study also explored one particular aspect of health - that of parental support and children's

access to active play opportunities in the home. The scope and options of applying or building on this work offers endless possibilities. In consultation with Professor Dan Stokols from the School of Social Ecology, University of California, Irvine and aligned with a social ecological paradigm, future consideration may benefit from “broadening the scope of the family micro environment to assess not only physical activity orientations as indicators of health behaviours, but also other interrelated dimensions of a family's overall wellness orientation” (Personal communication, April 8, 2012). This broader conceptualisation of family wellness orientations could explore “multi-faceted, multi-level conceptualisation of family wellness orientations”, whether assessed qualitatively or quantitatively. This research could include investigating factors such as physical activity, nutritional practices of the family in the home and beyond, emotional tone or climate of the family, safety of the home environment, crime potential and social capital in the neighbourhood.

Another possibility, could be examining “the synergies or non-complementarities between dimensions such as nutritional patterns that either enhance or undermine the health benefits of high levels of physical activity, or perhaps safety hazards in the home that might negate the potential benefits of free-range v containerised children and parenting practices” (Stokols, Personal communication, April 8, 2012). While some might question the futility of using a social ecological framework for investigating, or attempting to provide recommendations for health behaviours, due to the complexity that underscores the numerous types of influences on these issues health behaviours, others like Stokols, Lejano, and Hipp (forthcoming) recommend a process of rendering the key areas of importance into smaller manageable chunks when considering policy, programs and future research projects.

8.4 *Summary of the chapter*

This chapter has shared the synthesis and distillation of key points that emerged from reflection and analysis of data from the Masons, the Hamptons and the Calmings and further informed the three research questions of this study. A number of significant methodological and conceptual contributions to knowledge were outlined. Finally, a number of recommendations for intervention practices and strategies were outlined, each underpinned by the premise that it is only when we truly appreciate the power of context and the multiple layers of influence, that we can effectively target the specific factors required to improve health outcomes and build capacity for the long-term health and well-being of children and adults (Brown, 2009b; Stokols et al., 2003). This chapter also raised for future consideration a number of exciting and important avenues for future research, with a strong message to extend the scope of this research beyond one paradigm or superficially imposed boundary of disciplines to a paradigm which embraces the richness of collective visioning based on social ecological principles of multidisciplinary approaches.

This study does not contain all the answers to the complexity of issues surrounding factors that influence the perspectives and behaviours of parents and their impact on young children's health behaviours and experiences in the early years of life, nor is it a definitive encapsulation of case study research. Although the field acknowledges the value and importance of this type of research, there still remains much to be explored. Raising children is a collective undertaking, one that is integrally linked to multiple places and networks of people, yet families and their domestic spaces are still at the heart of this endeavour. We can only understand individuals within these places by understanding their context, located within multiple environments and the wider social milieu.

Such research needs to be underscored by approaches that appreciate the contextual nuances of families, whilst also reinforcing the need to embrace the multiple fields and disciplines in order to enable “individuals, organizations, and communities to better manage multiple sources of environmental change and to collaborate effectively toward reducing their negative impacts on population health and societal cohesion” (Stokols et al., 2009, p. 181). It is intended that this study will inspire future research endeavours that might further address the challenges outlined in Chapter 1, and seek to better understand the experiences and perspectives of children and parents in this legitimate space - a space where much research still needs to be done in order to advance our understandings, yet has the potential of being an untapped resource, that in many respects could still be defined as the ‘*New Frontier*’.

8.4.1 Journal Entry 7: Exploring new territory through ‘different eyes’

I have come to the end of another week of writing and attempting to complete the last of the edits and amendments on my thesis. I emerge from my desk that has cocooned me for many hours over the last few months, and now sit perched on the lounge of my apartment balcony, looking out over the Brisbane River and city suburbs, and witnessing the sun setting on this wintery evening. The clear blue sky slowly transforming into the muted colours of pastel pink, mauve and grey, the landscape morphing into a magical sprinkling of streetlights and homes coming to life as their occupants arrive after another busy day. As I gaze at this scene unfolding around me, my mind wanders, contemplating how I have changed or been transformed by the theory and the people that I have met, researched and learnt from along the way.

In some respects, my research journey of nearly six years has been much longer than that of most expeditions by explorers, and while I may not have faced the physical challenges of

frostbite, sunburn, or oxygen deprivation experienced by those on an epic expedition, I have shared a like-minded persistence, and will to never give up. I recall one of my earlier reflections, where I referred to my research journey being a solitary one, viewed similar to that of an explorer, where, because my research was located in paradigm dominated by positivistic approaches, I was intimidated and therefore stepped tentatively, felt isolated and unsettled. Yet, determined, I came to appreciate that if I wanted to pursue a path through uncharted territory, I needed to ask advice and seek out others who had experience in venturing a similar route.

At these poignant times I have been comforted to discover theory, other studies, and during the way met like-minded researchers from Australia, and more recently from my travels to Irvine, California, who have provided direction and insight at timely junctures. I have come to appreciate that one's exploration of a place, context or phenomenon can be interpreted differently, viewed through multiple lenses and be collectively richer, if a number of individuals discover new territory, places, and people together. So rather than seeing my journey as occurring in isolation, I am conscious that in many ways, this has been a shared journey.

This insight has confirmed the strength and potentiality gained through collaborative research, closely linked to what I refer to in the final chapter of this Thesis as supporting 'social ecological principles'. What is more clear, is that not only does collaborative research and multiple perspectives strengthen the possibilities of deeper and richer research to help gain insight into a phenomenon, but collectively, this approach offers opportunities for dynamic and substantive contributions to resolve a range of social and health problems.

I recall a few years ago writing my first diary entry entitled 'Discovering Context', where I confirmed my respect for context, and its application not only to health related research, but to better understand the impact of phenomena on individuals, people and communities. Since then, this respect for context has gained traction in many fields and disciplines. My valuing of context has also deepened, as I have come to appreciate the multiple applications of context in helping to reveal how others see the world, and respond to various situations and experiences. Context is therefore something I still carry with me, not so much anymore as a talisman, but something much more intimately linked to who I am, and to all aspects of my personal and professional life, including the impact that this has on my approach to writing, to new research projects, to the way I view children and families, as well to the way I support tertiary students in terms of optimising teaching and learning in higher education.

Finally, I sit here this evening reflecting on a Keynote that I gave recently to a group of nearly two hundred early childhood educators attending the 'Invitation to Play' conference in Brisbane. The title of the Keynote was 'Glad wrapped, containerised or free-ranged kids - The impact of our world on the active play of children. Rethinking the possibilities'. The message of this presentation was, that in an area of research, or a phenomenon squarely located in a paradigm of 'doom and gloom' and obstacles brought on by modernity, there is a need to appreciate the context in which this phenomenon is located and the factors that impact on the phenomenon of active play opportunities for children. There is a need to appreciate that opportunities and factors that impact on childhood access to active play experiences are not located in one place, but exist in multiple environments and dynamically change through time. Yet, the important occupation of active play necessitates the rethinking

of the possibilities' of how play can look, needs to look. Rethinking these possibilities requires multiple lenses of interpretation and just as importantly, multiple levels of advocacy.

*I left the audience with the thoughts of Nicholas Christakis and James Fowler, authors of *Connected - The Surprising Power of Our Social Networks and How They Shape Our Lives*, in terms of the efforts of the positive actions of 'self', influencing others, one person at a time, and quoted the words of Gandhi,*

“Be the change you want to see in the world.”

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Appendix 1 – Glossary of Terms

Still to be completed – Always place reference list before Appendix

A

Active play experiences (eg. Bouncing baby on a knee etc):

Although children's play varies in levels of intensity – for the purpose of this study, active play experiences are classified as those structured and unstructured gross motor experiences children engage in either solitary, with other children or with primary caregivers that involve moving with regular bursts and at a “moderate to vigorous pace” (Brady et al., 2008; Livingstone et al., 2003; Murdoch Children's Research Institute, , p.1). Active play not only enables children to master a range of skills in a uninhibited environments but contributes significantly to “brain and muscle development”(McCain et al., 2007, p. 45). It also is a proactive step in disease prevention later in life (Trost, Kerr, Ward, & Pate, 2001); helping to support and maintain cardiovascular and core body health and lifelong physical activity behaviours essential for everyday living (Burdette & Whitaker, 2005).

B

Bioecological model of human development: is “an evolving theoretical system for the scientific study of human development over time. Within the bioecological theory, human development is defined as the “phenomenon of continuity and change in the biopsychological characteristics of human being, both as individuals and as groups” (Bronfenbrenner, 2004, p. xxviii). The bioecological model extends on Bronfenbrenner's ecological systems theory and applies it as a model to consider when addressing a range of intervention and family, community and health issues.

Built environment: A multidimensional concept used to describe patterns or aspects of human activity in a particular geographical location or physical environment. This can include locations such as homes, roads, sidewalks, parks, neighbourhoods, transportation systems, bike paths and classrooms (Popkin et al., 2005; Sallis & Glanz, 2006).

Bubble-wrap: describing a phenomena of ways that parents (particularly from Generation X) protect their children by limiting the opportunities for them to participate in active play or physical activity (Hoban, 2005), these parents are also understood as not leaving “parenting to chance” (Malone, 2007, p. 519). See also Gladwrapped.

C

Capacity Building: A collaborative and dynamic process that increases the potential of individuals, groups or communities to reach a particular goal, objective or outcome

Caregiver: An individual, such as a parent, foster parent, or head of a household, who attends to the needs of another individual

Case study: a process or means of inquiry that best affords researching and critical insights of a contemporary phenomenon, organisation, episode, social unit or individual in context (Creswell, 2002; Merriam, 1998; Stake, 2000).

Chronosystem: A system which acknowledges the influence and dimension of time as it relates to a child's environments. This includes not only how time can impact or influence of time on a child's perception of the world but also the physiological changes that occur.

Containers: a range of objects that young children are placed in and may include prams, cots, high chairs, car seats, playpens.

Containerised children: a term used to describe young children growing up in homes with generation X parents. This describes children that are often confined to cots, high chairs, prams, and car seats (Pica, 2000).

Contextual: the aggregate of a set of conditions or circumstances connected by time and space to a specific environment.

Context: A “unique set of conditions or circumstances that operate on or are embedded in the life of an individual, a group, a situation or an event, which gives meaning to its interpretation” (Brown & Reushle, 2010, p. 37; Oers, 1997)

Context-dependent knowledge: “a methodological approach to understanding the social world that recognises that some forms of knowledge are experiential and situated” (Warr, 2004, p.580).

Contextual influences: The nuances of determinants unique to a particular environment, location, community, group of people or individual. In this case contextual influences being a specific range of factors impacting on specific home environment, the family and parenting and in turn opportunities, behaviours and values for children to engage in physical activity or sedentary behaviour.

Containers: The physical constraints that children are placed in with the intention of retraining, protecting or safeguarding them. These include cots, high chairs, prams, car seats and bouncers.

Community: “A social entity that can be either spatial, based on where people live in local neighbourhoods, residential districts, or municipalities, or relational, based on common ethnic, cultural, or other characteristics or similar interests” (Koplan et al., 2007, p. 375).

Contextual: the aggregate of a set of conditions or circumstances connected by time and space to a specific environment.

Context-dependent knowledge: “is a methodological approach to understanding the social world that recognises that some forms of knowledge are experiential and situated” (Warr, 2004, p.580)

Critical leverage points: “to specify a particular context within which individuals may be affected by an intervention and then design a program for that context” (Jamner & Stokols, 2000, p. 12).

Culture: a range of values, beliefs, norms, traditions, attitudes and customs collectively held by a group of people who are unified by common ground (nationality, life experience, nationality, religion, ethnicity).

D

Determinants: a range of factors significantly contributing to or impacting on phenomena or complex set of behaviours (Bracco et al., 2006; Gordon-Larsen et al., 2000; Hands et al., 2001; Sallis et al., 2000).

Dialogism: the understanding that people are constructed, developed and grow not in isolation but within through and amongst interaction with others as they interact and engage both verbally and nonverbally (Sampson, 1993).

Denaturalised transcription: This is a data transcription approach concerned primarily with the substance of the interview and whilst still embodying the faithful transcription of an interview leaves out a range of elements including idiosyncratic elements of speech (Cameron, 2001; MacLean et al., 2004; Oliver et al., 2005).

Discourse: conversations that are shared during the interview process and form the main body of ‘lived experience of parents’ (see lived experience).

Dualist: The term was originally derived from the Latin word ‘duo’ meaning two where it was understood it denoted a state of being in binary opposition.

E

Ecological models: a model based on social cognitive theory that explains human behaviour in terms of the reciprocal relationship a person has with their environment (physical, temporal and social environment). This model emphasises the individual, the multiple contextual systems and the interdependent relationship in between (McLaren & Hawe, 2005).

Ecology: Ecology is understood to mean the “study of the relationships between organisms and their environments” (Stokols, 1996, p. 285). This term and approach was initially used to understand the relationship between plant and animal populations and later extended by those in the field of sociology, psychology and public health to human behaviour and environments.

Ecology of human development: “the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives as this process is affected by relations between these settings and by the larger contexts in which the settings are embedded. It includes reciprocity” (Bronfenbrenner, 1979, p. 21-22).

Ecological environment: understood as an ecological factors located within a series of nested concentric circles referred to as the micro-, meso-, exo-, and macrosystems (Bronfenbrenner, 1979).

Economic rationalism: A rational solution to policy based on sound economic principles.

Enculturation: the adoption of cultural habits including jargon, values, behaviours and norms of a particular social group or becoming a member of a particular culture (Packer & Goicoechea, 2000).

Embeddedness: a particular belief, practice or phenomenon is embedded within a collective and evolving set of events, contexts and environments and that human development, beliefs and behaviours emerge from this collection of sociocultural practices (Oers, 1997).

Environment: objective or perceived context or boundary that can be either physical or possessing a particular place or space in time and can include built environments, neighbourhoods, buildings, road, recreational facilities including places where people work, play and live (Ball et al., 2006; Davison & Lawson, 2006; Sallis & Glanz, 2006). (See also physical environment). It can also include non-physical considerations which could include the human and temporal environment.

Epiphany moment: In this study an ‘epiphany moment’ is defined as similar to an ‘aha moment where there is a sudden realisation or insightful moment that raises awareness on a particular issue, value or belief. Although not necessarily confronting an epiphany moment can cause one to experience a heightened sense of emotion (Smith & Kornblum, 1986).

Epistemology: our philosophy or interpretation of the world and what counts as truth (Packer & Goicoechea, 2000; Usher & Edwards, 1994).

Early childhood: the period of a child’s life that falls between birth and eight years of age

Enculturation: “picking up the jargon, behaviour, and norms of anew social group; adopting its belief systems to become a member of the culture.(Packer & Goicoechea, 2000, p.229).

Epidemiology: The science concerned with the of factors influencing the incidence, relationship, distribution, and control of disease in populations for the purpose of establishing intervention and prevention programs (Lawlor & Mishra, 2009).

Exosystem: refers to one or more larger social systems where the developing person is not present as an active participant yet the events which occur in this setting can affect the developing person in their microsystem or in turn be affected by this developing person (Berk, 2000). For example a child may not be directly involved with a parents place of work or work hours, yet both of these factors may positively or negatively impact on a child’s

development and behaviours and the microsystem. Another example of this is the case of the higher price of living meaning a parent may be required to take on two jobs and work longer hours therefore affecting the amount of time they can connect or be involved in 'active play' with their child.

Epistemology: ways of knowing the world or the perspectives on how we know (Brown & Packham, 1999; Usher & Edwards, 1994).

F

Family Home: Those practices and environments that exist within the space which is defined as the home, unit or main place of residence for a family (physical, emotional, social).

G

Gladwrapped: a phenomena of ways that parents (particularly from Generation X) protect their children by limiting the opportunities for them to participate in active play or physical activity (Hoban, 2005; Malone, 2007). "These are parents who do not leave parenting to chance" (Malone, 2007, p. 519). See also bubble-wrapped).

Gatekeeping: restrictions placed on children based on safety concerns.

H

Home: In this case the family 'home' is defined as the primary place of residence or where a child spends most of their time. In the case of a divorced family the family 'home' may in fact consist of two primary locations or micro-environments.

Home context: Home context is made up of two concepts 'home' being the primary place of care where a child lives, but possibly also encompassing the environments in which the child may play as part of his or her home experience (this could include the backyard, park, sporting or clubs, neighbours); context being: a set of factors or circumstances that operate on or are embedded in a situation or event and that gives meaning to its interpretation.

I

Idiographic: based in social theory, this approach to research focuses more specifically on particular cases or the unique traits of individuals rather than adopting a nomothetic approach that is seen as more 'scientifically' verifiable, based on universal characteristics and generalizations about human behaviour and "presumed to speak for everyone, everywhere, for all times" (Bowman, 1998, p. 295; Hurlburt & Knapp, 2006).

Research methods that adopt an idiographic approach is fore grounded by the uniqueness of each case and individual and would include primarily intrinsic case study that acknowledges the uniqueness of each case (Stake, 1995).

Idiosyncratic perspective: An idiosyncratic perspective is identified as being one that adopts an idiographic approach and in particular is concerned with an indepth understanding of the characteristics of individuals (Allport, 1962). It is argued that this approach was introduced to the study of psychology as early as 1898 by Hugo Münsterberg (Hurlburt & Knapp, 2006). It was concerned with the study of the individual as being unique and possessing their own particular properties which set apart from other individuals (Turvey). In this study an idiographic perspective has been adopted which appreciated that each family is unique and situated in its own micro context where it generates and is influenced by its own bundle of idiosyncratic factors and behaviours. This idiosyncratic perspective was concerned with studying and determining the unique characteristics of particular parents and families.

Illuminate – To highlight or bring to the forefront the meaning or essence of a specific person's experiences and understandings the associate with a phenomenon.

Interpretivism - Describes the utilisation of an interpretivist paradigm to explore a phenomenon.

Interpretivist paradigm - An interpretivist paradigm helps researchers to concentrate more holistically and in-depth on particular aspects of people's lives and critically question commonly held assumptions (Merriam, 2002; Stokols, 2000; Stokols et al., 2003). This paradigm is particularly valuable for elucidating the behaviours of populations and exploring the subtleties of people's 'lived experiences', the interactions that take place and how these are made sense of in their social worlds (Rubin & Rubin, 2005). This is achieved through the sophisticated dialectical process between the researcher and the participant (Angen, 2000). This approach enables one investigate the internal beliefs and knowledge of participants in their natural setting whilst at the same time be open for new understandings emerging (Stake, 1995; Strauss & Corbin, 1998). An interpretivist paradigm utilises a range of qualitative tools to help understand the participant's stories and context for this research.

J

K

L

Lived experience of parents – In this study the term 'lived experience' is used to describe an individual's idiosyncratic perspective that includes a unique set of life experiences and the ways an individual interprets the experience which occurs within a particular context of their every-day lives (Cohen & Omery, 1994; Grbich, 2007; Hitzler & Eberle, 2004; Van Manen, 1990). In this study the 'lived experiences' relates to parents' descriptions and direct understandings of what motivates, inhibits and influences their attitudes, dispositions and practices for supporting opportunities for their children to engage in PA in the home.

Life-course perspective: An understanding that the social and environmental processes that occur and progress throughout the lifespan can shape or modify behaviour. This perspective also believes that exposure to biological, environmental and social influences at critical stages life (including gestation, infancy, childhood, adolescence, adulthood) can have greater effects on inducing or modifying behaviours of individuals (Hutchinson, 2011; Kuh & Ben-Shlomo, 1997; Lawlor & Mishra, 2009).

Life-course Epidemiology: "The study of the effects on health and health related outcomes of biological (including genetics), environmental and social exposures during gestation, infancy, childhood, adolescence, adulthood and across generations" (Kuh & Ben-Shlomo, 1997; Lawlor & Mishra, 2009, p. 3).

M

Macrosystem - Those larger or external systems (subcultures and cultures) that exist as part of a whole, each being impacted on and in turn cascading upon other systems (including cultural values, socioeconomic issues, customs, political issues, physical environments, sociocultural status, and access to resources) (Koplan et al., 2005; Parke & Buriel, 1998). For example if the economy and government reinforce the importance of both parents working, then it is likely that both the mother and father will be expected to go back to work very soon after a child is born. The responsibility of raising a child in this case will fall on both the family and the care service.

Mesosystem – comprises of the interrelations among two or more systems in which a person is actively involved (eg. in the case of a child, the relations among the care facility, home, and school; for an adult, the relations between their work, home, and social life) (Berk, 2000; Bronfenbrenner, 1979).

Micro-environment– This definition draws on behavioural and social ecological models and describes an ecological niche, being a specific location defined by physical boundaries where a person is most heavily influenced or spends a large amount of time (for children this could include the family home, extended family, local neighbourhood as well as a care or education facility) (Davison & Birch, 2001; Salmon, Timperio, Telford, et al., 2005; Stokols, 1996; Swinburn et al., 1999).

Microsystem – the layer that is closest to a child (person) and contains bi-directional patterns of experiences, relationships, influences and interactions that exist between the child and those in their immediate surroundings. Structures in this microsystem are most commonly the family, home, care environment, place of work, extended family or education site (Bronfenbrenner, 1979; Koplan et al., 2005).

Micro-context – a unique or particular environment within the microsystem where bi-directional patterns of experiences, relationships, influences and interactions exist between the child and those in their immediate surroundings. For example families, home, care environment, place of work, extended family or education site are all unique micro contexts.

Milieu: the totality of an individual's surrounds and environment

Move: in this case 'to move' refers to planned or spontaneous physical activity using primarily major large muscle groups. Large or gross muscle movements could include running, crawling, climbing, walking and cycling (Pica, 2004).

Movement experiences: These are either planned, spontaneous or active play experiences where all the major large or small muscle groups are exercised. Large muscle or gross motor activities can include crawling, walking, running, climbing, whereas small muscle or fine motor activities can include dressing, painting, scribbling, threading, block play etc. Movement experiences that are creative and open-ended can also contribute to not only developing physical skills but also positively channel energy, as well as promote creativity, stimulate the imagination and experience success. Both small muscle and large muscle activities play a large role in promoting brain laterality (Pica, 2004).

Motivation: those factors that affect a person's reasons, choice, effort or persistence in committing to an activity. It can also affect their performance, intensity and duration of this activity.

Multifaceted Interventions: Interventions that involve more than one component that are delivered concurrently to a target group in combination

N

Natural setting - is the context within which this phenomenon appears. The natural setting includes a range of specific contextual conditions and nuances which can impinge on the phenomena.

Naturalistic approach –

Nuances - a combination of conditions or determinants that are twisted or altered due to being located in particular context. For example in regards to a parent supporting physical activity for children in the home this combination of factors may be that the home is located in a conservative country town, with a single unemployed mum raising three children under five with limited educational background and a history of negative experiences to physical activity due to being overweight as a child. The combination of these factors and many more are referred to as the nuances (Flyvbjerg, 2006).

O

Obesogenic environmental factors – a range of factors that may promote obesity and encourage the a higher predisposition to gain weight (Egger et al., 2007; Swinburn et al., 1999).

Obesity- an excess amount of subcutaneous body fat in proportion to lean body mass. In children this is determined as an elevated body fat level with a BMI of the 85th and 95th percentiles.

Obesity – is the presence of an excess of body fat (adipose) at levels that may be harmful to the body. “Current thinking is that those individuals with a body mass index (BMI) equal to or greater than the

Obesogenic Environmental factors that may promote obesity and encourage the expression of a genetic predisposition to gain weight..... the sum of influences...that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations (Swinburn et al., 1999).

Ontology: Is one's particular version of the world (Brown & Packham, 1999; Usher & Edwards, 1994, p. 13). Is the consideration about the nature of being and reality: "what it means for something – or somebody – to be (Packer & Goicoechea, 2000,p. 227).

P

Paradigm - A paradigm can be defined as a system of beliefs or a philosophical understanding about the nature of the world that guides action (Denzin & Lincoln, 2005). With respect to its application to research, a paradigm is the assumptive base or structure for viewing reality or from which knowledge emerges (Rubin & Rubin, 2005).

Parental encouragement - verbal and nonverbal practices and behaviours that can influence a child's activity behaviours and habits (Adkins et al., 2004; Bauer et al., 2008; Biddle & Goudas, 1996; Spurrier et al., 2008). }. For example a parent can directly encourage a child to go outside and play with the neighbours in the backyard rather than sit and watch television.

Parental facilitation – parents scaffolding, proactive efforts and providing resources (financial or accessibility) to support children in being physically active. Welk defines facilitation as "the provision of equipment, access, or opportunities to be active" {Welk, 2003 #659, p. 29).

Parental involvement – a parent's direct assistance or participation in active play or physically active experiences (including daily routines, infant massage, rough and tumble play, building a cubby area, etc) with a child {Brown, 2009 #1023}.

Parental role modelling - efforts by parents to demonstrate or model an active lifestyle or active behaviours with their child (Welk et al., 2003).

Perinatal - and identified period of growth and development for infants (commencing at 22 weeks prior to birth and ends 7 days after birth defines the period occurring around the time of birth (5 months before and 1 month after).

Phenomenon: An observable occurrence of an extraordinary event or an observable occurrence of a range of different things including an event, a problem, an activity or an individual.

Phenomena: More than one observable occurrence of an event, problem or activity etc.

Physical activity – incidental or planned gross motor body movements and experiences (often experienced in the context of active play, general routines and conducive environments) that result in energy expenditure (above the basal level) and or predisposing the body for future physical skills and development (Bellew et al., 2008; Casperson et al., 1985; Malina et al., 2004; Murdoch Children's Research Institute; Timmons, 2005) (See appendix for a more detailed explanation and outline of physical activity classifications).

Physical environment: A particular place or space in which individuals spend their time (care or education setting, home, neighbourhood, community). The physical environment can include aspects of urban design (e.g., Accessibility to footpaths, crossings and streetlights, distance to venues), venues that support physical activity (e.g., parks, backyards, school playgrounds) as well as physical elements such as weather conditions (Davison & Lawson, 2006). (See also Environment, micro-environment)

Physical fitness – an attribute that supports physical activity and may consist of cardio-vascular endurance, muscle strength or flexibility or a combination of these (Brett et al., 2004).

Play – the involvement of children in experiences that they actively engage in and which are freely chosen, intrinsically motivated.

Primary care settings - the settings where the child spends the majority of her or his daily contact – e.g., with parents, main caregivers, school, extended family, friends and support services.

Primary caregivers – the people a child spends the majority of their time with and may consist of parents, care facilities, extended family and friends.

Primary site - this is usually at the home, education or early childhood service

Primary care settings - the settings where the child spends the majority of her or his daily contact – e.g., with parents, main caregivers, school, extended family, friends and support services.

Primary caregivers – the people who a child spends the majority of their time with and may consist of parents, care facilities, extended family and friends.

Primary site - this is usually at the home, education or early childhood service

Protectionist paradigm: a consequence of parental fears or ‘overparenting’ generation Z children are increasingly finding themselves indoors with limited opportunities for physical activity (Malone, 2007, p. 525).

Q

R

Report : The strategies employed to develop a level of trust and non-threatening environment between the researcher and the participant so that participants are comfortable sharing their experiences (Dockett et al., 2009).

Risk Factor - A factor that may increase the vulnerability of an individual or group of people because of their involvement with a phenomena (for example lack of exercise or consuming high levels of fatty foods as risk factors of obesity).

Rough and Tumble play: A form of child/child or child/adult ‘big body’ or gross motor play that usually includes rousing, chasing, tagging, play wrestling, acrobatic actions or rolling on the ground (Carlson, 2009).

S

Skewed: A term to define a factor that is distorted from a line of trajectory. In this research is used to define the way that determinants are shaped due to the influence of a range of ecological factors.

Sociocultural paradigm: Learning and behaviours are social and situated, mediated and inextricable embedded in context.

Social cognitive theory: An understanding that suggests “behaviours are primarily influenced by the interaction between a person’s attitude, the social norm, and surrounding influences” (Welk, 1999, p. 12).

Social Constructivism: a belief that knowledge and meaning is constructed by self and or with others.

Social capital: The networks, social culture, information and resources that individuals have access to or can draw upon (Kawachi, Kennedy, & Glass, 1999; Ziersch, 2005).

Social Ecology: The field of social ecology moves beyond a more historical view of human ecology that focussed on the biological and geological processes of human behaviour to a heightened appreciation of and framework for acknowledging the pervasive influence and interaction of the individual, social, organisational and cultural contexts and their influence on personal and collective behaviours (Stokols et al., 2003).

Social ecological paradigm: A school of thought that supports a heightened appreciation of and framework for acknowledging the pervasive influence and interaction of the individual, social, organisational and cultural contexts and their influence on personal and collective behaviours (Stokols et al., 2003).

Strength-based paradigm: A view that consciously draws attention away from focussing on inadequacies to one that recognises and taps into the resources and potential that all individuals possess (Dockett et al., 2009; McNeil, 2010; Sanders & Munford, 2009; Weik, 1992). The focus is on the strengths, abilities and capabilities of consumers, not on their problems and weaknesses or in aiming to ‘fix’ something that may not in fact be broken (Denzin & Lincoln, 2000a; Freedman & Combs, 1996; Krathwohl, 1998; Maxwell, 1996; Merriam, 2002; Rinaldi, 2005).

T

Tracking: The prediction and relationship of future measures based on earlier exposure. The notion that physical activity in childhood may lead to physical activity in adulthood (Conroy, Cook, Manson, Buring, & Lee, 2005; Trost, 2005). Further to this, it acknowledges the vital role that a young child’s environment has in determining their long-term habits and health. Trost (2005, p. 12) explains tracking using Blair and colleagues (Blair, Clark, Cureton, & Powell, 1989) conceptual model that helps to explain the relationship between physical activity status in childhood and adult health status. “According to the model, childhood physical activity may influence adult health status either directly (Path B) or indirectly through its beneficial effects on childhood health outcomes (Paths A and E). Alternatively, childhood activity may indirectly influence adult health status through its positive effects on physical activity levels during adulthood (Paths C and D). This association is commonly referred to as the tracking of physical activity from childhood to adulthood” (p. 12).

U

V

W

Well-being A view of health that considers the health of the mind, body and spirit.

X

Y

Young child/children: In this study a young child is referred to being between the ages of birth to four.

Z

Appendix 2 – Physical Activity Classifications for young children (birth to four)

Physical activity –incidental or planned gross motor body movements and experiences (often experienced in the context of active play, general routines and conducive environments) that result in energy expenditure (above the basal level) and or predisposing the body for future physical skills and development (Bellew et al., 2008; Casperson et al., 1985; Malina et al., 2004; Murdoch Children's Research Institute; Timmons, 2005).

Physical Activity Classifications:

For the purpose of this research, opportunities for physical activity and movement in young children have been classified under the banner of 'active play experiences' (A - Exploration, child initiated movement and unstructured active play; B - Proactive or planned movement, physical activity and active play experiences). See the rightmost box on Figure 1-2 that details these experiences.

Active play experiences (eg. Bouncing baby on a knee etc)

Although children's play varies in levels of intensity – for the purpose of this study active play experiences are classified as those structured and unstructured gross motor experiences children engage in either solitary, with other children or with primary caregivers that involve moving with regular bursts and at a "moderate to vigorous pace" (Brady et al., 2008; Livingstone et al., 2003; Murdoch Children's Research Institute, , p.1). Active play not only enables children to master a range of skills in a uninhibited environments but contributes significantly to "brain and muscle development"(McCain et al., 2007, p. 45). It also is a proactive step in disease prevention later in life (Troost et al., 2001); helping to support and maintain cardiovascular and core body health and lifelong physical activity behaviours essential for everyday living (Burdette & Whitaker, 2005).

A) Exploration, child initiated movement and unstructured active play

Solitary or collaborative spontaneous and unstructured movement experiences that usually involve evidence of creativity and imagination (eg. Crawling, creeping; rolling, rocking, kicking, reaching, walking, running)...building with blocks, playing in the park,(Brady et al., 2008; Burdette & Whitaker, 2005).

B) Proactive or planned movement, physical activity and active play experiences

Those proactive, planned or intentional experiences or organised experiences that support physical activity and child development that occur usually in a sequence set of events or actions (Burdette & Whitaker, 2005). In the early years these can also be seen as a proactive measure in the attachment and bonding process or 'connecting' with children. Another significant set of experiences included under this banner are those active experiences that children participate in with adults as part of helping with 'routines'. These could include helping to 'clean', garden, wash the car or hang out the clothes (Brown, 2009b).

Proactive experiences to support physical activity and active play can include: Baby massage, cross lateral movements, dancing with baby; sensory experiences; infant and toddler movement sessions (eg. Gymbaroo, learn to swim classes, etc). Experiences like 'rough and tumble play'(Brady et al., 2008) can also be included under this heading. These experiences include experiences such as active tickling, playful tussling and wrestling and chasey games (Hughes, 1996; Pellegrini & Smith, 1998).

Sensory experiences are seen to be a proactive step in laying down the foundations for early physical development and neurological stimulation (McCain et al., 2007).

Appendix 3 – The contextual audit template (CAT)

This contextual template draws on my previous knowledge as well as the work of Egger et. al and Swinburn, et. for diagnosing obesogenic environments (2007; 1999). CAT data was sourced using a combination of observation data and data acquired from semi-formal interviews. Ideas on demographic collection and topics for questions were inspired from the work of a number of theorists (Bracco et al., 2006; Brady et al., 2008; Campbell et al., 2006; Giles-Corti & Donovan, 2003a; Veitch et al., 2006).

Parental demographics

Parental Demographics	Information
➤ Age of parents: Age (y) 18–29 30–39 40–49 50–59	
➤ Level of education: Tertiary Diploma/certificate Trade/secondary Sub-secondary	
➤ Occupations: Blue collar White collar Paraprofessional/professional Home duties Other	
➤ Sex Female Male	
➤ SES: High Medium Low	
➤ Marital status Married Separated/Single Remarried/Defacto	
➤ Number of children No 1 - 8	
➤ Order of children Make a note here of sex and age of each child	
➤ Level of physical activity or interests/hours /week High vigorous levels Moderate as recommended Below recommended	
➤ Hours/ week watching television	

Lifestyle and history of parental activity

Lifestyle and history of parental activity	Information
➤ Work status and times of work	
➤ Care arrangements	
➤ Exploring tv viewing patterns and routines	
➤ Exploring types of recreational and formal physical activity and active play	
➤ Explore incidental activity including house-cleaning, walking up stairs etc.	
➤ Level of education	
➤ What do you do in your leisure time?	
Are you involved in any sort of fitness? How often per week would you exercise?	
How do acquire information on child development/health?	
What hours to you spend at work? What is your routine when you get home?	

Social/emotional support and factors

Social/emotional factors	Information
➤ Family and children's access to a network of friends and relatives living nearby or who visit regularly	

Child Demographics: physiology and development (Make a note of this information for each child four years or under)

Child Demographics	Information
➤ Sex Female Male	
➤ Age of child/children at time of interview	
➤ Stage of development	

Access to play environments (indoor/outdoor)

Play Environments	Information
➤ Where do children usually play or participate in informal physical activity?	
➤ Access and frequency to play space: Does your child have access to parks, playgrounds, ovals, outdoor spaces?	
➤ What are the barriers to using this space?	
➤ What is the general day/week-end activity your child participates in?	
➤ What is their daily routine?	
➤ How does your child spend their leisure time?	
➤ What types of play are they engaged in?	
➤ What sort of play are they involved with in their room?	
➤ What sort of play are they involved with outside?	
➤ At what times of the dayor how often does your child watch television?	
➤ Does your child sleep during the day?	

Home/Neighbourhood/ Community Environment

Neighbourhood/Community Env	Information
<p>➤ Area of Residence: Cul-de-sac Highway Other</p>	
<p>➤ Access to sidewalks/footpaths None One Both sides</p>	
<p>➤ Access to recreational facilities Eg. parks, swimming pool, cycle paths, sporting clubs</p>	
<p>➤ Availability of backyard or neighbourhood space Small space Space populated by gardens and landscaping Space supportive of young children (eg swings, sandpit, large area for running)</p>	



Appendix 4 – Parental consent letter

Dear

Thank-you for expressing an interest in participating in the research project titled:

The new frontier: A social ecological exploration of parents' supporting physically active play behaviours with young children in the home (Ref no. HO8REA078)

This research aims at investigating factors impacting on parents' understandings and practices of supporting physical activity behaviours and opportunities with young children in the home. Of particular interest is hearing about your experiences and time spent with children engaged in physical activity and active play. Additionally, an important area I would like to investigate is: what resources (physical, social, educational) you have available for providing opportunities and experiences for physical activity with children in terms of prioritising or integrating physical activity opportunities in their busy lives. During this conversation I would like to further understand what impacts on your beliefs, choices, knowledge and understandings of physical activity experiences with your child/children.

In agreeing to participate in this project you understand that this will involve a number of conversations (2-3) with you in your home with each session lasting approximately 1 hour. This is to develop a comprehensive picture of your unique home situation. These conversations can involve one or two parents and can be worked into your day either when the children are in bed; over a cup of coffee; while you are preparing dinner etc. After sharing this time with you I may also diarise some field notes, thoughts and observations that will enhance information from the interviews. I may also ask permission to photograph a play environment, outdoor environment, some resources or some other interesting examples that could help reinforce information you have shared during an interview. Please note that all efforts will be made to ensure that children or premises are not identified in any way in the visual images.

In order to reflect on these conversations more fully after meeting with you I would like your permission to record these sessions. It is anticipated that the findings from this research may be published in a range of publications, conference proceedings and for more specifically my doctoral thesis. It is also important to highlight that all information collected during this project will be stored securely for 5 years.

It is anticipated that the findings from this research will provide a convincing argument for the necessity of acknowledging the powerful force parents' practices, values and understandings have in supporting physical activity opportunities and behaviours with young children. Additionally, it is the intention of this research to reinforce the complex range of factors that influence parents in supporting and engaging in active play and in physical opportunities with their children in the home.

I look very much forward to working with you and your family and thank-you for your support,

Alice Brown

Faculty of Education

University of Southern Queensland

Toowoomba, QLD 4350

browna@usq.edu.au

46311933

Note: It is important to highlight that the participation in this project is purely voluntary and if you at any time wish to withdraw from this project you are free to do so. If you have any concerns regarding the implementation of the project, you should contact The Secretary, Human Research Ethics Committee USQ or telephone (07) 4631 2956. If you have any questions regarding this research or would like further information, you may contact one of the principal investigators of this study:

Alice Brown on (07) 46 311933 - browna@usq.edu.au

Appendix 5 – Ethics Clearance



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OFFICE OF RESEARCH AND HIGHER DEGREES

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Friday, 24 October 2008

Mrs Alice Brown
Faculty of Education
USQ, Toowoomba Campus

Re: Ethical Clearance – The new frontier: Exploring determinants and contextual influences impacting on parents' understandings and practices of supporting physical activity behaviours and opportunities with children in the home

Dear Mrs Brown,

The USQ Human Research Ethics Committee recently reviewed your application for ethical clearance. Your project has been endorsed and full ethics approval was granted 24/10/2008. Your approval reference number is: **H08REA078** and is valid until **24/10/2009**.

The Committee is required to monitor research projects that have received ethics clearance to ensure their conduct is not jeopardising the rights and interests of those who agreed to participate. Accordingly, you are asked to forward a **written report** to this office after twelve months from the date of this approval or upon completion of the project.

A questionnaire will be sent to you requesting details that will include: the status of the project; a statement from you as principal investigator, that the project is in compliance with any special conditions stated as a condition of ethical approval; and confirming the security of the data collected and the conditions governing access to the data. The questionnaire, available on the web, can be forwarded with your written report.

Please note that you are responsible for notifying the Committee immediately of any matter that might affect the continued ethical acceptability of the proposed procedure.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ashley Steele'.

Ashley Steele
Research Ethics Officer
Office of Research and Higher Degrees

