When culture speaks:
Indian immigrant families’ participation
in sport and physical activity

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Thesis Abstract

This study investigated the experiences of Indian immigrant families’ participation in sport and physical activity (PA) in Auckland, New Zealand (NZ). Drawing from previous knowledge and research involving South Asian immigrants, case-study research was undertaken to answer the question, “What influences the decision of Indian immigrant families to participate in sport and physical activity (PA) in NZ?”

A single case-study design with embedded units included three Indian immigrant families (parents, one child) with differing backgrounds (sport, spontaneous, inactive-interested) as the participants. Information was gathered for each parent and child adopting qualitative methods of inquiry (in-depth interviews, participant self-reflection reports, researcher journal). Thematic analysis of the data revealed that the three emerging themes of 1) Neighbourhood 2) Multiculturalism and 3) Evolving Social Mindset and Beliefs, were major influencers on the decisions of Indian immigrant families to participate in sport and PA. In particular, the difference between everyday lifestyle activities in India versus NZ that arose from culturally distinctive neighbourhood behaviours and practices had created a perceived lack of opportunity and appeared to encourage sedentary practices among Indian immigrant children. As Indian immigrant families experienced NZ’s diverse social cultures, they perceived barriers in finding common sporting interests within multicultural societies, resulting in a ‘cultural disconnect’ in sport and PA in NZ. The outcome of the perceived disconnect had initiated for Indian immigrants the need to promote Indian cultural modes of PA, recognising a greater need in using not only sport but also cultural activity as a medium to connect diverse cultures. Within NZ’s social egalitarian principles (no caste, gender roles, socio-political impacts) and good infrastructure (cycle lanes, foot-paths), Indian immigrant families experienced equal rights and opportunities. As a result, motivating mindsets and a willingness to participate in PA behaviours, with positive experiences for the Indian immigrant mother as these families evolved from their traditional beliefs and practices (shared housework duties).

In summary, there is a strong need for integrating immigrant Indian perspectives alongside cultural values within initiatives and interventions that might be implemented. In other words, it is imperative that cultural values and belief systems be well understood and reflected, and may necessitate the collaboration with the Indian communities (collective-cultural intelligence) in NZ. As ‘not everyone fits the mold’ aiming to increase
PA participation should be tailored to the adopted cultural practice and tradition. This study sets the foundation for future research and sports systems aimed at the social inclusion of Indian immigrant participation and practices of sport and PA in NZ.
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Attestation of authorship

I hereby declare that this submission is my own work and that to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made.

Siona Fatima Fernandes

Date: 25th September, 2017.
Research outputs


Acknowledgements

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The support crew:

Thank you Jane Bucholz for your thorough proof reading skills.

Thirty-five years of saying sorry, this is the moment for me to dedicate this thesis to my loving mum, Blossom Fernandes and my dad, Dr. John Fernandes. Thank you for your care, support and guidance.

I present the thesis in gratitude to New Zealand’s support of the righteousness of the Indian immigrant people in NZ and worldwide.
Ethics approval

The present research was approved by the Auckland University of Technology Ethics Committee on 29th September 2016, AUTEC Reference number 16/323. To participate in this research, consent was obtained from parents and assent was obtained from their children.
Chapter 1. Introduction

When culture speaks: Indian immigrant families’ participation in sport and physical activity (PA) is an investigation into the experiences of parents and children from three Indian immigrant families and influences of participation in sport and PA in NZ.

This introductory chapter provides the background in understanding broader perspectives and nuances of culture while making the essential aspects of the Indian culture explicit. Subsequently, the chapter unfolds the rationale, significance and aim of this study, describing the view of the researcher’s vision (story) to undertake this research. The chapter concludes with a thumbnail sketch of this thesis.

Background

What is Culture?
Hofstede defines culture as “the collective programming of the mind which distinguishes the members of one group or society from those of another” (Hofstede, 1984, p. 84). As a ‘learned’ pattern of behaviour, (Harris, 1983) defines culture to be, “The learned, socially acquired traditions and life-styles of the members of a society, including their patterned, repetitive ways of thinking, feeling and acting…” (p. 5).

When cultural patterns of thought, meaning and values are transferred between generations of families (intergenerational), ones tends to latch on to intergenerational beliefs as they experience life within that culture (Hofstede, 1984, 2011). Accordingly, anchored in early years are societal, gender and national cultures that play unconscious influencers to the propensity of an individual’s greater liking for one alternative over another or others (Hofstede, 2001, 2011). Consequently, initiating change in a culture, necessitates a deep understanding of the values, beliefs and expression of a particular culture (Hofstede, 1984, 2011).

Attention is drawn to the anthropological sciences, of how culture was understood as in 1930, through the work of Franz Uri Boas.
“Culture embraces all the manifestations of social habits of a community, the reactions of the individuals as affected by the habits of the group in which he lives, and the products of human activities as determined by those habits” (Franz, 1911, p. 159)

Boasian themes emphasised that individuals display unconscious tendencies when initiating something new (activity) “but then to invent secondary rationalisations for them after the fact” (Torres & Hobbs, 2015, p. 141). Accordingly, the Boasian themes that drew upon selective retention and blind variation strongly reflect the Darwinian theories of evolution.

Culture according to Boas was recognised as the distinctive patterns of behaviours between individuals that belong to a certain group. By adopting their own cultural lens (historically), these individuals may view the world to which they belong (Moore, 2009). Boas themes have emphasised that understanding the way a culture may come to influence (condition) people, necessitated an understanding of their cultural practices, traditions, life domains (language), values and norms (Moore, 2009). Hence, it is by their exchange of ideas through which people interact that takes a closer step to understanding the culture.

The German-American anthropologist emphasised that a vital aspect of a cultural study is giving consideration to an individuals’ perception of their social settings (individual-societal relationship) (Boas, 1940). Accordingly, the Boasian construct took culture from a singular to a pluralistic sense (universal experience) that propagated the ubiquitous notion for every society to be formed of a culture. The pluralistic essence of culture, called into question the Western preconceptions of the non-Western people (lower status/rank, lack of civilisation) (Darnell, 2006; Whitfield, 2010).

From investigating the experiences of different people world-wide, the Boasian projects have systematised methodological constructs towards the understanding of meaningful experiences in different societies (Torres & Hobbs, 2015). As a result, I draw on Franz Boas school of thought when informing my methodology and methods in this research (Chapter 3).
Culture and ethnicity

Despite having a myriad of meanings, \textit{ethnicity}, used to identify oneself is derived from categories that stem from attributes of cultural uniqueness such as nationality, descent or physical appearance (D. Thomas & Dyall, 1999). \textit{Ethnicity} reflects the characteristics of group representation of feelings and experiences such as common heritage, shared cultural traits, past historical memories, sense of communal living (camaraderie) (Spoonley, 1993, 2009). As culture makes no reference to skin colour or any other physical or biological traits (race), an \textit{ethnic identity} may involve a person to be strongly influenced and positioned within a culture, yet without obvious recognition towards their cultural group (Tajfel, 1981), as seen in relation to sport-related behaviours of immigrants (Bradley, 2006; Stodolska & Yi, 2003).

Cultural integration

\textit{Acculturation}, as we commonly know it, is a term used to describe the process of cultural adaptation that follows the meeting between cultures (Berry, 1980; Sam & Berry, 2010) In contrast, \textit{cultural orientation} is the extent to which the traditions, norms and practices of a specific culture have influenced an individual (immigrants) to actively adopt the cultural practices (Tsai & Chentsova-Dutton, 2002). Accordingly, different levels of cultural orientation may be revealed through various life domains such as proficiency of written and spoken language, social connections, engaging in cultural practices and attitudes of host country and native country (Tsai & Chentsova-Dutton, 2002).

Culture and immigration

Before immigration, individuals are potentially unaware of the level to which their system of values, behaviours and ideas impact their native cultures. Immigration challenges individuals to make adaptations to host cultures (for example New Zealand) that may differ to their existing native system of values, beliefs, behaviours and ideas (India). Only then immigrants gain an awareness of how deeply rooted they are to their native cultural values, norms and traditions. On immigrating, they are required to learn and master host customs and traditions to function effectively in new environments, despite not needing to unconsciously assimilate or internalise them (host traditions, beliefs, values) (Tsai & Chentsova-Dutton, 2002).

The initial models of cultural orientation (Tsai & Chentsova-Dutton, 2002), assume that a strong orientation to the host country may lead to a weak orientation to the native
country (uni-dimensional models) (Stonequist, 1964). These models faced criticism for a one-sided (either host/either native) assumption that considered individuals who adapt to the host cultures are healthier over individuals with a bicultural/multicultural orientation (psychologically unhealthy) (LaFromboise, Coleman, & Gerton, 1993). Furthermore, as cultural orientation differs by a variety of life domains (Tsai, Ying, & Lee, 2000) the uni-dimensional models fall short in focusing on only one or two domains of life experiences (e.g. competency of language). In most cases, immigrants may retain native ‘cultural connections’ in their home settings, which may be challenged with time, and they may surrender certain native cultural aspects for acquiring aspects of host cultures (school and work settings) (uni-dimensional) (Tsai & Chentsova-Dutton, 2002).

In view of cultural orientations as separate processes that are experienced independently, the bi-dimensional models assume various types of orientations (assimilation, marginalisation, integration, separated) (Berry, 1980) and make no association between host and native cultural orientations. Accordingly, those born in the host country (e.g., NZ born Indian children) are first exposed to host practice making the adaptation process easier and natural. Consequently, enabling them to develop various cultural orientations to suit different contexts. Hence, with immigrant counterparts (e.g., Indian-born parents), those born in the host country can retain native cultural associations at home and simultaneously develop host cultures in work and school environments (bi-dimensional) (Tsai & Chentsova-Dutton, 2002).

Adjusting to new cultures necessitates change of prior practices and beliefs to occur at some level. It seems unlikely that orientation to native and host cultures for immigrants’ is unrelated (Tsai & Chentsova-Dutton, 2002). Consequently, bi-dimensional models faced criticism for failure to elucidate the experiences of certain groups, such as immigrants (Tsai & Chentsova-Dutton, 2002). Nonetheless, drawing from these bi-dimensional models, this research would assume NZ born Indian children may have a natural ability to adapt to host practices while maintaining native practices of their Indian parents in home environments.

Moreover, one’s place of birth plays a vital role in shaping cultural experiences, further affecting individuals’ models of cultural orientation (Tsai et al., 2000). Other factors that impact cultural adaptation and change are age of migration, reason for migration and mode of migration (with/without parents).
Culture of India

As one of the oldest civilizations in the world, India has been influenced by the Greeks, Persians, Europeans and Turks (Medora, 2007). India is a nation made from the amalgamation of diverse sub-cultures, a fact well established by Indian researchers (Sinha, 2014), with 22 different languages and 100 regional languages; with Hindi as the national language of the country and English spoken by urban populations (Table 1). Indians have many faiths and religions, dominated by Hinduism. As the dominant religion, Hinduism, sets the system of caste and social structure which prevails in modern times, despite its end in the 1950s (Medora, 2007).

Set out in Table 1, are the differences relating to the structure of populations in India compared to that in New Zealand. As can be seen, India is homeland to a diversity of ethnic cultures that are rooted from dharmic faiths (religious traditions), with each ethnic group following their own native religion and language.

In comparison with the Indian civilization, NZ has a pronounced influence of Western living, with a dominant European ethnic group and subsequently, English language. In NZ, diversity may stem from different national cultures (despite small numbers), unlike in India, where diversity of ethnic cultures stem from a single national culture (Indian). Accordingly, NZ’s ‘Western’ construct embraces the Christian religions and practices, while Indian Dharmic traditions are routed in home to hinduist religions and practices.

The Indian Approach: Collectivist or Individualist?

A collectivist culture recognises the group or societal needs before one’s own. Conceptually, collectivism “pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (Hofstede, 1991, p. 51). In contrast to individualistic cultures that “pertains to societies in which the ties between individuals are loose; everyone is expected to look after himself or herself and his or her immediate family” (Hofstede, 1991, p. 51).
Table 1
*An Outline of Demographic Characteristics Between India and New Zealand*

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>New Delhi</td>
<td>Wellington</td>
</tr>
<tr>
<td>Area</td>
<td>3,287,590 km</td>
<td>268,680 km</td>
</tr>
<tr>
<td>Population</td>
<td>1,341,778,785 as of Friday, June 16, 2017</td>
<td>4,603,076 as of Friday, June 16, 2017</td>
</tr>
<tr>
<td>Language (s)</td>
<td>English, Hindi (national language), 14 official languages: Bengali, Telugu, Marathi, Tamil, Urdu, Gujarati, Malayalam, Kannada, Oriya, Punjabi, Assamese, Kashmiri, Sindhi, Sanskrit</td>
<td>English (official) Maori (official)</td>
</tr>
<tr>
<td>Religion(s)</td>
<td>Hindu - 80.5%, Muslim - 13.4%, Christian - 2.3%, Sikh - 1.9%, others - 1.8%, unspecified - 0.1%</td>
<td>Anglican - 14.9%, Roman Catholic - 12.4%, Presbyterian - 10.9%, Methodist - 2.9%, Pentecostal - 1.7%, Baptist - 1.3%, other Christian - 9.4%, others - 3.3%, unspecified - 17.2%, none - 26%</td>
</tr>
<tr>
<td>Ethnic Group(s)</td>
<td>Indo-Aryan - 72%, Dravidian - 25%, Mongoloid and others - 3%</td>
<td>European - 69.8%, Maori - 7.9%, Asian - 5.7%, Pacific islander - 4.4%, others - 0.5%, mixed - 7.8%, unspecified - 3.8%</td>
</tr>
</tbody>
</table>


As most of the time Indian people manifest collectivism over most situations (Triandis, 1995), evidently the Indian culture has been recognised as a collectivist culture (Sinha,
Collectivism can be seen as ‘relational’ that is recognised by interpersonal sharing and dependence on superiors or subordinates alongside trusting -helping friends and family members (Sinha, 2014), while ‘familial’ collectivism recognises ‘close ones’ as nearly members of the family. Drawing from which, the Indian collectivist community is rooted to a powerful sense of belonging and valuing others (family, relatives, friends) before one’s own needs and preferences (Hofstede, 1984; Sinha, 2014).

Although modernisation has aroused both collective and individualistic behaviours in Indians, the collectivist belief in independence stems from a purpose to serve a communal cause (Chadda & Sinha, 2013). As a result it may seem collectivism is more evident in Indian women, adhering to traditional gender roles than Indian men (Chadda & Sinha, 2013).

The family bond as an integral part of the Indian culture, recognises the ‘male’ as the decision maker in most families (patriarchal) rarely considering the female as ‘head’ of family (matriarchal) (Sinha, 2014). Accordingly, paternalism stems from the strong values set in family relationships, within the hierarchical system in relationships established by ancient Indian scriptures to reinforce beliefs of being authoritative and paternalistic. Hence, it seems a paternalistic family relationship justifies an authoritative parenting style prevalent in Indian family cultures (Medora, 2007). Accordingly, while different generations coexist, the outlook on relationships based on a system of hierarchy remain unchanged (Medora, 2007; Sinha, 2014). Nonetheless, a fairer, egalitarian approach (equal rights and opportunity) to family interactions may exist in urban middle classes.

Traditionally, Indians families consist of many generations living collectively in the same house (joint families) (Chadda & Sinha, 2013; Medora, 2007). Although more recently, modernisation has influenced the formation of a nuclear family tradition. Nonetheless a modified extended family tradition prevails, wherein family members continue their participation in performing their usual tasks and roles despite living in separate households (familial collectivism) (Medora, 2007; Sinha, 2014).

While the dominance of collectivism prevails in the Indian mindset, a dual nature in their thought process, finds comfort in contrasting beliefs (concern for people- power mongering, individuality-communism) (Sinha, 2014). Accordingly, coexistence of
collectivist and individualist tendencies (thought duality), hierarchical relationships, and meeting individual needs (personalised relationship), provides an ability to withstand ambiguity and consenting behaviours suited to a particular situation (Mathew, 2013; Merton, 1995; Sinha, 2014). Moreover, this phenomenon may be explained more so with the migration of Indians overseas, holding inherent values influenced by Westernised practices (education) (Mathew, 2013; Sinha, 2014).

**Culture and Sport: Merging the two**

It can be proposed that sport originating in one culture can be adapted in order to meet the cultural preferences in the manner of playing that sport (cultural styles) in another culture (D. Thomas & Dyall, 1999). For instance, while reflecting core elements of British cricket, Kirikiti (Samoan Cricket) has adapted its form and style to merge with the Samoan cultural style. Similarly, Cricket introduced by the British has led to it being merged within local cultural traditions in India (Appadurai, 1996).

Among immigrant ethnic minorities (Indians), reflecting indigenous ties to sports may prove vital for encouraging their participation in local sporting communities. Hence, we need to consider cultural styles in sport among Indian ethnic minority dominant sports such as Cricket, Hockey and Kabbaddi, introduced in NZ sporting cultures. It therefore follows, that future research is needed to inform the process of local adaptations in sports and how it may impact local identity, recruitment, and participation rates in sporting cultures (D. Thomas & Dyall, 1999).

**Rationale and significance of research**

Recognition of the importance of socially including other ethnicities in NZ sport and PA contexts is growing in recent years. It seems to be in the spotlight among many organisational development plans and interventions, particularly the inclusion of Maori and Samoan participation in sport (Gordon, Sauni, Tuagalu, & Hodis, 2010).

As it stands the Indian population is growing in NZ. With limited research to focus solely on the sporting behaviours and practices of Indian (versus South Asian) immigrants, this seems to be the first research study to consider Indian immigrant involvement in NZ’s sport and PA contexts. Accordingly, an investigation of Indian sporting experiences will enrich a deeper understanding of their cultural values and beliefs in relation to participatory sporting behavioural practices. As a consequence, I envision the gaining of
deeper cultural insight (intelligence) will help inform the cultural responsiveness towards the social inclusion of Indian participation and practices in NZ’s sport and PA.

As a step towards understanding and improving participation; motivations in sport and physical behavioural practices, identifying knowledge about family dynamics can be an essential precursor among family centered collectivist cultures. Côté’s (1999) Developmental Model of Sports Participation may be considered a favourable pathway in the development of sport. Cote himself stated that, “Although theoretical typologies of parental influence are useful, they are not based on in-depth analyses of experiences or insights of various family members” (1999, p. 396). Thus, there is a growing need to explore family dynamics outside western communities to inform sporting practices (Harwood & Knight, 2015). With a better understanding of the meaning people give to their experiences involving sport and PA, this may help enhance the development of successful interventions, finding ‘social equilibrium’ for Indian communities within NZ’s sporting system.

**Research question and focus of the study**

*What influences the decision of Indian immigrant families’ to participate in sport and physical activity in NZ?*

**Aim of the study**

This is a qualitative exploration of experiences of Indian immigrant families’ involvement in sport and PA in NZ.

This study seeks to understand Indian immigrants’ (parents and children) experiences of NZ’s sporting culture (see - researcher’s vision). It provides the foundation for the in-depth application towards the planning, developing and implementing of interventions for cultural responsiveness involving Indian immigrants in NZ sport and PA. An ideal outcome of this study would be, cultivating deeper awareness by which sporting systems make imperative for cultural values and beliefs to be well understood to enhance the responsiveness of Indian immigrants to participate in NZ’s sport and physically active cultures. A step above would be to further consider the need for Indian community representation within a collaborative systems network.
A way of exploring experiences of the past, as understood by the three Indian immigrant families (participants) in the present, was conducted as a case study methodology. The adoption of interactive methods of collecting data (in-depth interviews, participant self-reflection reports) and thematically analysing phenomenological aspects, unraveled the meaning and description of experiences of Indian immigrant families’ participation in sport and PA in NZ.

**A storyline preface: My story in this thesis**

If it is the stories we carry that influence our thoughts, then what was my story that sparked my interest to investigate the experiences of Indian immigrant families in sport and PA in NZ?

In playing with my memories, I take you back before the year 2006.

_The journey:_ I was born and brought up in Goa, a Portuguese colony in India, studying the art of Indian classical dance—‘Bharatanatyam’, for 17 years under the Gurukul system. My sporting success is often attributed to my boxing achievements in NZ but my path to participating in sporting activities began at the age of seven when my mother enrolled me in Indian classical dance lessons. The classical art form was built on Hinduism, while I was a practicing Catholic. I experienced how the amalgamation of Indian sub-cultures, religions and associated beliefs are unified with dance. With a religious belief as “One in all, and all in one”, I continue to embrace my Indian roots as my way of life. Through dance, I developed strong spiritual ties with the Indian culture, a sense of freedom and defining my world view (read brochure below).
Image 1. A brochure (2005): Written an expression of what Indian classical dance means to me on achieving discipleship to the dance guru (teacher).
I continued to play sports in college alongside academic pursuits. I was selected to represent India at the National Asian school basketball games. “A great opportunity!” However belonging to a family of academics, a future in sports was unsupported.

In 2006, I completed my Masters in psychology when my family immigrated to NZ. As an immigrant my dance career was on a hold being in a foreign and unknown country, I took up the sport of boxing. A sport I knew nothing about. To me it was complex, challenging, yet enjoyable, qualities that influenced my participation in any sport or activity. My childhood sporting experiences all came together now. So ‘given’ the opportunity, I was prepared to take it. From what started out as ‘trying something new’, was indeed another life changing moment.

A journey that inspired a vision

In 2012, I become the first female Olympian to ever represent NZ in the sport of boxing.

Were there other Indians who were achievers in NZ’s sporting culture? I was curious to know how Indian immigrants in NZ participated in NZ’s sporting culture and how NZ systems provided for Indian participation in sport.
Why?

I understand many Indians share similar sporting backgrounds from cultural activity to sport. While there are opportunities for sport in NZ, it seemed to me that Indian people do not necessarily avail themselves of these opportunities. As a result, developing higher level skill for competitive sport potentially poses a greater challenge for Indians in NZ’s sporting culture. With classical traditions as propagated solely by the Indian community, additional support from policy makers and community organisations could positively benefit greater Indian participation rates in sport and PA.

Considering India as a 5000 years old civilisation poses the question, how long would one need to understand the Indian culture, its diverse practices, traditions, beliefs and attitudes? I assumed limited Indian involvement in NZ’s sporting culture may stem from inadequacy of ‘insight’ in building culturally intelligent systems.

Casting the vision in research: While I consider myself global in spirit, I am Indian at heart. Drawing from my athletic experiences in both India and NZ, I was curious to know how Indian people of diversified socio-cultural traditions of a nation, come to integrate in NZ’s Westernised sporting practice, bearing diverse and multiple national cultures. This curiosity grew on me in observing a recent growth of the Indian populace in NZ. In finding that there was limited research which explored Indian sporting participation and practices in NZ, this propelled a greater need in setting a platform towards informing systems aimed at improving the participation of Indian communities in NZ sporting practices. Thus, prompting greater curiosity in deducing how implementing interventions/initiatives may further reflect the involvement of Indian communities. As I understand it, when those who design sporting systems make the imperative for cultural values and beliefs to be well understood and reflected ‘in practice’, this may set the hallmark for cultural responsiveness in sport.

We cannot rest in thinking that the practices of religion, cultural, gender, are all encompassing influences on Indian PA. A deeper understanding of other (social, environmental) varied aspects involving the Indian immigrant in sport and PA may draw advantages towards creating value when implementing systems and practices appropriate to embrace Indian culture. Hence, in seeking to advance understanding for professionals, implementation of current initiatives, and expanding the existing literature, I delve deeper
into how experiences of Indian immigrant families unravel determinants that may influence Indian immigrants to participate in sport and PA in NZ. It is hoped that in the end helping put together the daily living experiences of sport and PA of the Indian immigrant families’ may help create systems that better reflect in practice, an understanding of Indian immigrant communities in NZ’s sporting culture.

As truth be-said, what would make the real difference is not what I find, or what you understand, but what ‘we’ do to implement in practice what is found. In sowing the seeds for Indian sporting participation and practices in NZ, this study marks as a reminder that the end is only the beginning! At this point, I take privilege to acknowledge you as the reader, and invite you to an exciting investigation of experiences in, ‘When culture speaks: Indian immigrant families’ participation in sport and physical activity in NZ.

Meet the team
The primary researcher is a cultural insider with a similar cultural background as the study participants (Indian descent). Furthermore, the primary researcher draws insights from her active involvement as an athlete at Olympic level competition and a registered exercise and wellbeing coach working with adults and children in NZ sporting contexts. With a masters in psychology, the primary researcher carries academic and practical expertise, useful given the nature of the study. As a NZ Olympic ambassador the researcher works closely with children, parents and organisations related to sport.

The guides: The researcher was supervised under the expertise of Professor Erica Hinckson and Associate Professor Lesley Ferkins.

Professor Erica Hinckson has an extensive track record of research in the fields of physical activity and sedentary behaviour. She is a member of the international Sedentary Behaviour Research Network, on the executive committee of the International Physical activity and Environment Network and the Chair of the International Council of the Environment and Physical Activity, groups with strong links with the potential for future collaborative projects.

Associate Professor Lesley Ferkins has research specialisation in the leadership and governance of sport organisations. She has worked closely with the boards of national sport organisations in New Zealand and Australia as part of action research interventions.
to develop board strategic capability. She is currently working with New Zealand Rugby to explore the experiences of different cultural groups in the leadership and governance of rugby in Auckland.

Hence, the primary researcher was well positioned with an aim to investigate the experiences of immigrant Indian families’ participation in sport and PA in New Zealand.

**A thumbnail sketch of the Thesis**
This thesis consists of six chapters as set out in Figure 1 below.

Following the assumptions and motivations of the researcher in pursuit of this thesis, this introduction, **Chapter 1** unpacks ‘culture’ and links this theme to immigration, cultural traditions, values and practices of the common people of India. Further, the rationale and significance of conducting this study is made explicit.

**Chapter 2** a review of literature is provided in relation to Indian/South Asian involvement in physically active practice, both within a global and NZ context. The reviewed literature presented in this chapter informs the research question of this study.

**Chapter 3** describes the research methodology adopted in the study. This chapter seeks to explain the epistemological assumptions of the research approaches and the philosophical principles applied in the different stages of the study. Furthermore, the research methods used in sampling, participant recruitment, data collection and data analysis are described and justified. The chapter discusses the ethical and cultural considerations involved in this research. The measures taken to maintain rigour of the study are also outlined.

**Chapter 4** synthesises and interprets the key themes (findings) that emerge from the in-depth individual interviews and participant self-reflection reports.

**Chapter 5** discusses and reflects on the key findings (themes) in relation to pertinent literature.

**Chapter 6** presents the conclusion of the study. This chapter weaves into the researchers experience sojourning as a cultural insider, along with limitations, strengths, recommendations and considerations for further research.
Figure 1. The thumbnail sketch of this thesis.
Chapter 2. Literature Review

What does the evidence suggest as influencers to Indian immigrants’ involvement in sport and physical activity?

Introduction

South Asian communities are at an increased health risk of cardiovascular disease (CVD) (Balarajan, 1995; World Health Organization, 2003; Yusuf, Reddy, Ounpuu, & Anand, 2001), with Asian Indians at a higher risk over Chinese (Danaraj, Acker, Danaraj, Ong, & Yam, 1959) and Malays, particularly Indian males (J. Lee et al., 2001). Studies reveal the disparity among South Asians is predominantly with younger age groups (25% Indians <40yrs) compared to other ethnic groups (4-6% Western Europe, north America) (Enas & Kannan, 2005).

One main contributor to the increased risk of metabolic syndrome among Asian Indians is the prevalence of low PA levels, which is also common among children and adolescents (L. Hayes et al., 2002), and contributes to CVD at young ages (Gupta et al., 2002; Gupta et al., 2009). A recent and ongoing survey across many states in India found 50% of the rural population and 65% urban populations to be physically inactive (Anjana, Pradeepa, & Das, 2014). However, it is recognised that social and cultural influences play a vital a role in South Asian people’s pre-disposition of disease onset and complication (P. M. Greenhalgh, 1997).

Increasing the levels of PA is vital for improving the overall health and wellness of the South Asian Indian community (Patel, Phillips-Caesar, & Boutin-Foster, 2012). As most research recommendations have involved western communities, these may be of limited translational value when implementing interventions for increasing participation rates of non-western communities. With cultural influences largely unexplored, achieving success in implementing plans, policies and interventions remains a challenge.

In New Zealand (NZ), the growth of social promotion of diverse ethnic communities in sport and PA, is made evident with organisational plans and interventions reflecting goals that increase Māori and Pacific Island participation. With recent immigration leading to the growth of the Indian community in NZ, identifying ways in which cultural values, practices and lifestyle factors impact Indian participation gains importance when aiming
for the socially inclusive sporting culture involving ethnic minority groups. This necessitates the development of opportunities (e.g., facilities, programmes, initiatives) adhering to the Treaty of Waitangi principles of partnership, participation, and protection that require identifying how Indian cultural values, practices and lifestyle factors impact on their participation in sport and PA in NZ.

In a step towards understanding the participation of Indian immigrant communities in NZ’s sport and PA, this necessitates a review of the previous literature to be undertaken (see diagram 1). Therefore, the purpose of this review was to take a systematic approach in identifying literature relating to Indian migrants’ involvement in sport and PA while considering their cultural beliefs and motivations for participation.

Figure 2. The relationships of literature review.
Methods

Literature search
The review was conducted in accordance with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) statement guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009) to best approximate a systematic approach to search the research literature. Accordingly, this search was undertaken for articles pertaining to the participation of Indian communities in NZ sporting cultures from international peer-reviewed journals. Studies were found by searching Web of Science, PubMed, Scopus and Proquest electronic databases from inception to May 2017. The following Boolean phrases were used for these searches (motivation OR barriers OR influence) AND (dance OR physical activity OR sport) AND (Indian OR South Asian) AND (migrants OR immigrants) AND (culture OR ethnicity). Additional studies were also found by reviewing the reference lists from retrieved studies.

Inclusion and exclusion criteria
Studies from solely Indian migrants of any age, gender or activity level were included. No restrictions were imposed on publication date or publication status. Studies were limited to the English language.

Study selection
A search of electronic databases and a scan of article reference list revealed 193 relevant studies (Figure 3). After applying the inclusion and exclusion criteria fourteen studies were retained for further analysis.
Studies identified through database search (n = 186)
PubMed = 14 Academic research library Proquest = 145
(apply filters Asia, India, location and journals), Web of
Science = 15, Scopus = 12

Additional studies identified through hand searches of references lists (n = 11 studies)

Rejected at title/abstract
- Duplicates removed
- Conference abstracts
- Non Indian / South Asian
(n = 20 excluded)

Title and abstract screened
(N = 166 studies)

Title and abstract scanning (n = 130 excluded)

Full text eligibility screened (n = 36 studies)

Full text studies (N = 28 excluded)
- Accounts provided by third party (i.e. from carers)
- No information on uptake and adherence to sport and PA

Included in final qualitative synthesis (N = 8 studies) and (N=11 handpicked articles)

Figure 3. A flow chart of information through the different phases of the systematic review.
Findings

Nineteen articles were systematically identified relating to Indian migrants involvement in sport and PA (Table 2 and Table 3 below). While a number of articles were found relating specifically to sport and PA of Indians globally, the search results in a NZ context were minimal (one study- Kolt (2007)). Most articles discussed the role of sport and PA across South Asian immigrants at large, with recent healthcare research on immigrant Indian communities that minimally featured the role of PA in Indian communities. Thus, in comparison there seems to be limited research that exclusively linked Indian experiences in sport and PA.

This literature has been constructed by narrowing on global evidence that has examined both quantitatively and/or qualitatively various factors (eg. barriers, facilitators) relating to culture, gender and healthcare. Drawing from all resulting evidence, a synthesized review of literature that links various factors relating to ‘Indian’ experiences and physically active behaviours (sport/ PA) is discussed. Considering the complexity of ‘culture’ as a concept, it necessitates a brief overview of relevant aspects of Indian culture. Accordingly, the review of literature is deliberately arranged to focus on predominant characteristics (such as gender, health, culture) from an exclusively Indian cultural perspective in the context of sport and PA alone.
### Table 2

**The Original Research Studies and Handpicked Articles that Inform the Review of Literature**

<table>
<thead>
<tr>
<th>Study</th>
<th>Location</th>
<th>Objectives</th>
<th>Participants</th>
<th>Methods</th>
<th>Results</th>
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<tbody>
<tr>
<td>Johnson (2000)</td>
<td>U.K</td>
<td>Perception of barriers to PA</td>
<td>SA men &amp; women: Indian N= 19, Pakistani N= 26, Bangladeshi N= 20; SA men: Indian N= 36, Pakistani N= 36, Bangladeshi N= 30</td>
<td>Qualitative focus groups with health and lifestyle surveys</td>
<td>Perception to barriers (physical, time, emotional, access) between ethnic groups: Age 20-65 yrs.</td>
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<td>Study</td>
<td>Location</td>
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<td>Sriskantharajah &amp; Kai, (2007)</td>
<td>U.K.</td>
<td>Explore influences on &amp; attitudes towards, PA among SA women.</td>
<td>SA women N = 15; SA (Indian) N = 5; (Pakistani) N = 4; (Bangladeshi) N = 1; (East African Asian) N = 2; (Sri Lankan) N = 3</td>
<td>Age: 26+70 yrs.</td>
<td>Identified cultural barriers to exercise.</td>
</tr>
<tr>
<td>Kolt et al., (2007)</td>
<td>New Zealand</td>
<td>Assessing body fatness, PA, and nutritional behaviours.</td>
<td>Asian Indians in New Zealand N = 112; Male N = 50; Female N = 62</td>
<td>Ages: 44-91 yrs.</td>
<td>Pedometers were worn to record daily steps.</td>
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<tr>
<td>Ramanathan &amp; Crocker (2009)</td>
<td>Canada</td>
<td>Role of personal, familial, cultural attitudes and social norms for PA on actual PA behaviour.</td>
<td>Female Adolescents N = 6; Diverse group of Indians, recent immigrants and two-time immigrants</td>
<td>Age: 15 to 19 yrs.</td>
<td>Interviews and a focus group.</td>
</tr>
<tr>
<td>Study</td>
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<tr>
<td>Vahabi et al., (2012)</td>
<td>Canada</td>
<td>Investigate acceptability of culturally specific dance in enhancing SA immigrant women involvement in PA.</td>
<td>SA Indian women, N= 50; Pakistani N = 6; Kenyan N= 1; Sri Lankan N = 1; Age: 22-77 yrs.</td>
<td>Qualitative focus groups, self-report measures and Lifecorder EX accelerometer.</td>
<td>Need to increase lifestyle PA among SA Indians.</td>
</tr>
<tr>
<td>Vahabi et al., (2015)</td>
<td>Canada</td>
<td>Examine gender and cultural differences of PA</td>
<td>SA women N=27; Qualitative focus groups, self-report measures and Lifecorder EX accelerometer.</td>
<td>Qualitative focus groups, self-report measures and Lifecorder EX accelerometer.</td>
<td>SA women, N=27; Qualitative focus groups, self-report measures and Lifecorder EX accelerometer.</td>
</tr>
<tr>
<td>Study</td>
<td>Location</td>
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<tr>
<td>Dave et al., (2015)</td>
<td>U.S.</td>
<td>Exploring SA women's perspectives to leisure time PA.</td>
<td>SA immigrant women (6 focus groups (English, Urdu, Hindi)) N= 42</td>
<td>Community-based participatory research with semi-structured focus groups</td>
<td>Among SA women PA strongly influenced by community-based cultural influences. PA strongly influenced by sociocultural norms, family constraints, and lack of community-based cultural influences. PA strongly influenced by sociocultural norms, family constraints, and lack of PA strongly influenced by sociocultural norms, family constraints, and lack of access. Culturally salient intervention strategies needed (women-only classes, targeted education campaigns to increase awareness of PA benefits across life stages).</td>
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<td>Study</td>
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<td>Fischbacher, Hunt &amp; Alexander (2004)</td>
<td>U.K.</td>
<td>Assessed the evidence that PA is lower in SA groups than in the general population.</td>
<td>Culturally and linguistically diverse migrants (CALD) in Western society.</td>
<td>Systematic literature review</td>
<td>Low levels of PA among UK South Asian populations.</td>
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<tr>
<td>Caperchione et al., (2009)</td>
<td>Global</td>
<td>Outlined the barriers, challenges and enablers of PA.</td>
<td>Culturally and linguistically diverse migrants (CALD) in Western society.</td>
<td>Review article</td>
<td>Physical inactivity key contributing risk factor to chronic disease in migrant CALD groups. Barriers include: cultural and religious beliefs, issues with social relationships, socioeconomic challenges, environmental barriers, and perceptions of health and injury. Need for cultural sensitivity and the provision of education.</td>
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<tr>
<td>Daniel &amp; Wilbur (2011)</td>
<td>Unknown</td>
<td>Correlates of lifestyle (leisure time, household, and occupational) PA behavior of healthy SA immigrants.</td>
<td>South Asian Immigrants (Indian)</td>
<td>Integrative review methodology: Cross-sectional studies N=11, Qualitative studies N=4</td>
<td>Correlates of PA: Socio-cultural variables, current health, acculturation; female sex; poorer health; and less time since immigration. Few studies focused on social support, environmental factors, motivational factors. Few studies focused on social support, environmental factors, motivational factors.</td>
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<td>Key:</td>
<td>Sedentary time (ST), Physical activity (PA), South Asian (SA), Leisure time (LT), Total number (N).</td>
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<td>Babakus &amp; Thompson (2012)</td>
<td>Global assessed levels of PA and sedentary behaviors. SA immigrant women. Systematic mixed methods review. Qualitative studies N = 12, Quantitative studies N = 26. SA women showed low levels of PA compared with SA men. Cultural and structural barriers to PA, faith and education as facilitators, with lack of understanding of the recommended amounts and PA benefits among SA women. More research needed to standardise objective PA measurement and how to utilise resources of individuals and communities to increase PA levels.</td>
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</table>
From the nineteen articles reviewed, several common themes emerged. These were culture (seven studies: (Daniel & Wilbur, 2011; Lawton, Ahmad, Hanna, Douglas, & Hallowell, 2006; Patel et al., 2012; Rajaraman et al., 2015; Ramanathan & Crocker, 2009; Vahabi, Beanlands, Sidani, & Fredericks, 2012; Vahabi & Damba, 2015), gender (six studies: (Caperchione et al., 2015; Daniel et al., 2013; Johnson, 2000; Patel et al., 2012; Rajaraman et al., 2015; Vahabi et al., 2012), environment (Daniel & Wilbur, 2011; Rajaraman et al., 2015), PA misconceptions (three studies: (Daniel et al., 2013; Kolt, Schofield, Rush, Oliver, & Chadha, 2007; Patel et al., 2012), social expectations (three studies: (Daniel & Wilbur, 2011; Jepson et al., 2012; Lawton et al., 2006), time (three studies: (Lawton et al., 2006; Vahabi et al., 2012; Vahabi & Damba, 2015), cost (Vahabi & Damba, 2015), body image (Patel et al., 2012), motivation (Vahabi et al., 2012), religion (Johnson, 2000), safety (Johnson, 2000), academic pressure (Rajaraman et al., 2015).

**Facilitators and barriers to Indian participatory behaviours**

What has been perceived as acceptable and has shown to facilitate increasing South Asian women participation rates of PA is the provision of childcare facilities, female only dance programs and female instructors of a shared cultural connection (Vahabi et al., 2012). Accordingly, instructors sharing a cultural connection may be perceived to “understand our ways”, by further engaging physically active behaviours in group settings (Vahabi et al., 2012). Contrastingly, that lack of cultural appropriateness (same sex instructors, single-sex facilities) in facilities may impede the involvement of those with a readiness to exercise (Lawton et al., 2006).

Other catalysts for disengaging PA participation rates may occur from a lack of outdoor spaces in urban settings and climatic influences such as cold, snow, and heat (Rajaraman et al., 2015). However, evidence highlights such barriers (time, climate) to be shared among other ethnic populations and may not be confined to Indian cultures alone. Additional distractions in support of increasing levels of inactivity may be related to use of technology and television. Nonetheless, while the general benefits of staying physically active (energy, fitness, stamina, ideal body image, social inclusion, enjoyment) are explicit, an understanding of specific health benefits to physical exercise may seem limited, particularly among immigrant South Asian women (Vahabi et al., 2012).
Gender

It can be seen that distinct gender roles played by father/male and mother/female still prevail in South Asian families (Patel et al., 2012). Accordingly, the role of male and female in the South Asian Indian context are briefly reviewed in this section. With the evidence considering a South Asian context, this section focuses on gender from the Indian context.

The Male

Considered the ‘head’ of the family, the Indian male also acts as the ‘decision maker’ and ‘provider’ of the family (Patel et al., 2012). As a result, time well spent, is time used to provide for the family. Accordingly, as believed by most immigrant South Asian men, a great deal is sacrificed when leaving their native country for a better quality life for the family. In the study by Lawton et al (2006), Indian male participants consider the use of any available free time as culturally unsuitable when invested in exercise. This consequently condones the cultural expectation to forgo health and physical wellbeing for the sake of family, under the notion that ‘family comes first’ (Lawton et al., 2006). However, as one study touches upon Indian male behaviour in relation to PA (Lawton et al., 2006), the other identified male gender roles in relation to dietary behaviour modifications (Patel et al., 2012). This necessitates deeper exploration of male behaviours towards PA participation and practices.

The Female

Evidence supports the distinct female role of the Indian mother in raising children and attending to all household duties, which leaves the Indian mother constrained for time to engage in structured modes of PA (Lawton et al., 2006; Patel et al., 2012; Ramanathan & Crocker, 2009). The Indian community, as well as family members, may regard dedicating time to PA as a lack of responsibility towards household tasks and deem them culturally inappropriate, particularly among older women (Sriskantharajah & Kai, 2007). Similar views are expressed in Lawton (2006), stating that traditional female roles are embedded in Indian culture, which sets expectations for the mother to utilise ‘spare time’ towards assisting the family business or providing an additional income. Importantly, in communities that support such views the participating female may be looked down on, as is her family (Patel et al., 2012). As a result, females may be constrained to residing indoors, with a lack of time and opportunity that stems from a cultural norm to meet
household expectations, which becomes more profound after marriage (Lawton et al., 2006).

**Adolescents**

It can be seen that adolescent Indian males perceive PA to be “good for health” while females perceive the benefits of exercise in younger years to lead to healthier habits in future years (Rajaraman et al., 2015). The study identified a strong understanding among all Indian adolescents (normal and overweight) for exercise to provide mental clarity and relief from stress, mainly in relation to studying effectively, ultimately improving academic performance. Contrastingly, to the western counterpart (Indian Canadians) only normal weight adolescents perceive PA to provide mental relaxation while academic benefits seemed more pronounced for the overweight adolescents.

It can be seen that female adolescents fall prey to the social gender role within Indian society to disconnect from physically active behaviours. Female patterns of inactivity, that develop in early years, may stem from unsociable environments and lack of participation in sports. Consequently, in adult years, the Indian female meeting expected demands of increasing PA on migrating may seem a challenge (Lawton et al., 2006). As a result of societal perceptions, decreased participation in PA behaviours have been seen amongst Indian female adolescents. However, outside Indian settings, low rates of participation in PA have been attributed to social norms that impact attitudes leading to an absence of potential opportunities for participation in physically active behaviours.

With evidence to suggest urban school children have low levels of PA, it is likely that these patterns are established at early ages, and continue to decline into adolescence, especially amongst girls (Rajaraman et al., 2015). This identifies a need to support ‘social involvement’ of female adolescent activity, in relation to their academic environments (Rajaraman et al., 2015). Drawing upon the influence of media messaging to increase PA participation rates in adolescents, as this proves to be an encouraging tool to support culturally specific issues in promoting female participation in PA in South Asian Indians (Rajaraman et al., 2015). Additional barriers that result in disengaging active behaviours in adolescents stem from a lack of outdoor spaces in urban settings, weather (cold, snow, heat) and a lack of understanding of personal benefits of PA particularly Indian overweight boys and girls (Rajaraman et al., 2015).
Interestingly, exercise takes on a paradoxical view for Indian adolescents who view exercise as a mental de-stressor that clears the mind, provides relaxation and relief from stress and looked upon as a positive influencer towards improving academic performance. Indian males perceive PA to be “good for health” while females perceive the benefits of exercise in younger years to lead to healthier habits in future years (Rajaraman et al., 2015).

However, with competing priorities such as examination schedules, participating in PA may consider “time wasted” with associated fatigue that limits effectiveness of time spent to study. Furthermore, Indian born adolescents, perceive tiredness, injury, sunburns associated with PA as obstacles that disadvantage academic performance outcomes. While parents as the key motivators that encourage participation in PA among adolescents (Rajaraman et al., 2015) they also discourage active behaviours as they perceive exercise to be a source of distraction around examination schedules (Rajaraman et al., 2015). Moreover, such inactive behaviours and perceptions may be reinforced when teachers and school cultures encourage the substitution of physical education sessions with additional teaching. This ultimately discourages participation in behaviours towards keeping physically active.

**Body image**

It can be seen that beliefs on body image and healthy weight are a cause for concern when building motivation towards modifying exercise behaviours (Dave et al., 2015; Patel et al., 2012). While a slim body image drives the motivation to exercise in western societies, as a “sign of good health”, South Asians perceptions of health and well-being is linked to having a larger body size. Consequently this dampens the motivation to partake in exercise behaviors. Customarily, the preferred expectation for the women to gain weight after marriage lessens the drive to exercise in an attempt to lose weight. It is commonly seen that thin body types favour finding a job, partner and living a longer life, while after marriage this may be perceived as a sign of a stressful marriage. Therefore, it is the context and the consequence that grounds such attitudes towards body image and its influence on exercise behaviours in the South Asian community.

**Physical activity of intergenerational immigrants**

Evidence using surveys reveal low PA levels predominantly among women and elderly (Fischbacher, Hunt, & Alexander, 2004), Furthermore, levels of PA among immigrants
have shown to increase with time (Tremblay, Bryan, Pérez, Ardern, & Katzmarzyk, 2006). However, findings reported by using surveys fail to explore the underlying influences of individual, social and cultural contexts that impact PA (Fischbacher et al., 2004).

While cultural traditions may impact generations of immigrants differently towards engaging in physically active behaviours, first and second generation immigrants appear to be influenced by host cultural practices (western born) from exposure to their social environments (school, work) (Vahabi et al., 2012). Consequently, health promoting practices among first and second-generation immigrants may reflect a heightened awareness of PA.

**Physical activity with dance**

A global review of literature suggests cultural dance to appeal to some cultures more than others (Olvera, 2008). Consequently, cultural dance maybe greatly favoured over traditional modes of activity such as running, walking, gym and playing competitive sport. Despite being considered a non-traditional activity, dance proves to be advantageous for improved physical (Engels, Gretebeck, Gretebeck, & Jimenez, 2005; Flores, 1995) and mental health returns (Lane & Lovejoy, 2001; Sandel et al., 2005) through preventing obesity, decreasing stress and enhancing life satisfaction (Olvera, 2008). As a result, while benefiting community health, its practicality has further shown to be effective at increasing the participation of subgroups with low levels of PA (Olvera, 2008), particularly women and young girls of immigrants (Evenson, Sarmiento, Macon, Tawney, & Ammerman, 2002) and minority groups (D'Alonzo & Cortese, 2007; Grieser et al., 2006). Accordingly, it is suggested that community organizations provide opportunities that respect non-traditional modes of PA such as cultural dance. However, more research needs to investigate the way in which cultural dance can be made more accessible, and therefore increase PA (Olvera, 2008).

Culturally specific dance is defined as dance within a community or group, with a purpose that serves traditional practices, cultural transmission, connectedness or social acceptance (Jain & Brown, 2001). When considering PA to be a modifiable risk factor, offering culturally acceptable interventions has shown to promote PA levels and minimize their risk of CVD, in South Asian women (Vahabi et al., 2012). Moreover culturally specific
forms of PA fulfill the need for social support, and act as a catalyst for behaviour change (Johnson, 2000).

Evidence shows certain cultural features among South Asians pose a challenge to behaviour change, particularly among immigrants who strongly attach to their cultural beliefs and practices when immersed in a society with differing views and ideologies (Patel et al., 2012). Moreover, these challenges to behaviour change are heightened when changes adopted are perceived to conflict with practicing beliefs and customs of individuals from such communities (Patel et al., 2012). Johnson 2000, points out, a “color blind approach” may be counterproductive, when developing facilities aimed at promoting PA for individual ethnic communities. Further recognising, the ‘modesty’ that prevails among South Asian men and women and a ‘fear of racial provocation’, which needs to be taken seriously (Johnson, 2000).

Given its potential to increase PA participation rates, one study has explored the effectiveness of dance as a mode of exercise to promote PA in South Asian immigrants in the U.K (Vahabi et al., 2012). With Indians as the predominant subgroup of South Asian, this study found traditional/cultural dance was perceived as an easy, affordable, fun-filled activity. Consequently, promoting engaging behaviours that led to increasing participation rates in PA, removed any hesitation. Furthermore, it was found that a diverse range of ethnic and religious Indian South Asian women showed an interest in cultural dance/folklore dances (Bollywood, Bhangra). Such beliefs and attitudes towards traditional dance encouraged a social environment at a community level.

There is a need to investigate related obstacles and facilitators as perceived by a South Asian immigrant towards undertaking PA (dance) with a lens to pursue an exploration of the reported perceptions and themes (Vahabi et al., 2012). Importantly, the study highlights the need to consider heterogeneity of South Asian communities, and to consider developing PA interventions that is inclusive of the cultural practices and values of the community in focus. Accordingly, more research is encouraged towards examining culturally informed interventions for encouraging positive PA within targeted populations (Vahabi et al., 2012).

Although traditional forms of dance have been effective and proved to be acceptable forms of PA for South Asian women, the non-homogenous complexity of a South Asian
population (Indian, Pakistanis, Sri Lankan) may challenge its acceptability as a successful intervention. Accordingly, Vahabi and colleagues (2012) suggest that acceptability of a dance intervention will depend on how a dance intervention is custom-made and delivered as appropriate for each culture specifically.

Vahabi and colleagues (2012) state,

“The focus should be on developing an intervention that is based on an understanding of the principles that may be most reflective of a wide range of values and beliefs held by South Asian women and thus acceptable to the largest number” (p.156)

It is suggested that yielding acceptable outcomes of dance as a mode of PA requires dance interventions to customize their forms of delivery to be made culturally specific (Vahabi et al., 2012; Vahabi & Damba, 2015). It can be seen that by providing childcare facilities, women-only dance programs and female instructors of a shared cultural connection were perceived as acceptable. This enabled South Asian women to increase their participation rate in PA (Vahabi et al., 2012).

Physical activity via of socio- cultural influences
Although health issues may reduce the ability to stay physically active, evidence demonstrates this to be reinforced by existing cultural beliefs and perceptions among Indians (Lawton et al., 2006; Ramanathan & Crocker, 2009).

A strong work ethic among Indians further challenges their view to engage in daily exercise. With businesses involving early starts and late closings (shops, restaurants) (Lawton et al., 2006), the Indian lifestyle is faced with everyday demands of long workdays (shops, restaurants) and unsociable hours. Consequently, justifying the negative correlation between number of hours worked and partaking in health promoting behaviours (Misra & Gupta, 2004). Additionally, feeding the idea that the ‘family comes first’, and an obligation to help others within the family, takes precedence over own interests and activities including exercise (Lawton et al., 2006). Accordingly, evidence suggests the importance of education with interventions that promote long-term lifestyles changes, that account for individual differences within their social, cultural and historical viewpoints (Lawton, 2003; Lawton et al., 2006).
Among the social and cultural barriers, the lack of a culture of exercise (socialization) may be explained by an existing fear of exercise that stems from unfamiliar physiological responses to exercise (sweating, increased heart rate) (Lawton et al., 2006). In addition, Sriskantharajah and Kai (2007) found language barriers may decrease changes to participation behaviors in South Asian communities.

Low levels of PA are partly attributed to cultural beliefs and practices among in South Asian peoples, when compared with other ethnic communities. Such attitudes become entrenched within the South Asian community, and perpetuate a culture of low PA (Ramanathan & Crocker, 2009). Its often felt in these communities that there is a lack of a ‘need’ towards PA, which is vital for maintaining optimal health, and culminates in low participation levels in PA or organised sport (Lawton et al., 2006).

Cultural perceptions of physical activity

It can be seen that different perceptions of what is considered as PA may exist among South Asian cultures (Vahabi et al., 2012). Accordingly, household chores that involve high bouts of physical exercise (cleaning, laundry without washing machine, vacuuming, lifting heavy objects, grocery shopping, etc) may go unnoticed as active forms of physical behaviour in South Asian communities (Vahabi et al., 2012). Although more investigation is required on advantages of accumulation of household activities, we must be cognisant of the role of accumulated activity when considering participation of PA, particularly women, in immigrant ethnic minority communities, who exclusively tend to stay physically active through household activities (Vahabi et al., 2012).

Healthcare research

Connecting the dots: Health, physical activity, culture

In NZ, a wide variation of CVD risk factors exist amongst Asian ethnic groups, with health care research identifying South Asians (Fiji, Indians) in Auckland, as committing the least amount of time spent on exercise (minutes/week) compared to Europeans (Metcalf, Scragg, & Jackson, 2006). Particularly, South Asian women who reflect lower activity levels when compared with other Asian women (survey) (Scragg & Maitra, 2005). Studies have shown that physically active behaviours for leisure have been considered an adaptable risk factor for increasing activity levels among South Asian Auckland communities (Metcalf et al., 2006).
One study identified a gap in relation to Indian health information and policy of Asian Indians in NZ (Kolt et al., 2007). In urban NZ older Asian Indians were identified to be at a greater health risk of CVD, and diabetes (Kolt et al., 2007). Kolt (2007) compared findings with other studies and found Asian Indians in NZ to reflect higher levels of PA (step counts). However, the majority of the sample was estimated as sedentary and to perform minimal activity. These activity levels decreased further with increased time spent in NZ, however they suggested that PA education may increase success of interventions aimed at improving Asian Indian activity in NZ. Kolt et al. (2007) acknowledges that this study made weak to moderate associations, and was limited by the use of a small, non-representative sample of the population.

Importantly, as health issues may reduce the ability to stay physically active, it may be reinforced by existing cultural beliefs and perceptions among Indians (Lawton et al., 2006). When examining the health of South Asian peoples, particularly in relation to increasing daily levels of PA, the specific role of sociocultural influences must be considered, especially when implementing healthcare strategies for this community Asian. Evidence suggests a need to promote and increase PA participation rates of South Asian peoples with a framework focused on early involvement, as vital in addressing increasing health concerns prevalent in this ethnic population (Patel et al., 2012). Additionally, it is important for health interventions to be thoughtfully carried out in favour of respecting cultural views and backgrounds. Hence, evidence cautions the use of a ‘one size fits all approach’ when aiming to increase PA activity participation rates among ethnic minorities (Booth, Bauman, Owen, & Gore, 1997; Lawton et al., 2006).

**Conclusion**

From the review of literature, limited evidence exists that explores Indian immigrant participatory behaviours in sport and PA in NZ. With a ‘market for this gap’ an in-depth exploration of the experiences of Indian immigrants families would provide a foundation that positively contributes to Indian involvement in NZ sporting cultures. Accordingly, investigating three Indian immigrant families (parents, one child) with differing backgrounds (sport, spontaneous, inactive-interested) was worth undertaking to identify what values and beliefs come to influences their decision to participate in NZ’s sport and PA practices.
With this as the first research study exploring Indian participatory sporting and PA behaviours it sets a foundation from where future researchers, policy makers and community organisations develop culturally informed interventions in providing appropriate and responsive initiatives for this rapidly growing population. Therefore, this thesis investigates the experiences of Indian immigrant families’ participation in sport and PA in NZ. The study was guided by the research question

What influences the decisions of immigrant Indian families’ to participate in sport and physical activity in NZ?
Chapter 3: Methodology and Methods

Introduction
In exploring the experiences of Indian immigrant participation in sport and PA in Auckland, NZ, the approach and the philosophical stance that informed the methodology (the ‘thinking’), and the selection of methods (‘the doing’) in collecting information related to the overall purpose of the study is explained.

Philosophical assumptions of this research: Implications for methodology and methods
The term paradigm popularised by Thomas Kuhn, as a lens or as a world-view of the way a discipline views reality, is a matrix of beliefs and perceptions that occur as an outcome of interaction with the social world (McNamara, 1979). Essentially, unique to each paradigm are two philosophical components namely ontology as the study of the nature of being (Crotty, 1998) or, the study of existence (reality), and epistemology that questions what can be considered as knowledge and who can know it (Guba & Lincoln, 1994). Consequently, a chosen paradigm sets philosophical assumptions of the research that determines who participates in the study, the choice of tools for collecting information and the process of analysing the gathered information (Denzin & Lincoln, 2000; Denzin & Lincoln, 2013). In other words, different research paradigms may have different ontological and epistemological assumptions that influence the methodology (‘the thinking’) and methods (‘the doing’) used for different types of research (qualitative/quantitative) within the chosen paradigm.

Interpretivism

To understand is always to understand differently
(Gadamer, 1970)

Much opposed to the ‘positivists benchmark’ of ‘one reality’ where truth is measured by finding and recording sensory observation as facts by an observer (object), interpretivists identify the nature of reality as multi-layered, complex and constructed based on individual perception of the social world (Greener, 2008). It draws from existentialism with a philosophical stance (theoretical perspective) in understanding what meaning
people give to their own experiences, and how, through shared interpretations, knowledge is developed (Grant & Giddings, 2002). Similarly, by way of constructionism (epistemology) Crotty’s states, “there is no meaning without a mind and that meaning is not discovered, but constructed” (Crotty, 1998). Accordingly, constructionism may share parallels with interpretivism through identifying meaning as constructed by engaging with worldly realities, rejecting this view of human knowledge and truth waiting to be discovered.

Interpretive research, alongside critical and poststructuralist research, has come to be recognised as ‘soft (qualitative) research’, often prey to criticism for its validity, reliability, and generalisability (Eisenhardt, 1989; Perry, 1998). Accordingly, “triangulation” or mixed methods designs have been suggested to challenge such methodological criticisms when researching the social world (Hammersley, 2003; Silverman, 2004). Consequently, multiple and independent methods reaching the same conclusions are considered more reliable over single methodological approaches (Denzin, 1970; Denzin & Lincoln, 2013).

The science of “Verstehen”: Understanding and interpreting the social world
The core nature of interpretivist philosophy and research paradigm contributes to the pursuit of contextual depth by valuing uniqueness of a particular situation (Myers, 1997). Weber’s 1949 theoretical concept of interpretive sociology may further enhance the history of interpretive approaches by integrating the science of “verstehen” (in German means to understand, perceive, know) and causal analysis to comprehend the nature and importance of a phenomenon (Weber, 1949). Verstehen represents a complex process by which people interpret meaning of actions of everyday life and those of others with whom they interact (Bernstein, 1976). It is a process by which social scientist seek to understand, as interpretivists aim to reconstruct the self-understandings of actors engaged in particular actions (Schultz, 1967). Within humanistic approaches, interpretive epistemology may call for action over structure, requiring the research be viewed through the lens of the human actors (inductive strategy), capturing the ideas and feelings of the interviewed or observed (Lader, 1994).

It is considered that verstehen may be achieved only when this process of understanding and interpreting encompasses a state of empathetic identification with the actor. Accordingly, what an action means can be understood only in terms of the system of
meanings to which it belongs (Fay, 1996; Outwaite, 1975) and understanding those systems of meaning is the goal of verstehen (Giddens, 1993). Thus, the researcher (inquirer) needs to fully comprehend the meaning that constitutes such actions (Schwandt, 2005). Consequently, the epistemological position of interpretivism considers ‘the knowers intellect’ in the process of understanding in pursuit of knowledge about the meaning of human actions. Given ‘understanding’ has been claimed to be a basic structure of people’s life experiences, it cannot be done as an isolated pursuit (Gadamer, 1970, 2013). Interpretive researchers come to understand and interpret in the light of their own prejudgments and prejudices that continue to evolve in the course of history. As they start asking different questions, what is being said may differ with the changing research perspectives.

In this study, the notion of verstehen, is introduced when the researcher comes to understand the meaning of action from the participant’s point of view through the use of dialogue (interviews). Furthermore, as this study is also underpinned by interpretivist-constructionist philosophy (Denzin & Lincoln, 2013), further detailed below, the researcher aimed to reflect meaning from the participant’s perspective. This requires the researcher to understand what meanings are being constructed by an individual’s perception of their social world in order to value the uniqueness of a situation experienced through the eyes of the participant. Accordingly, verstehen and the ‘meaning’ being interpreted may be seen as prejudiced, biased and inaccurate. Therefore constructing interpretations that may not be seen as inconsistent and distortive (Bernstein, 1976) necessitate the reflection of meaning be maintained by ensuring trustworthiness and rigour throughout the process of data analysis.

What defines reality? A researcher’s viewpoint

Role of culture in defining reality
I recognise reality to be influenced at birth by the cultural practices you grow into. Drawing from my own experiences, I understand a cultural realism identified as the historical, philosophical and spiritual connections that may hold greater communal powers over individual beliefs and practices. By following traditional festivals, religious and cultural practices, one may firmly anchor to values and beliefs influenced by their host society practices and traditions. Furthermore, family beliefs and traditions may be influenced by one’s cultural heritage in the way one comes to understand reality,
anchoring to values, beliefs and practices borne from the country’s historical, philosophical and spiritual traditions and related practices of the family.

I was born in an Indian culture that was 5000 years old with values and beliefs that I anchored to early on, and that I follow today as an immigrant in a western social system. With similar cultures, my values and beliefs are strengthened and may be deep rooted and unconscious. However, when met against other differing cultures such deep-rooted cultural beliefs come to surface to conscious levels. In an effort to reflect on what values and beliefs add meaning to my current life experiences, I may adopt host cultural practices that favor a ‘commonly identified social reality’ for that given time and place. Doing so may redefine behaviours, thoughts and beliefs only to meet extrinsic demands of the social dynamics of the adopted culture while consciously anchoring to previous innate cultural values and practices. As a result a newly defined reality takes shape as I value the experiencing of a ‘mixed social culture’ advantageous in meeting social demands to finding success (extrinsic motivators) in my host society while adhering to traditional values and beliefs (birth culture) that I use to define who I am (intrinsic socio-cultural identity).

Distinctively as individuals, we form a part of the nature of social dynamics. We shape our actions founded on values and beliefs through everyday lived experiences. Accordingly, as we come to understand reality, our thoughts and behaviours are reflective of what values, beliefs and attitudes we anchor to, through our encounters with diverse life experiences.

I understand personal self-reflections as a kind of ‘soft speech’ that enables the uncovering of meaning I give to my own experiences. Such meaningful truths governing my actions (deliberate or automatic) may come to form what I experience as reality.

“If men define situations as real, they are real in their consequences” (W. I. Thomas & Thomas, 1928)

School of thought

Although Max Weber is often recognised as the dominant influencer, interpretivism can be linked to ethnographers like Mead, Garfinkle, Malinowski and Boas who considered the nature of existence as relative to the person at a given time and place (Lincoln &
Guba, 2013). I draw on Franz Boas’s school of thought of cultural study through human actions, with additional views on people’s mental make up to exist in active judgment in relation to other persons (Darnell, 2006). Boas’ school of thought viewed culture as an integrated system at work made from values, ideas, symbols and worldly perceptions that required examining to understand culture (Kuper, 1999; Stocking, 1968).

**The interpretive-constructionist paradigm in context of the social world**

The interpretivist-constructionist paradigm guides the researcher in seeking out the meaning and reasons that underlie the behaviours and actions of the participants with others in their society and culture (Ponterotto, 2005). Further, bringing to light the meaningful nature of people’s character and participation in both social and cultural life (Elster, 2007; Walsham, 1995). Accordingly, if what is recognised as true to the participant is established as true in their community (social reality), then the view of a ‘shared reality’, is seeing the world through the eyes of the people being studied (participants). Such a subjective view may therefore differ between individuals, as they experience the social world by participating in it. Consequently, as reality differs from person to person it is said that “there are as many realities as individuals” (Scotland, 2012, p. 11).

The meaning that exists independently in nature can be brought to life through this dialectic co-construction of findings from interactive forms of inquiry and interpretation (Ponterotto, 2005). Effective communication, through use of dialogue and self-reflection, proves to be significant by stimulating depth in unraveling hidden meanings. Accordingly, while interpretive-constructionist approach provides a deeper understanding of what is now a conscious individual experience, it enables the researcher to come to understand reality by experiencing and participating in it (Cohen & Varnum, 2016). As a result, the researcher considers the individual’s “self-understanding” (reflective-knowing) as part of what makes reality (Cocks, 1989). Thus, valuing interpretation by which deep ‘self understandings’ come to surface in ways previously unseen to the individual themselves.

As Crotty (1998) points out, “all that we are consciously aware of within the real world is because of our interaction with it” (p. 3).
Why qualitative research approach?
A qualitative approach proved more compelling when the aim of the study was to investigate the experiences of Indian immigrant families’ participation in sport and PA. Specifically,

What influences the decisions of Indian immigrant families’ to participate in sport and physical activity in New Zealand?

As shown in Table 4 below, qualitative research has the ability to provide rich descriptions of a topic as understood by the people who experience it, and is useful in discovering the meaning that people give to events they experience (Denzin & Lincoln, 2000; Denzin & Lincoln, 2013). Accordingly, while qualitative approaches seek to understand the local population it involves in relation to a specific topic or question, it has been acknowledged that it brings an effectiveness when seeking culturally specific knowledge on the values, beliefs and social behaviours of targeted populations (Mack, Woodsong, Macqueen, Guest, & Namey, 2005). Contrasting quantitative research, it leads with flexibility towards evoking responses that are meaningful and culturally striking, enabling the researcher to explore deeper interactions in accordance with one’s personality and style. Therefore, this study adopts a qualitative research approach that enables the aim of exploring and understanding the meaning people (Indian immigrant families) give to their own experiences in relation to their participation in sport and PA in Auckland NZ. Table 4 sets out the contrasting approaches of quantitative and qualitative methods, further demonstrating the utility of a qualitative approach for the present study.
### Table 4

**Quantitative and Qualitative Approaches**

<table>
<thead>
<tr>
<th></th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
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<tbody>
<tr>
<td><strong>General framework</strong></td>
<td>Seek to confirm hypothesis about a phenomena</td>
<td>Seek to explore phenomenon</td>
</tr>
<tr>
<td></td>
<td>Instruments more rigid style of eliciting responses and categorizing responses to questions</td>
<td>Use semi-structured methods such as in-depth interviews, focus groups and participant observation</td>
</tr>
<tr>
<td></td>
<td>Use highly structure methods, surveys, questionnaires and structured observation</td>
<td></td>
</tr>
<tr>
<td><strong>Analytical objectives</strong></td>
<td>To quantify variation</td>
<td>To describe variation</td>
</tr>
<tr>
<td></td>
<td>To predict causal relationships</td>
<td>To describe and explain relationships</td>
</tr>
<tr>
<td></td>
<td>To describe characteristics of a population</td>
<td>To describe individual experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To describe group norms</td>
</tr>
<tr>
<td><strong>Question format</strong></td>
<td>Close-ended</td>
<td>Open ended</td>
</tr>
<tr>
<td><strong>Data format</strong></td>
<td>Numerical (numerical values to responses)</td>
<td>Textual (audiotapes, videotapes and field notes)</td>
</tr>
<tr>
<td><strong>Flexibility in study design</strong></td>
<td>Study design is stable from the beginning to end</td>
<td>Some aspects of the study are flexible (adding, excluding, or wording of particular interview questions)</td>
</tr>
<tr>
<td></td>
<td>Participant responses do not influence or determine how which questions researchers ask next</td>
<td>Participant responses affect how and which questions researcher ask next</td>
</tr>
<tr>
<td></td>
<td>Study design is subject to statistical assumptions and conditions</td>
<td>Study design is iterative, that is, data collection and research questions are adjusted according to what is learned</td>
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</table>


**Case Study Research Methodology**

This study also adopts an exploratory case study research methodology to explore the experiences of immigrant Indian families participating in sport and PA in Auckland NZ. Case study research has the capacity to produce rich descriptions and understandings of particular situations, context and phenomena. It enables the researcher to evaluate the situation, be it the individual or group activities, or a specific phenomenon from multiple
perspectives and within local contexts (Cronin, 2014). Typically, exploratory case study research may draw upon small sample sizes, however close examination of the case has the potential to reveal a large number of factors (Yin, 2009) related to the particular situation. With systematic data collection and analysis, the researcher can resolve how the context ‘influences’ the phenomenon and maintain openness to how data are presented (Swanborn, 2010). Case study research explores a clearly defined bounded system, highly contextualized in nature, providing methodological flexibility that may lead to new insights (Hyett, Kenny, & Dickson-Swift, 2014). This methodological flexibility and rigour, proves valuable when developing theory and interventions in health science research (Baxter & Jack, 2008). Case study research has enabled researchers to produce knowledge to inform professional practice (Cronin, 2014) and policy realms (Baxter & Jack, 2008). Hence, case study research may be considered a more practical approach over other more deeply philosophical approaches (Cronin, 2014).

This study adopts a single holistic exploratory case design with embedded units, which takes into account sub units positioned within the case as a whole (Baxter & Jack, 2008). Accordingly, each family is considered a single case with the father, mother and child as sub units embedded within the case as a whole. This design has been considered “powerful” with its rich analysis of data (within, between, cross-case) that illuminates the overall issue in question (Baxter & Jack, 2008, p. 550). Additionally, by focusing on a particular case the reader may interpret the data in the light of their own circumstances with understandings transferable to other contexts (Stake, 1995).

**Methods**

**Participant recruitment process: Inclusion exclusion criteria**

Following an online advertised study flyer (Appendix F) and through word of mouth, 12 families in total expressed an interest to participate in this study, six of whom met the inclusion criteria as follows (Table 5).

*Both parents must be born in India and settled in New Zealand:* Accordingly, parents that were of Indian descent was made part of the inclusion criteria to emphasise an authenticity towards the exploration of culture, values, traditions and beliefs in the study.
Families (consisting of father, mother and minimum one child): As a convenience sample and respecting the participant right to ‘volunteer’ their participation in the research process, it was expected for either one of the parents with a minimum of one child to express their willingness to participate in the study.

Immigrants (early settlers or long term, no fixed requirement): A fixed term on immigrant status was not the predominant aspect of the inclusion criteria used in selecting the families. A mixed group of settlers (less than ten years, long term settlers greater than twenty years) was favoured.

Children either born in India or New Zealand: By ensuring parents were born in India, relaxing this aspect of the inclusion criteria for the children made the probability of finding families that met other components of the inclusion criteria more feasible. Moreover a mix of Indian and NZ born Indian children enabled comparisons between perspectives that drew deeper insights into cultural aspects aimed in this study.

Children 13-25 years: When considering the nature of this study as an exploration of values and beliefs, conducting interviews that unravel in-depth perspectives with children below 13 years may have posed a challenge. Hence children 13 years and above were selected to participate in the study.

Table 5
Participant Inclusion and Exclusion Criteria

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families (consisting of father, mother and minimum one child) settled in New Zealand from India</td>
<td>Step children and step parents.</td>
</tr>
<tr>
<td>Immigrants (early settlers or long term, no fixed requirement)</td>
<td>Other Indian descendants (Fijian Indians) will be excluded.</td>
</tr>
<tr>
<td>Both parents must be born in India.</td>
<td>One parent not of Indian origin.</td>
</tr>
<tr>
<td>Children either born in India or New Zealand and 13 years to 25 years.</td>
<td>Children below 13 years as conducting interviews with very young ages will pose a challenge considering the nature of this study (values, beliefs etc). Children living independently, away from family.</td>
</tr>
</tbody>
</table>


Participants selection process

With an interest in exploring differing sport and PA backgrounds from the Auckland region (NZ), a purposive sampling criteria (Patton, 1990), was used when selecting the families. Based on specific characteristics associated with the proposed research objective (Merriam & Tisdell, 2015), three immigrant Indian families (six parents, three children) from the Auckland region, involved or interested in sport and PA in NZ settings were chosen to participate in the study. Accordingly, one family actively involved in structured/organised sport, the second family involved in spontaneous/accumulated activity, and the third with an interest in cultural modes of activity, were selected.

As an holistic exploratory case study, each family was considered as a single case reflecting the specific focus as set out in Figure 4. With the father, mother and one child as embedded units within the case (Baxter & Jack, 2008), this enabled the researcher to analyse the data within each sub unit (each family member), between each case (between families) and across all sub units (across three families and their members). Consequently, by considering the influence of a variety of characteristics and related aspects, this added depth towards the overall purpose of the study. Figure 4 below, details the specific focus in selecting each of the three families with one family representing a separate case.

Figure 4. Specific focus of each family selected.
**Data collection process**

As an exploratory case study (Yin, 2009) within the interpretive research paradigm (Grant & Giddings, 2002) the use of interactive methods of inquiry emphasise an understanding of what *meaning* people give to their own experiences and what knowledge is developed through their shared interpretations. Accordingly, drawing from the interpretive-constructivist paradigm, the interactive methods of collecting information (data) involved the use of in-depth interviews, participant self-reflection reports, a short questionnaire and the researcher journal and memos (Swanborn, 2010), as set out in Figure 5 below.

*Figure 5. The progressive use of methods at various stages of data collection.*

It can be seen from Figure 5, a questionnaire was administered prior to interviews to a total of nine participants (three from each family - father, mother, child). The purpose of administering a questionnaire was to inform the interview guide and provide direction during individual interviews. Thereafter, a total of nine in-depth interviews were conducted separately for each father, mother and child from the three families. On completion of each individual interview, each of the nine participants was informed to capture ongoing reflections by maintaining an unstructured participant self-reflective report.

**A questionnaire: Informing the interview guide**

Considering the amalgamation of cultures within the Indian community (Keay, 2010; Mohammada, 2007), a short demographic questionnaire (Appendix G) was designed to collect demographic information of each member of the family in determining the level of homogeneity or heterogeneity of the chosen sample. From this questionnaire, it was
identified that the chosen families belonged to distinct communities (different states in India) with children either born in India or NZ. While heterogeneity may limit the generalisation of the findings, it may prove advantageous when exploring mindsets, PA behaviours and practices of values and customs that differ from place to place within amalgamated cultures that span throughout the Indian country. The questionnaire was piloted on family and friends proving useful in highlighting current and previously held PA behaviours and practices of the individual when compared to other individuals’ PA behaviours and practices. Thus, administering a self-report questionnaire prior to individual interviews, enabled the researcher to identify topics of specific cultural interest to be explored further during the individual interview phase of data collection. Consequently, the use of a questionnaire prior to interviews informed the interview guide.

**Semi structured interviews**

**Piloting interviews:** The supervisory panel screened the guideline questions (Appendix H) for the individual interviews (father, mother, child) before meeting with the three families. This practice of piloting or screening provided an opportunity for potential improvements to be made to the interview guide and developed interviewing skills prior to actual data collection (Braun & Clarke, 2006).

Prior to each interview, each parent and child signed their respective consent and assent forms (Appendix C-E). Thereafter, interviews were conducted separately for each parent and child using an interview guide with a preferred set of questions and topics to be explored. With semi-structured in depth interviews, the researcher had the flexibility to delve deeper into specific topics asking additional questions that prompted further discussion, while also maintaining control over the direction of the interviews (Hyett et al., 2014). During each interview, researcher memos with observational notes were maintained and used particularly in capturing non-verbal communication of participants (Clarke & Braun, 2013). A total of nine interviews ranging from forty-five minutes (children) to ninety minutes (parents) were audio-recorded (dictaphones) and transcribed into written form between an external transcriber and the researcher. Individual participant self-reflection reports were gathered during this time.

**Participant self-reflection reports**

The nature of data collection particularly involving culturally diverse Indian communities, created additional complexities with regards to data collection.
Accordingly, having a grasp of the relation between the experience and languaged expression became vital when collecting data from participant self-reflection reports (Polkinghorne, 2005) particularly among the mix of cultural diversities within the Indian community.

With over reliance of data collection methods such as semi-structured interviews, the use of participant diaries have been underutilised despite their known effectiveness in ethnographic studies (Johnson, 1995). In using participant self-reflection diaries, each parent and child described their own realisations, without the influence of a researcher or structured question. As a result, participant diaries deepened the meaning of experiences, as parents and children made comparisons to experiences of sport and PA in India.

As a method of data collection, a ten day participant self-reflection report (diary) was used to note participants’ thoughts and experiences in relation to their involvement in sport and PA. Each participant report was systematically analysed for themes and in doing so, the framework of the data analysis verification tool (DAViT) for self-report data (Clayton, 2000) was adopted. The framework involved a systematic approach that enabled the researcher to immerse themselves in the data to become familiar with the participants’ individual data and to capture the deeper insights in the participants’ self-reflection reports that may not have be captured during the interviews.

With each parent and child verifying their respective reports, this process provided additional opportunity to ensure that rigour and trustworthiness was maintained with using individual participant self-report diaries. The researcher made use of participant reflective reports to check for any disparity of thinking between researcher and each participant. Furthermore, this ensured a close representation in ‘context and meaning’ of participant quotes when interpreting findings. Subsequently, each participant report was used as a source of verification of themes that emerged during the interviews (Clayton, 2000).

**Researcher subjectivity: Memos and journals**

The extent of researcher influence in the methodological texts of qualitative research remains a contention. With such “interpretive crisis” (Denzin, 1994, p. 501) creating transparency in the process may be established by keeping an open record of the researcher’s opinion, thoughts and feelings as part of the process (Denzin & Lincoln,
Accordingly, keeping a researcher reflective journal adds visibility to the process and value when writing up the research process (Ortlipp, 2008). Given researchers are encouraged to talk about themselves, the use of reflexive journals has become more extensive (Ortlipp, 2008). Consequently, the research area of interest may be influenced by the researcher’s own personal experiences, values and positions further impacting “the methods they choose to gather their research knowledge, and the ways they choose to represent their research findings” (Harrison, MacGibbon, & Morton, 2001, p. 325). Methodologically, the use of researcher journals has been considered an accepted practice for most qualitative perspectives such as constructivist, feminist, interpretivist, and poststructuralist (Denzin, 1994; Denzin & Lincoln, 2013; Lather, 1992; McNaughton, 2001).

As the researcher, I share a cultural connection having the same cultural background as the study participants (Indian descent, immigrant). Together having a wide experience of participation in sport and PA in India, I also draw insights from my immigrant experience of participation in sport and PA involvement as an athlete at Olympic level competition and a registered sport and exercise coach working with adults and children in NZ. I also carry an academic and practical background in psychology which was useful with research that involved human behaviour. As a cultural insider I consider myself positioned ‘inside’ the study (Le Gallais, 2008). Consequently, the use of ‘subjectivity’ is seen as valuable in this qualitative research (Braun & Clarke, 2006).

Given qualitative research is a ‘subjective’ process (Hollway, 1989) I capture my own experiences, perspectives, sporting histories and cultural background presented as a separate prelude of the thesis. This gives me a voice to consider my own experiences as an immigrant Indian involved in NZ’s sporting culture. Furthermore, making visible any personal premonitions allows me to find my position in this research process, distinctive to that from my participants. However, it was vital to keep a researcher journal of ‘personal reflexivity’ (Wilkinson, 1988) to allow myself to be made visible and act as a ‘quality controller’ during the research process (Braun & Clarke, 2006). By keeping a researcher reflexive journal, I was able to bring to the surface and make explicit my experiences, judgments, thoughts, beliefs, and feelings, and hence acknowledging their influence on the research design, and process of data collection, analysis, findings and interpretation.
Data analysis: A view from the top

Analysis was completed for each participant transcript along with their individual self-reflective reports for themes, meanings and key characteristics using the six stages of thematic analysis (Braun & Clarke, 2006). In this section, the process of data analysis is detailed from the stage of familiarisation, through to the reviewing, defining and naming of themes. This was followed by a thematic network analysis (web-like illustrations), a technique used to ensure all themes that are systematically analysed are mutually connected and constructed as a network (Attride-Stirling, 2001). This ‘web-like network’ acts as an illustrative tool that enabled the researcher’s interpretation of the texts, and the reader’s understanding of it. Thereafter, a cross-validation of emerging themes was conducted with the supervisory team to ensure rigour throughout the process and enhance trustworthiness of the findings.

The “thematic network approach”: Analysis of information

The thematic network approach used was designed to produce a ‘thick description’ of data and highlight similarities and differences across the data set (Braun & Clarke, 2006). Thematic network approach goes on to interpret different aspects of the related topic (Boyatzis, 1998) and brings about unanticipated insights (Braun & Clarke, 2006). Furthermore, it offers theoretical flexibility by its wide application across diverse theoretical and epistemological approaches (constructionist, contextualist, realist method) proving compatible with constructionist and essentialist paradigms (Braun & Clarke, 2006). As a foundational method for qualitative data analysis, it enables a researcher with limited experience to develop basic core skills in support of other forms of qualitative analysis (Braun & Clarke, 2006). As a result, I chose to use the thematic network approach in support of the overall research purpose and scope set within this research study. In the next section, I make explicit the theoretical framework and assumptions that inform this approach.

What counts as a theme?

Braun and Clarke (2006) state:

As this is qualitative analysis, there is no hard and fast answer of what portion of your data set needs to display evidence of them for it to be considered a theme. And that the ‘keyness’ of the theme is
not dependent on quantifiable measures but rather on whether it captures something important in relation to the overall research question.

With no set rule on what makes a theme (quantifiable, ‘keyness’), I have used this ‘freedom’ of flexibility of the process of thematic analysis to establish what may be considered a theme and related aspects of prevalence. Thus, a theme was recognised as a patterned response that captures something important in relation to the overall research question through informing the sub questions.

I considered the aspect of ‘prevalence’ to be based on how much meaning a theme expressed and what associations were made towards informing the research question, irrespective of the themes occurring frequently or not (quantified measure). In other words, irrespective of a quantitative measure (frequency), any theme that held a level of importance by the associations it made was included in the analysis.

**Type of analysis**

Thematic analysis allows for details of one particular theme or group of themes to be analysed in relation to the specific research questions. Considering the overall study is a single case design, an overall presentation of themes for the entire data set would be useful in informing an under-researched area (Braun & Clarke, 2006), of such a community (Indian immigrant families) whose experiences in sport and PA in Auckland, NZ are largely unknown/unmapped. Nonetheless, as an analysis relating to entire data may incur a loss of depth and complexities (Braun & Clarke, 2006), I also provide a nuanced account for the particular themes with complexities of interest in addition to accurately reflecting the themes codes and analysis of content in relation to the entire data set. Consequently, adopting abductive reasoning (Dubois & Gadde, 2002) to inform this process, maintained a rich descriptive account of the overall content towards informing the research questions.

**The approach and the level of analysis**

With thematic network approach, coding of each data extract may be carried out based on prior review of literature that informs the specific research questions of interest to the researcher (deductive approach) or coding to what is emerging from the data (inductive approach) (Braun & Clarke, 2006). Accordingly, while I reflect the use of the top-down-
deductive approach (Boyatzis, 1998; N. Hayes, 1997), with a specific interest to explore the research question. I have also considered inductive approaches to be important by recognising themes that are ‘data driven’ (Patton, 1990).

By reviewing the literature ahead of the data analysis I was able to focus on additional and subtle features of the data, shown to improve the quality of the data analysis that unravels unexpected or new insights or expands on previous literature (Tuckett, 2005). Therefore, in favouring an abductive approach to coding process (deductive and inductive) (Dubois & Gadde, 2002), this allowed me to be guided by the findings based on what was observed or experienced by the empirical world (data driven).

As many characteristics and components of case study research can interrelate, the integration of inductive and deductive approaches may prove useful in utilising in-depth insights of empirical phenomena and their contexts that come to be emphasised by case research. Based on abduction, I draw upon the systematic positioning of inductive and deductive approaches in case study research (Dubois & Gadde, 2002). Consequently, using a framework that reflects the researcher’s preconceptions while allowing for empirical insights to inspire change in theory and vice versa (a tight yet evolving framework) (Dubois & Gadde, 2002).

Similarly, both a latent-interpretive approach that identifies the underlying features (Boyatzis, 1998) without overlooking patterns identifiable on the surface (semantic approach) has been adopted as the level of analysis when coding the data. Consequently, the approach aimed to seek how related codes and themes may come to shape the patterns identifiable on the surface, by way of construction/interpretation.

**Epistemology (theoretical perspective)**

It is the theoretical perspective that informs the process of interpretation/construction and (what I can say about) directing the findings. The study is set within an interpretive-constructive approach (meaning is socially produced and reproduced) that brings to light the meaningful nature of people’s character and participation in relation to their social and cultural life (Elster, 2007; Walsham, 1995). Accordingly, conducting a thematic analysis within an interpretivist-constructionist framework, I attempt to focus insights drawing from social and cultural circumstances and structural conditions more so than individual motivations or psychologies (Braun & Clarke, 2006).
A constructionist analysis of themes leans towards more latent themes may draw parallel with thematic discourse analysis where in “underlying system of meanings” are identified using codes, themes and discourses (G. W. Taylor & Ussher, 2001). Consequently, the manner of spoken or written communication emphasises how or the versions of the world, of society, events and inner psychological worlds are produced (Potter, 1997).

**Effecting the steps in thematic analysis**

At first, all transcripts were analyzed using the six-step approach of thematic analysis (Braun & Clarke, 2006). I may have approached the analysis with some initial thoughts of the data having conducted all interviews myself. By transcribing some interviews (in verbatim) I was able to familiarise myself with the data (Riessman, 1993) and by checking all transcripts for accuracy against their respective audio recordings. Regardless, it was reading the transcripts over and over again that led to identifying patterns and meanings. Thus engaging with the data while capturing my thoughts and ideas through reflexive writing (researcher journal).

Secondly, the coding phase commenced when the data was manually organised into meaningful groups (initial codes) (Tuckett, 2005) in relation to the research question (theory driven) with close attention to what was emerging from the data (data driven). With as many codes generated for their respective data extract, data was coded manually with written notes against each sentence or group of sentences on the transcript (data extract).

Subsequently, mind-maps were used to make an association between codes, with groups of initial codes to form candidate themes and related subthemes. At this stage, no themes or codes were disregarded and any unassociated themes and codes were categorised as ‘miscellaneous’ sets of codes. All candidate themes and subthemes were reviewed with their respective data extracts to adequately represent the coded data. Accordingly, themes were refined and reviewed as needed to bring coherence and ascertain an accurate reflection of themes in association with the data set. The process of refining and reviewing ceased when nothing substantial or of interest could be added to the process.

At last the essence of each theme and related subthemes were defined and named by recognising what part of the data they represented and by identifying a value of their
interest. This was followed by a cross-validation of emerging themes conducted with the supervisory team to ensure rigour throughout the process and enhance trustworthiness of the findings.

Ethics

“The complexities of researching private lives and placing accounts in the public arena raise multiple ethical issues for the researcher” (Mautherner, Birch, & Miller, 2002, p. 1).

This study aimed at exploring the experiences of Indian immigrant families’ participation in sport and PA in NZ’s sporting cultures. What brings about a researcher’s need for understanding value of ethics within this qualitative research, stem from a social dynamism of what is deemed in action as ‘acceptable’ or ‘unacceptable’ in a given time (Indian immigrants in NZ). Accordingly, ethical understanding may not solely be driven by unprincipled acts of untrustworthiness or unreliable researcher practices (Bound, 2012).

The researcher considered the need to account for third party influence mainly when involving ‘collectivist’ cultures as with these Indian immigrant families. A discussion of between participant acquaintances with any third party members (research team transcriber, other families) accounted for any negative consequences that would emerge during the process. By contacting each family in person, the researcher had the opportunity to draw out any third party influences while creating an opportunity to ensure each family member was clear on their position in the process. By valuing individual participant perspectives in relation to their role within the design and practice of the study, the researcher offers a ‘partnership’ approach in using participant views to inform the moral/social code in the ethics process. Consequently, ethical considerations provide an important guiding principle towards the design and practices of this study.

The process

**Ethical approval**

Prior to participant recruitment, ethical approval was attained from the Auckland University of Technology Ethics Committee (AUTEC) by adhering to the guidelines (AUT, 2015) (Appendix A).
Te Tiriti o Waitangi

Due to the NZ context of this study the key principles of participation, partnership, and protection (Health Promotion Forum of New Zealand, 2002) of Te Tiriti o Waitangi need to be respected particularly with research targeting specific cultures or social groups. While this study is not targeted at Māori, the researcher acknowledges and respects the Treaty of Waitangi and upholds the three key principles throughout the study process. Accordingly, under the Treaty of Waitangi all people residing in NZ have a right to participate, to have their health protected, to be a partner in research and to withdraw from participation with no adverse consequences. Accordingly, the ethics of research and the way knowledge is shared and gained incorporates these three principles.

Principle of Partnership

Essentially, the principle of partnership to act reasonably, honourably and in good faith was observed by being sensitive and showing respect to the each member of the three Indian families’ and the uniqueness of Indian cultural beliefs, and practices on which this case study was based.

This principle of partnership was implemented throughout the research by recognising participants as partners in this research. As the participants in this study, the three Indian families have a major stake in the outcome of a research project focussed on issues of relevance involving Indian participation in NZ’s culture of sport and PA. Accordingly, a working relationship based on collaboration and partnership was established, between the researcher and these participants through mutual sharing of the research process and research outcomes. The summary report from the study was specifically designed to inform participants of the research outcomes. With information, knowledge and co-operation of the participants formally acknowledged within the research outputs.

As this study is focused on immigrant Indian families, cultural sensitivity and appropriateness was ensured through consultation and feedback from other Indian parents in the local Auckland community. With consultation and feedback, the research team had an improved understanding, appreciation and respect for cultural differences that enhanced the reciprocal nature of this research. Furthermore, by being cognisant of the importance of building rapport and trust with our participants, the team ensured transparency and open communication lines directly to research team members were
maintained (with contacts list on participant information sheet) throughout the research process.

**Principle of Participation**

As participants, both parents and children of immigrant Indian families were given the opportunity to have a voice through the study. Therefore, separate interviews were conducted for parents and children along with the inclusion of individual self-reflection reports as part of the data collection process. Through the stories of these families, the research team envisioned a better understanding would be established towards the experiences of Indian immigrant involvement in sport and PA in NZ. Consequently, empowering the parents and children with a sense of achievement, by making their individual contributions to the study. As participants of the study, each parent and child were given the opportunity to check their transcripts to ensure they were comfortable with any of their comments being made in a public space. It is expected through the publication of the findings in this study, for a much wider reach of implications towards social inclusiveness in NZ’s sport and PA practices involving the Indian community.

**Principle of Protection**

This third principle of protection accounts for the safety, privacy, and confidentiality of the research participants.

*Safety:* Parents and children agreed to be interviewed at their place of convenience, in their own environment, which enabled them to feel comfortable and safe. As a result, the researcher and each participant engaged in uninterrupted and transparent communication. While the interviews were conducted in places of minimal physical risk safe from harm and deceit, the researcher ensured (as part of interview setting) the presence of a senior family member during the individual interviews with each child.

*Informed voluntary consent:* The research team ensured a clear message that participation in the research process was voluntary, with no obligation to complete the interview once started and freedom to withdraw their participation at any stage regardless. The use of consent/assent forms and participant information sheets during recruitment and before every interview session, provided opportunity to reiterate participants’ right for informed voluntary consent.
Privacy and confidentiality

Transcribing and the transcriber: The transcriber was made to consent to a confidentiality agreement (Appendix I) prior being involved with part of the process of data analysis. It was agreed upon for the transcriber to delete all transcripts once secured by the researcher. Furthermore, identifying features such as country of origin, current location, were removed from the transcripts. All digital interview recordings were deleted after this study was completed and the transcripts were stored in a secured place.

Final report considerations

Participant self-selected pseudonyms: In identifying each participant on all working documents, the researcher requested each parent and child to self-select a false name (pseudonym). Using participant self-selected pseudonyms enabled the researcher to respect the right of individual identity. Importantly, showing value towards any cultural, religious or family traditions linked with individual identities (names) was also part of the decision to allow self-selection.

Joint summary report: Considering familiarity between family members may increase likelihood for one member to identify information disclosed by another family member, a joint summary report (all families) instead of individual reports (per family) of the study findings was presented to each family. A joint summary (all three families) would preserve anonymity within/between each family, particularly given the small number of participants from each family. Although the three families were not known to each other this was done to preserve each individual family member’s right of privacy and confidentiality towards their individual contributions made within the family. With no specific reference given to participant demographics, each family’s identity was kept confidential in the final report. Guidelines for confidentiality were outlined in the family information sheet (Appendix B), and consent/assent forms (Appendix E).

Social and Cultural Sensitivity

Researcher was cognisant of potential implications or interest that the process and outcomes of the research might have for other cultures or groups. As the Indian culture is an amalgamation of cultures, the researcher emphasises the need to be cognisant of socio-cultural differences within the sample while respecting any cultural diversity that exists between each family. The researcher looked closely for differences in health status,
changes in family environment, personal situations to ensure respect for vulnerable participants, before, during, and after the data collection phase.

**Respect for Vulnerability**

In accordance with the Principle of Respect for the Autonomy and Dignity of Persons and the *Code of Ethics and Conduct*, the primary researcher ensured vulnerable participants (children) were given ample opportunity to understand the nature, purpose and anticipated outcomes of their involvement in the research project. Accordingly the use of assent enabled children to give consent to the extent that their capabilities allow. The research team ensured the use of methods that maximize the understanding and ability to give informed consent whenever possible (Family information sheets, consent/assent forms, plenty consultation time to resolve participant questions/queries). Participants were encouraged to ask as many questions of the research team members at will, in order to be comfortable with their potential as participants involved in the research process (interview, self-reflection reports).

**Other ethical considerations**

All written material were stored in a locked cabinet in the supervisors office at AUT, and electronic data stored on the AUT network in password protected files. As part of signing the consent form, all participants agreed to keep all discussions confidential when applicable. Identifying information, such as consent forms, are stored in a separate locked cabinet also within the AUT office. All consents will only be read and collected by the researcher and no information regarding specific addresses were presented in any written material including the final report. The security of research data will be undertaken in accordance with AUTEC policy.

In practice cultural sensitivity involving Indian communities incorporated the three principles of partnership, participation, and protection to form the ethical considerations that guide the qualitative design of research in NZ settings. Consequently, intended to create a supportive and safe environment within this research while empowering participants to be active in the research process and not mere objects for data collection.

Moral understandings derived from the Cartwright inquiry necessitate ethical research practices be set within the legal framework wherein research participants are cared for, protected and treated with respect (Paterson, 2010). Accordingly, the researcher had to
possess a set of moral principles, affirming a specified group, field, and the process involved in conducting the research. The researcher recognised that this study strongly relied on the participants sharing their personal stories (experiences) generously. Therefore, the ethical considerations embraced in this study were a response to the private information entrusted, and a responsibility to ensure confidentiality of the participants.

**Summary**

This chapter demonstrates the principles of philosophy that informed the makings of a case study design research aimed to investigate the experiences of Indian immigrant families’ participation in sport and PA in NZ. Further using ontological and epistemological assumptions of an interpretivist-constructivist approach to inform a case study research methodology ‘the thinking’ and chosen methods in ‘the doing’ of qualitative research.
Chapter 4: Research Findings

The present study was built on the research question

What influences the decisions of Indian immigrant families to participate in sport and physical activity NZ?

Each family member described their perceptions and experiences during in-depth interviews, where values and beliefs were also discussed. These underlying feelings and thoughts were also made evident in the participants’ personal self-reflective reports, which compared their experiences of sport and PA in India with their experiences in NZ. Prior to interviews, an initial questionnaire was used to inform the interview guide, by identifying topics of specific cultural interest to be explored during participant interviews. The research insights reported in this chapter are therefore drawn from semi-structured in-depth interviews, participants’ self-reflection reports, questionnaire, and the researcher’s observations and reflections during the process.

Participants
A total of three Indian families (two parents, one child) from different ethnic groups (Gujarat, Maharashtra, Karnataka) of the Indian community were considered participants of the study. As children had to be living with their parents, a broader age range (13yrs to 25yrs) was preferred to meet the inclusion criteria (See Figure 4 chapter 3). The descriptive characteristics of the individuals within each family are presented in Table 6.
### Table 6

*Family Characteristics, Pseudo Names and Immigration Status/Years In NZ (NZY)*

<table>
<thead>
<tr>
<th>Status</th>
<th>Father</th>
<th>Mother</th>
<th>Child</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family 1</strong> - Sport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Olly</td>
<td>Jess</td>
<td>Crystal*</td>
<td></td>
</tr>
<tr>
<td>Indian subculture</td>
<td>Maharashtra</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZY</td>
<td>&lt;10 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family 2</strong> - Accumulated/spontaneous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Ben</td>
<td>Zara</td>
<td>Sunil**</td>
<td></td>
</tr>
<tr>
<td>Indian subculture</td>
<td>Karnataka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZY</td>
<td>&gt;10 years &lt; 20 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family 3</strong> - Inactive-interested (cultural)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Raj</td>
<td>Ramaya</td>
<td>Shamira**</td>
<td></td>
</tr>
<tr>
<td>Indian subculture</td>
<td>Gujarat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZY</td>
<td>&gt;20 years</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key *Indian, ** NZ
Study findings

Three themes were identified during this study. While each theme is reported discretely, themes may share some overlap. In addition, ‘subthemes’ were considered and described as relevant to the main overarching theme. The findings presented below adopt the use of pseudonyms to give an introduction to each participant who contributed to this study.

The parents made equal contributions across all three themes, however, the fathers talked at length mostly relating to Theme 1 along with the children. The mothers had much more to say about housework and body image.

In using the six stages of thematic analysis (Braun & Clarke, 2006), Figure 6 below presents the three major themes derived from the data in relation to the research question.
Figure 6. The three themes derived from the data: Neighbourhood, Multiculturalism and Evolving social mindset and beliefs.
Theme 1: Neighbourhood: design and interactions

Both parents and children of the three families identified a cultural difference in neighbourhood behaviours and practices in NZ when compared to India. Further exploring this notion, an overlap of the two main subthemes 1 and 2 were identified by which ‘neighbourhood’ environments may influence these families’ participation in NZ’s culture of sport and PA.

1. Neighbourhood design via the ‘lack of common space’
2. ‘Non-spontaneous interactions’ in the neighbourhood community

All participants presented the notion that in India, it is a customary practice of neighbouring children to meet up after school to ‘play’. While children play, neighbouring parents engage in recreational sport or group leisure activity. Consequently, Indian parents and children engage in everyday lifestyle behavioural practices as a result of interactive neighbourhoods and ‘common space’ (playground). A playscape may be understood by the participants as having a shared common space described as a field or ground within the neighbourhood, where neighbouring parents and children come to form communities that positively influence their participation in recreational sport or activity. Having lived in NZ for fifteen years, Ben summarised this shared understanding stating, “….In India, small communities are formed within your own living space and especially when they have a common recreation area, you tend to mingle a lot more easily”.

In support of this view Jess outlined, as a mother, her experiences of the collective aspect of neighbourhood practices that influence Indian women to get active. “Part of the culture was the ladies in the society tend to come down every evening, with a garden in between, they spend time talking then getting into any kind of activity, they would walk around that area”. Drawing deeper insights on socio-cultural determinants that impact on the family members’ individual participation in NZ’s sporting culture, initiated prompt responses towards a ‘lack of common space’ and with ‘non-spontaneous interactions’ within respective neighbourhood.

With a keen interest in organised and recreational sport, Olly immigrated to NZ approximately eight years ago. According to Olly, not having a common ground, and, a perceived lack of spontaneous interaction challenged his engagement with sporting activities within the neighbourhood community. He stated, “If I want to make a team, in
my street in NZ, you don’t have a proper cricket ground, so I don’t think it might ever be possible”. Further, in his view, “every sport requires a team and if there’s no two person, then you can’t do it on your own”. In recounting his experiences, Olly emphasised the influence of non-spontaneous interactions on active behaviours amongst neighbours.

Ben brought more evidence to this standpoint in stating, “I doubt they (NZ neighbourhoods) have a common meeting space and when people prefer to have their own state of privacy [it] makes it difficult to get people together and do things here”. In Ben’s view, a cultural distinction is made explicit between interactive behaviours of Indian and NZ neighbourhood. “Indians tend to know and relate with their immediate neighbours quite well. Whereas here [NZ] people prefer keeping their own space, sometimes you don’t even know who your neighbours are”.

For the most part, all the parents shared similar anecdotes on the lack of common ground in their current neighbourhood as a barrier to their involvement in participating in recreational sport and activity in NZ neighbourhoods. Additionally, the ‘non-spontaneous’ and lack of interactive neighbourhood culture was revealed which challenged their involvement in sport and PA.

In reflecting on native cultural experiences, Raj drew on the essence of rural Indian neighbourhood practices. Raj portrayed rural Indian neighbourhood experiences as, “tremendous communal living where kids just run backwards and forwards” recognising a shared collectivism of community in sport (free play). In describing this feeling, Raj stated “everyone’s so close, it becomes a clicky little thing, a bit gossipy too yet it’s got that other comradeship about it as well”. This made him feel, “very free, very free”.

In exploring his current neighbourhood experiences as an immigrant for nearly sixty years in NZ, Raj is of the view that “people live in their own houses and [are] not integrated. Further, he described his current neighbourhood environment as … “not as close, with more over the fence” interactions. As he has come to recognise, “The contact aspect is not as great here [NZ]”. Raj seems to anchor beliefs around non-spontaneous interactions to be a modern age practice stating, “it is the way life is these days where neighbours don’t even talk to each other” calling it “a social norm”.

With a lack of a common space and non-spontaneous social interactions, parents from the three families’ recognised the ‘need to be self-driven’ towards engaging in sport and PA practices in NZ’s sporting culture. Evidently as Ben stated, “It is so difficult to get people together and do things here” he gives in to this need to be self-driven in NZ’s sporting environments, making explicit this thinking saying “Here [NZ], you got to get yourself motivated to actually go and do it”.

From the collective views of parent’s and children, these families’ come to a belief that:

‘While in India people connected you to sport, in NZ, sport connects you to people’.

Accordingly, Jess’ ‘need’ for getting activity stems from this need to connect with others in the community. In her view, “keeping active will help with more of interaction with people because here (NZ) I can see there is less of interaction”.

Evidently, Ramaya shared her support in stating, “Sports is connecting you with a lot of people. In New Zealand the more sports you play the more you get to know people….”. Consequently, emphasising the role of sport and PA as a medium that connects a collective culture (Indian) to sporting practices of the host society (NZ).

One family touched upon the advantages of initiating spontaneous interactions among neighbours. Olly revealed:

“For last one and a half years, the whole section is talking to each other. People are coming down and the kids are coming down and playing. Watching the kids playing the parents are standing next to each other and they’re talking, so that’s a start. Otherwise everybody was minding their own business.”

Consequently, initiating spontaneous interactions among neighbours, seemingly helps develop a positive experience for Indian families’, mainly children’s participation in neighbourhood sporting practices.

As with the parents commenting on “nobody to play with” and identifying “no place to play”, Crystal (one of the three children) linked her disengagement in sporting behaviours with NZ’s neighbourhood design as “It’s just a driveway and what can I play in a
driveway?” For Indian born Crystal, the ‘neighbourhood’ plays a vital role towards her involvement in sport and activity. She reflects on how her previous (native) neighbourhood experiences which motivated her to stay active and engage in sport:

“When I was in my society (term for neighbourhood) there used to be, just like a field, so we used to play with our friends. So I used to play soccer, badminton, relay, running….You know in India we all come down and play. I used to not play for any sports club or anything in India.” (Crystal, Indian born child)

Having immigrated to NZ five years ago, Crystal is of the view that her current neighbourhood practices pose a challenge to her active engagement in sport and recreational play which consequently may lead to sedentary behavioural practices. She makes this view explicit when stating:

“It’s really different, cause over there (India) you know in the evenings, we used to go down and play rather than watching TV. But over (NZ) here there’s nobody to play so I don’t know what to do other than watching TV or going on a device, cause here people are at home all the time.”

For Crystal, the neighbourhood spaces in India, enabled her interactions with friends through collective physical practices of recreational sport and free play. She emphasised the need for ‘spontaneity’ in neighbourhood cohesion as a determinant to engage in physical behaviours with neighbouring children. “It’s really different, over there (India) you know in the evenings, we used to go down and play rather than watching TV. But over (NZ) here there’s nobody to play.” The other two Indian children born in NZ expressed similar views in relation to their practices of sedentary behaviours. In Sunil’s view, “There’s no activity because there’s no one around here that you can do it with”. Further stating, “I don’t know my neighbours, so I prefer to go on runs. I can do that by myself.” Additionally, questioning his use of open spaces he stated, “I can’t go to the park and play cricket by myself”.

Through these statements, Sunil is emphasising how using open spaces (parks) can be challenged with a ‘non-spontaneous’ interactive neighbourhood culture. Consequently, when considering the participation rates of recreational outdoor behaviours with children from these Indian communities, Sunil drew on the value of connecting people through sport in a club environment. Sunil stated:
“I think [of] a club environment mostly because there would be other people but, if it's in … [the] open, normally when I'm in the open I'm alone, so, when I'm in a club, there's other people there, so it's more fun.”

When comparing Crystal’s experiences with the two NZ born children (Sunil, Shamira), the ‘spontaneous’ part of the neighbourhood culture seems in keeping to the style of social interactions experienced by Sunil within her neighbourhood in NZ. Sunil, NZ born Indian child stated, “I don’t meet anyone outside school, unless someone invites me over to their house, I don’t see them. I could skype them or talk to them”. Sunil made further comment on the nature of non-spontaneous interactions, adding, “If I can see them a lot more outside school we can potentially do sport and stuff”. These statements outline the importance of how unprompted interactions can contribute towards increasing participation of children outside school settings.

In support of the lack of spontaneous interactions, NZ born child Shamira stated, “Over here [NZ] it’s just so easy to switch TV on, jump on your phone and jump on the internet and talk to people”. As the only child in her family, Shamira described the collectivist neighbourhood culture in India as “a breath of fresh air”. When reflecting upon her experiences with her Indian neighbours she stated “you’re always going out with other people. It’s like really refreshing. You walk everywhere, I always lose weight when I go to India.”

While the parents of the three families provided observations with regards to how childhood practices of sport and PA come to evolve in NZ neighbourhoods, Ramaya summarised this view when stating her observations:

“when my daughter was little and my sister was just there, her kids were [in] primary school and we had lot of neighbours here. There used to be a nice playing ground [and] their kids used to be all playing there. But you don’t see that anymore. Children don’t go out so much now but I think they used to before. I think now what is happening is [with] all digital things they [are] too keen watching TV.[so] There is not much physical activity now. You don’t see them doing much. You don’t see many kids.”
Theme 2: Multiculturalism

“I guess as competing forces, forces around the European culture, forces around the Chinese culture, the Japanese, also around the Fijian, that Pacific Island culture. I just see it through the Indian eyes” —Raj

A unifying theme between the three families was the notion that multicultural societies engender ‘conflicting cultural forces’. In exploring individual family’s involvement and experience in NZ’s multicultural context, this theme presents meanings linked to multiculturalism within each case.

Subtheme 1: Finding a common interest- Perceiving sporting practices in multicultural societies

In relation to sport Olly outlined a view that, “with people from different nationalities” finding a “common interest” in sport poses a challenge with diverse nationalities in the host society. He stated, “There are quite a few Chinese, so asking them to play cricket would be like they don’t know the rules or they would not be interested”. As Olly brought attention to using group activity as a catalyst for creating cultural connections, he emphasised the value in unifying ‘like with like cultures’.

By observing cultural trends linked with sporting practices he stated, “I noticed that there are a set of Chinese people coming in almost every day as a group, bonding together and doing their regular swim exercises reminding me my earlier days of swimming”.

However, “making friends with them (Chinese) as they’re from the same home country” was a challenge for Olly, which he highlighted by expressing his need to be united with people from his own Indian culture stating, “I wish my own people could come together and do the same [Swimming]”. As a result, while emphasising the value in unifying ‘like with like cultures’, Olly comes to understand sport can create opportunities for “bonding together”. Subsequently, feeling connected reflects the value of “friendship, fun, laughter”, as key motivators for engaging and adhering to NZ’s sporting culture.

Ben’s view of sport as a medium to unify European (NZ) and Indian cultures was challenged with experiencing “very few Europeans participation in it (cricket)”. In stating “It felt, it felt, I won’t say great”, for Ben “…[cricket] is a common thing, which Indians
and they (Kiwis) can share” drawing parallels with Olly towards unifying communities with sport. However, Ben’s experience of feeling a cultural-disconnect with NZ’s sporting culture has shaped a belief of sport as “not united”.

By contrast, Raj, a keen sportsman in his early days identified connecting with other cultures in NZ “through hockey and cricket”. As a first generation migrant, Raj was exposed to NZ’s sporting culture at a very early age. Thus, comparing his experiences with Olly and Ben (immigrants for ten years), Raj acknowledged, “acquaintances with Kiwis or other Asians, was through sporting environments”. As can be seen, sport may be perceived with contrasting views that stem from individual experiences of conflicting cultural forces of multiculturalism in NZ’s sport and PA practices.

The advantage of mixed cultural influence on recreational activity is greater among mothers of the three families. Accordingly, another aspect of multiculturalism may surface when weaving diverse cultural forces in sport and recreational settings. Zara shared her experiences of dancing in a group of mixed cultures where it was “fun”, really fun”, associating feelings of social inclusiveness with a diverse cultural sporting environment, evidently, “I didn't really feel out of place. They never really spoke about being Indian. I felt more welcomed. I really loved it. It was nice to be with them”. With group activity involving mixed cultures, Zara identified the “the interaction with other mums from different cultures” as “helpful” in motivating her engagement with PA in NZ.

**Subtheme 2: A need to promote Indian cultural modes of activity**

By conflicting cultures within multicultural societies, what seems apparent is a need to promote cultural (Indian) modes of PA. Summarising his family’s perspective, Raj stated, “We want the local community, the local public to know more about Indian culture, to be more involved in it. It is not the lack but lesser of the awareness that is being created.” With a deep-seated need for cultural awareness in a multicultural society, Raj perceived “an attitude change is required in NZ” emphasising “one must roll up one sleeves and get your hands dirty in NZ”.

However, in stating “I don’t know if the white community can do it” Raj expressed uncertainty towards non-Indian (European) involvement in promoting Indian cultural practices. Further recognising this as “a challenge for Indian migrants”, Raj restated “It’s up to the Indian community to promote it (Indian cultural activity)”. From this standpoint
Raj drew attention to the idea of Indian involvement in the promotion of cultural initiatives targeting Indian participation in NZ’s sporting culture.

More insights were gained from Ramaya’s drive in “starting a culture club” to actively engage and promote Indian culture within her community in NZ. “I felt there was a need for promoting Indian culture”, adopting an educational lens through cultural activity, referring to second-generation Indian immigrant children (NZ born Indian children) in NZ. Although for Ramaya, “dance is quite disciplined plus physical”, she captured broader insights in using dance to promote cultural awareness stating,

“Through Indian dance, you’re learning about the culture as well as you’re doing physical activity”

Ramaya reflected a strong motivation in keeping traditional Indian practices in play within a multicultural NZ society in stating, “More than just physical it was teaching some of the Indian games that we used to play in India. Activities like koko, kabbadi, even kite flying.” These statements provide insight in using culturally specific practices to create educational opportunities in traditions, beliefs, and practices while simultaneously engaging active behaviours for Indian immigrant children within a multicultural host society.

With experiences of “European ladies” in “Bollywood dancing” Ramaya expressed elation of commingled cultures, stating “It makes me feel good, it’s quite good … some of them are a lot better than some Indians…Honestly”. Nonetheless, with an uncertainty of limited Western involvement in Indian cultural practices Ramaya stated, “I have no idea how, why they’re not coming. We don’t stop them [European] but they are probably not interested…..”

**Theme 3: Evolving social mindset and beliefs**

When exploring cultural values/attitudes that impact active behaviours of the three Indian immigrant families in NZ, certain members come to evolve traditional behaviours, beliefs and values as immigrants.
**Subtheme 1: Good infrastructure**

In drawing comparisons between India and NZ, drew dominant views of parents towards good infrastructure in NZ to support their involvement in physically active behavioural practices. For example, they cited the use of walking lanes, and cycle lanes which are thought to create opportunities that motivate practices to engage in PA behaviours (incidental/spontaneous, structured activity).

Olly summarised the participants’ views on how using good infrastructure motivates participation in physically active behaviours stating, “walking in NZ there are good footpaths and when people maintain their distances” instills a sense of “enjoyment”, with the practice. In comparing his native (India) experiences Olly stated, “In India you walk like a snake” referring to traffic and air pollution that challenge the ‘enjoyment’ when engaging in outdoor activity.

For Ben, who “picked up cycling here (NZ)”, shared similar views in using good infrastructure as a motivator to engage in spontaneous PA. He associated feelings of safety with the use of cycle tracks thereupon, recognising ‘opportunity’ for “cycling to work and back”. In using humour to reflect the unsafe environment of his native experiences Ben stated, “You’d probably end up as a road kill!!”, thus making known he feels about how poor infrastructure can impede physically active practices. Consequently, good infrastructure supports his practice of building up his activity during the course of his day. Ben’s association with good infrastructure goes a step further in connecting opportunity with good infrastructure towards changing his beliefs about balancing work with exercise.

“It’s a good opportunity to make use of the cycle lanes. I started cycling here. After I’ve begun to experience physical activity last few years, I think you’ve got to have a good balance of things” (Ben)

For Olly, “walking is not only good for health and exercise, and breathing fresh air”, it was also, “most of all was a feeling of being accepted in the society”. Consequently, walking outdoors is perceived as an opportunity for social interactions in the community.
**Subtheme 2: Sharing the house work**

The following statements of the mothers from the three Indian immigrant families puts together a construction of values/attitudes associated with traditional housework practices. Jess stated, “The culture there (India) is very much the male dominated society. The males have to be the breadwinners whereas the female will take care of the housework”. Similarly, Ramaya shared,

In the Indian community the husband does most of the outside work like paying the bills or all those sort of thing and the wife will just do more housework. …. In India it’s different because the men do anything [the neighbours say] what he’s doing here!! They think, he’s a lady’s man! A Word called “Bailo”!!”. It’s different there (India).

Zara viewed housework as a learnt tradition. She stated:

“That's the Indian culture which you learn, you always see your grown-ups doing it, they look after you, they look after your parents, and then it comes naturally I think, that you wanna do the same things for your kids for your husband.”

It seems apparent that the traditional interpretation of housework had evolved with migration, particularly in the cases of Ramaya and Jess. To meet “the cost of living”, Jess’s involvement in the workforce as an immigrant created a need in sharing the housework in NZ. She stated, “I am working now so we’re sharing our household work. I’ve changed it here”. She shared an appreciation for ‘sharing’ the housework stating, “I feel that’s something nice….it feels really good”.

However, when Jess stated, “He’s part of the family so he needs to be sharing every bit of it” she is drawing attention to challenges in sharing housework with unchanging cultural mindsets related to the male perception of housework. In her opinion, what comes to challenge males partaking in housework is “the Indian culture that has played so much of an impact on male thinking.” Further stating, “it was difficult to get that out of him so I need to ask him then he would do it (housework) it was not spontaneous, I expected it to be spontaneous that we both share the housework.”

Ramaya spoke of the ‘domestication of females in the family’ as another cultural belief linked to the tradition of housework. Evidently stating, “if she (daughter), has a house of herself or she gets married I want her to be domesticated”. As an immigrant Ramaya, sharing the housework between the family members enabled her to engage in personal
interests while also fulfilling traditional values and beliefs of the domestication of females.

....“I wanted some chapattis for tea and Shamira is at home, I ring her from work and I say can you make two cups of chapattis she would do it... she can make chapattis which I’m very proud of!!”

Consequently, anchoring to the belief that “there is less dependence with sharing housework” she expressed additional benefits of a ‘shared’ practice in stating “With everybody sharing, I don’t get too tired”. Hence, with other family members involvement in doing the housework Ramaya felt less constrained for time, enabling her to pursue other physical interests such as walking routines and cultural dancing with the community. She stated, “I have time to do my other things”.

Drawing meaning from performing the work alone to benefit her PA, Ramaya stated, “That’s how we grew up you know and probably that has helped me more, from always being active doing those sort of things (housework)”. However, reflecting on traditional practices of housework Ramaya drew attention to the physical effort involved in performing the housework alone. In stating, “it’s too much for me”, she emphasised the great deal of physical effort in performing housework unassisted as the tradition in Indian households.

It is Zara who comes to experience the challenge associated with traditional practices of housework expressed by Ramaya. Zara stated, “you can't find time to do all that stuff (PA), because you concentrate more on your kids, and by the time you wanna do stuff that's like oh I'm too tired, I just wanna sit and relax now”. …

Experiencing a ‘trickledown effect’ of intergenerational traditional beliefs and practices Zara was of the view, “that's the Indian culture which you learn from, you always see your grown-ups doing that stuff, they look after you, they look after your parents, and then it comes naturally”. While in the view of two mothers, housework evolved to be a ‘shared’ activity as immigrants, Zara continued to adhere to the traditional Indian belief of housework, as the duty performed exclusively by the ‘female’ of the household. She stated, “I still prefer doing my own cooking and the vacuuming, I think I feel that I should do my own house work, I should cook, clean, I should make sure my kids are fed, my
husband's fed …”. On exploring her perspective, Zara recognised the cultural influence of a joint family belief system in relation to the female roles within the household. In the next section on equal rights and opportunities Zara unravels, in-depth, the impact of joint families on immigrant beliefs and practices.

Subtheme 3: Equal rights and opportunity

As in the previous section, Zara drew attention to her experience of an upbringing in a joint family. Accordingly, she stated that joint family household customs remain in existence to impact current values/attitudes towards participatory behaviours in sport and PA. She explained:

“ It was big joint family, so, it was hard to go and do other stuff [sport PA], you come home you have your chores to do. With a joint family you have to answer to everybody in the house. The elders they brought us up really strict.”

From this statement alone she makes known the power of control over younger generations brought up in joint families.

Further outlining the impositions within joint families, Zara noted, “You can’t be out after five in the evening, no going to anybody’s house, no mixing with boys”. Zara considered that her experience of these beliefs resulted in unfavourable social consequences, saying “that’s why [I have] not many friends” and she feels “uncomfortable to go where men are there”. She felt these were her initial challenges as an immigrant.

In relation to body image, Zara’s reflections on her early schooling years brings to the surface how social expectation around body image impinge on her current motivation towards engaging in sporting practices. Consequently, demonstrating low self-efficacy, Zara made explicit her aversion to engage in sporting behaviours by stating,

“They used to do sports, but I never really joined. You know how they tease you, so I never really wanted to go and join anything, because I used to be a chubby kid. …. I have always been backward, no going forward, always. Maybe it's from that time that I stopped going forward. It used to make me feel like I don't know, you can't do stuff”

Zara who stated, “I never really joined activities” realises how social expectation of body image have come to influence her aversion towards her current involvement in sport and
PA. Consequently, motivated to “always sit back and relax no joining anything”, her negative experiences of body image and low self-efficacy beliefs, led her to pursue a sedentary lifestyle.

From Zara’s narration above, it may seem the opportunity to engage in physically active behaviours in her early days was restricted with joint family customs. However, an indication that she has gained new insights of culture as an immigrant is made explicit when stating, “…..I think I've opened up a lot coming here [NZ] and then you see other people, I think, here [NZ] I can do activity, it's okay for me and them [the children] to go and do stuff [children playing with friends]”

In addition, from her immigrant experiences of working alongside men, Zara recognises equal rights and opportunity as a social norm in NZ. Accordingly, her evolving native beliefs, and practices, are revealed as she stated:

“I think working with them (male) over here (NZ) I’m getting to open up and think differently … I don't mind talking to them (male), I dont think I can hold back, I'm okay to go and do stuff (gym) with them now….”

As an immigrant influenced by social norms of her host society (now, NZ) she is exposed to more opportunity and experiences from observing other cultures and traditions. Thus recognising the need for change towards her own beliefs and practices. In contrast to her native social belief of her native country, her thoughts and feelings of egalitarianism as an immigrant are made visible when stating, “Here its more accessible for me, I’m able to go and join a club and pay for stuff, and do the stuff I want to do, back home I would not have been able to this …”.

With similar anecdotes shared by the other two mothers, Jess touched upon cultural beliefs “that the middle aged woman would not get into a sports activity for sure”. This notion is defied by the societal practices in NZ when as an immigrant she observed, “a whole lot of ladies, married ladies with their children, they come out and swim”. In recognising female practices in a host community she is led to beliefs that positively impact sporting behaviours and practices of immigrants. This is summarised by Jess in her following statement:
“Oh it’s very encouraging, it definitely has an impact on me seeing if they [middle aged mothers] can give that kind of time and make time for the children as well, it’s not only for the children, the ladies coming out too. So that encourages me I said I should be making the time.”

With all participants identifying NZ social norms to provide equal opportunities for participation in sport and PA, the mothers’ experiences emphasise the essence of this notion. Ramaya highlighted political influence on sporting practices that differ between India and NZ’s sporting environments as, “sports is very healthy and non political”…while in in India everything is status. If you come from a well to do family you’re not expected to do manual labour [PA]….” Similarly, when Jess stated “In New Zealand, there’s no caste system, they’re broad minded and the spread is wide enough for anybody to take it up at any age group”, Jess made explicit the nature of NZ’s social principles that positively influence Indian female participation in sport and PA. All participants noted their experience of the egalitarian aspects in their social encounters with sport and PA. This sentiment is summarised by Olly: “in New Zealand yes you can participate in anything, if you’ve got ability you can do anything you like.”

Summary
This chapter presents the findings of the study that explored the experiences of Indian immigrant families’ participation in sport and PA in Auckland, NZ. These reported findings were based on the analysis of in-depth interview transcripts, participant self-reflection reports and supported by a short demographic questionnaire and the researcher’s observations by use of reflective journals and memos. Findings were discussed in three parts to correspond with the three major themes that emerged from the data. The information reported under theme one in the first section of this chapter focused on neighbourhood influences to Indian immigrant participation in sport and PA. Further, this emphasises how neighbourhood design and interactions can impact parents and children’s perceptions and experiences towards the engagement and disengagement of physically active behaviours. Consequently, this brings to surface their perceptions, and beliefs in the need to be self-driven given the ‘lack of common space’ (playscapes) that overlap with ‘non-spontaneous interactions’ to impact participation rates in sport and PA.

‘Multiculturalism’ emerged as the second theme when exploring what influences the decision of Indian immigrant families’ to participate in sport and PA in NZ. In particular,
multiculturalism revealed the effect of conflicting cultural forces, and its impact on individual experiences of sports and physically active participatory behaviours in NZ’s social dynamic. Participants described a range of views from positive experiences of feeling motivated by observing other cultures, to challenges faced in finding common sporting interests. Additionally, for the most part, participants were of the impression that what was lacking in action was the use of sport and cultural activity as a medium to connect diverse cultures.

The third theme that emerged was drawn from experiencing good infrastructure and egalitarian principles in NZ, to influence and evolve traditional beliefs and practices of Indian immigrant families. For the most part, parents and children agreed that with good infrastructure brings more opportunity and living in a society that believes in equal rights and opportunities evolves traditional practices in favour of PA and engagement in NZ’s sporting culture. To that end, Chapter 5 discusses the themes that emerged from this study in relation to previous studies and literature, in order to draw conclusions and recommendations about future practice and research.
Chapter 5. Discussion

This study addressed the following research question

*What influences the decisions of Indian immigrant families’ to participate in sport and physical activity in NZ?*

The present study revealed that neighbourhood (design and interactions) (Theme 1), multiculturalism (Theme 2) and evolving social mindset and beliefs (Theme 3) influenced the participation and practices of Indian immigrant families’ in sport and PA. The parents and children made comparisons with their socio-cultural and environmental experiences in India. Experiences within NZ’s neighbourhood had a greater effect on the Indian immigrant children, whereas the themes of multiculturalism and evolving social mindset, and beliefs, had a much greater effect on the Indian immigrant parents. As the present data marked the first research focused solely on Indian (versus South Asian) immigrants (Indian descent) in NZ, novel findings have emerged. The present research has further extended, refined and expanded findings consistent with existing literature. Consequently, this suggests new perspectives on NZ’s sport and PA practices involving the participation of Indian immigrant populace.

**Theme 1: Neighbourhood design and interactions**

In the present study, NZ’s physical and social neighbourhood surroundings had influenced the participatory behaviours of Indian immigrant parents and children in everyday sporting and PA practices. For the children, the lack of common space was a barrier to shared sporting behaviours with neighbouring children. However, the Indian parents felt the limited interactions between neighbours (non-spontaneous interactions) impacted their (family) decision to engage in physically active behaviours. As parents and children admitted to being more PA with greater social connections within native (Indian) contexts, their neighbourhood social ties were a strong precursor (facilitator) towards initiating their PA behaviours and practices in NZ.

The Indian parents identified a common space as a ‘meeting’ point (precursor), whereby interactions with neighbouring parents initiated participatory behaviours in recreational sport and PA (group walks-mothers, team sport-fathers). For Indian families, the common space was a catalyst for PA and sporting behaviours. These Indian families conveyed that
traditionally, a shared common space (natural- field, built- open space) was in the form of a playground in their native-Indian neighbourhoods. Similarly, Indian children associated their sporting behaviours with a ‘common space’, such as a playground where neighbouring children would partake in routine after-school sporting activities (play games, free play, sport). The limited shared-common space in NZ’s neighbourhood had ‘conveyed’ barriers for initiating sporting and PA behavioural practices. The finding from the present study align with a similar study by Rajaraman and colleagues (Rajaraman et al., 2015) who investigated the perceived benefits, disadvantages, facilitators, and barriers for PA among South Asian adolescents in India and Canada. In their study the role of built environments and its impact on active behavioural practices was also emphasised. Particularly, the Rajaraman study found that ‘unsafe’ space and the ‘long distance’ to a playground were barriers to active behaviours in South Asian adolescent children.

The present study exemplified that Indian immigrant families associated the efficacious use of a common space with the strength of social interactions (relationships) with their neighbours. Drawing comparisons with native experiences, all Indian immigrant parents and children participants recognised that the neighbourhood connections acted as a precursor that motivated their daily participation and practices in sport and PA. For these families, native neighbourhood experiences were built upon a strong sense of community that spread across other aspects of daily communal living (see chapter 1 collectivist cultures). They recognise that the core of a strong neighbourhood relationship (sharing, interactions) had influenced their PA and sporting practices. In other words, sport and PA practices were initiated only when neighbourhood parents and children collectively engaged in its practice. As a result, a common space added value only when strong connections were formed among neighbours, towards engaging the ‘community’ in active behaviours. Therefore, amidst close neighbourhood/social connections, the common space became a catalyst for neighbouring parents and children to willingly engage in social sporting behaviours and practices as a community (walking for women, sport for fathers, free play/sport for children).

From a NZ neighbourhood standpoint, a lack of common space posed barriers for the Indian children and parents to intermingle, mainly when social ties were weak within neighbouring communities. Indian immigrant families experienced that, in NZ, a spontaneous social conversation with their immediate neighbours was rare and, if so, was often over the fence, and initiated by the Indian parents. They perceived from limited exchange of words and weak social connections that in NZ, neighbours preferred their
own state of privacy, with neighbours not interacting with each other as the present day social norm. A non-interactive culture has led to a perceived ‘disconnect’ among Indian parents and children within the neighbourhood environment, that significantly differs from their native collectivist traditions. The lack of social interactions in NZ’s neighbourhood has resulted in Indian immigrant children to adopt sedentary behaviours. With a lack of common space (natural/built playscapes), these children capitulated to technological means in connecting with their peers. In other words, connections built from active neighbourhood practices from using playscapes were replaced with screen-phones, and Skype in NZ. Consequently, Indian immigrant teenagers come to be ‘screenagers’ with inactivity in NZ’s neighbourhood setting. Hence, the present study has inferred that given the technological age, the need for social connections becomes an essential aspect of PA participation and practices, mainly for Indian born children in NZ with familial roots from collectivist cultures (see chapter 1).

Only in the last two decades has research investigated the link between built environment and neighbourhood conditions on PA and sedentary practices in children (Ding, Sallis, Kerr, Lee, & Rosenberg, 2011). Franzini (2010) identified social ties, collective socialisation of children, and collective efficacy positively influenced neighbourhood PA behaviours among children. Previously, authors Sallis and Glanz (2006) and Caroll-Scott et al. (2013) identified that the lack of quality playgrounds and a trusting relationship among neighbours, impacted the PA participation and practices of resident children. Earlier Rajaraman et al. (2015) advocated for the productive use of outdoor space (built environment) necessitating the need for societal support in engaging the PA behaviours of South Asian female adolescents. With Indian immigrant children seen as screenagers in a technological age, the present study has drawn agreement with Timperio, Crawford, Ball, and Salmon (2017) that recognised the importance of sports facilities and playgrounds to positively benefit PA behaviours among children (less TV viewing). As the first longitudinal study of PA, Timperio et al. (2017) solidified the evidence that built environments impact the promotion of sedentary behaviours. These authors examined neighbourhood typologies in Australia, and found mixed land use, playgrounds and sports venues were positively linked with less TV viewing. While limitations (proxy reports, accelerometer not geo-referenced, no location of sedentary/PA during non-school hours) accompanied the study, the need to reflect diversity in ethnic cultures that inform rigour and insights of findings was highlighted (Timperio et al., 2017).
From wider literature in the U.S, one in every four children reside in an immigrant family (Hernandez & Charney, 1998). In 2008, Asian immigrants alongside Hispanic and black children did not meet the recommended guidelines for PA (Singh, Yu, Siahpush, & Kogan, 2008). Although the study involved 68,000 children, it didn’t account for neighbourhood environmental influences on immigrant children’s PA practice (Singh et al., 2008). It was the Brewer and Kimbro (2014) study that first examined the neighbourhood context and its social impact on PA of resident immigrant children (Hispanic, Black and Asian children) to the U.S born white children. Their study identified Hispanic children born outside the U.S were inactive in a neighbourhood with higher immigrant concentrations. Drawing limitations from self-report measures, limited samples of foreign-born children, and inability to clearly identify the sub groups of U.S born, Hispanic, Asian and other immigrants, the study didn’t account for the cultural diversity found in racial/ethnic sub-groups. Singh et al (2008) recognised that accounting for cultural diversity was vital, as PA behaviours of children may differ with ethnic sub-cultural groups (Singh et al., 2008). Nonetheless, when identifying low PA in immigrant children in the U.S, author Singh (2008) and Brewer and Kimbro (2014) emphasised wider aspects (race/ethnicity, nativity) in relation to neighbourhood contexts influenced immigrant children PA behaviours and practices. These authors make explicit what Leventhal and Brooks-Gunn (2000) found, where PA of children was influenced by different cultural and social norms that are practiced amongst the residents within a particular neighbourhood.

The present data demonstrated within Indian immigrant families, that the lack of PA had emerged from the non-social connectedness, creating a need for these families to be self-driven in order to partake in active sporting behaviours in NZ. In essence, Indian immigrant families in NZ associated a value that ‘sport’ would fulfill their need for social connectedness. From the present data, the PA practices of Indian immigrant families establishes strong social ties (social interactions) with their neighbourhood communities. Hence, this infers that Indian immigrant families understand that, ‘While in India people connect you to sport, in NZ sport connects you to people’. The present has drawn attention for NZ to view the need for ‘sport as the thread that ties the knot between Indians and other New Zealanders’.
The difference between everyday lifestyle activities that arise from culturally distinctive neighbourhood behaviours and practices.

From the wider literature, it stands as no assumption that PA practices had differed across different ethnic groups (Lichter, 2013). The present study demonstrates the views of authors Ramanathan and Crocker (2009) suggesting that Indian families look upon sport as an opportunity for social connection. These authors made explicit that Indian children engaged in outdoor activity are being encouraged by their parents as active role models for their children (Ramanathan & Crocker, 2009). The present findings exemplified a greater need for social interaction, as was the need for a common space in NZ neighbourhoods. Both of which were considered a vital aspect to engage PA behaviours among Indian immigrant parents and children in NZ. The present study has drawn parallels with the wider evidence that recognised experiences of neighbourhood environments impact the inactive behaviours among children in their neighbourhood (Lichter, 2013; Yen & Kaplan, 1999).

As introduced in this thesis (chapter 1), collectivist cultures are a vital aspect within family practices of the Indian community. From a neighbourhood standpoint (common space and interactions) the appropriate use of built environments should be aimed at provoking the Indian collectivist patterns of PA behaviours. Let us consider previous research that has emphasised “activities should also be considered that can be built into people’s everyday lives by capitalising on the kinds of things they do already” (Lawton et al., 2006). From this standpoint, the present study has inferred that a built environment may capitalise on culturally inherent ‘patterns’ of PA practices within neighbourhood spaces. In view that a built neighbourhood space can reinforce active participatory behaviours, the present study has refined the views in using built environments to drawing in ‘cultural capital’ from latching on to already familiar patterns of PA practices among Indian communities, at the neighbourhood level. Such a view would draw agreement with
authors Rajaraman (2015) and Ramanathan (2009) that recognised enjoyment of playing active games for Indian children (Rajaraman et al., 2015) and respecting the cultural aspect of familialism as vital aspects that motivate their active behaviours. Thus agreeing with previous studies that emphasised the need to consider culturally sensitive ways when deciding on PA for ethnic minority groups (Fischbacher et al., 2004). Given the wider evidence, it is reasonable to assume, ‘the ripple effect’ of inactive neighbourhoods and social ties, with its presence in NZ’s neighbourhood settings.

Theme 2: Multiculturalism

The present study revealed that physically active behaviours of Indian immigrant’s parents were influenced by NZ’s multicultural societies (European, Chinese, Japanese, Pacific). Among these diverse nationalities, most Indian fathers were challenged to find a common sporting interest that matched with Indian sporting behaviours and practices (playing cricket). Long-term Indian immigrants (see chapter 3 Table 6) perceived the co-existing diverse cultures in NZ had weakened the awareness of Indian traditional practices. Accordingly, Indian cultural dance and Indian games (Koko, Kabbaddi, Kite flying) were introduced to promote the awareness of Indian culture and traditional practices. These Indian parents recognised the limited involvement from non-Indian communities in Indian cricket and cultural dance (Bollywood). As a result, these families perceived a cultural disconnect within the current sporting practices in NZ. However, the inclusion of diverse nationalities had motivated the active behaviours of Indian mothers in NZ when participating in recreational group activities, such as dance. All these factors (common interest, cultural disconnect, need for cultural awareness, non-Indian participation) exemplified a greater effort was needed towards using sport and cultural activities as a way of developing social inclusion among the diverse cultures in NZ’s sport and PA contexts.

In the present study, Indian families recognised NZ’s society was made up of different immigrant nationalities. The diversity of nationalities contrasted their native social structure where many sub-cultures were connected to a single national culture (chapter 1). In NZ, the different nationalities conveyed each culture to have their own national sporting interests. Accordingly, the majority of Indian immigrant fathers were challenged in finding a common sporting interest that matched with Indian sporting practices. The present data revealed that essentially, sporting behaviours stem from engaging in either past family sporting practice, by direct family involvement in similar sporting activities,
or through cultural sporting heritage (Indian traditional/folklore dance, Indian games, cricket). It seemed that Indian immigrant families maintained their cultural roots from displaying a strong connection to participate in familiar sport and PA that the family unit previously experienced (India). The fathers perceived each culture adhered to their native sporting behaviours/practices in NZ, which challenged their ability to share their native sporting practices (cricket) with non-Indian cultures (Chinese). Additionally, they experienced less involvement from other cultures (European) in Indian dominated practices such as cricket and cultural dance. As a result, they understood sport in NZ reflected the idea of ‘each culture to their own’. Consequently, the fathers experienced a cultural disconnect within NZ’s sporting practices. However, for one father, the early involvement (young age) as an immigrant in NZ’s sporting culture, had engrained connections with diverse cultures. More data can substantiate the impact of integrating (age-related) young Indian immigrants in NZ’s sporting practices. Nonetheless, for the most part, the experiences of Indian immigrant families had entailed the need to reflect greater participation of the non-Indian community’s involvement in Indian dominated practices such as, cricket and Indian cultural dance. The families looked upon sport and cultural activity as opportunities to integrate diverse cultures that enabled social inclusiveness. Therefore, Indian immigrant parents (fathers, mothers) had exemplified that a greater effort be made to unify diverse cultures in NZ’s sporting practices. The present study has drawn agreement with authors Allen, Drane, Byon, and Mohn (2010) and Y. Lee and Funk (2011) who investigated patterns of immigration and how people established a community and identified sport and PA as a medium that integrated cultural diversity in the wider community (Allen et al., 2010; Y. Lee & Funk, 2011).

Given the present data, it may seem immigration of Indian parents during their adulthood may have drawn a greater challenge toward the integration of diverse sporting cultures in NZ. From this standpoint, it seems likely that the integration of Indian immigrant families in NZ may draw the need to consider the possibility for the early engagement of Indian immigrant children within NZ’s multicultural sporting communities. In an attempt to find common sporting interests, the growing challenge for NZ’s diverse immigrant culture requires a greater focus in and around the social integration of diverse cultures. One aspect could be aimed at programs implemented at initiating early involvement of Indian immigrant children in the participation and practices of NZ’s sport and PA. I draw from the aspect of familial and social collectivism of Indian society (chapter 1), and envision the social inclusion of children will dissolve the barriers for Indian parents towards positive integration in the multicultural practice of sport and PA in NZ.
In the present study, the diverse nationalities had influenced positive experiences among Indian immigrant mothers. The inclusion of mixed cultures in a group recreational activity setting (swimming, dance) had prompted a sense of social inclusiveness for Indian mothers to partake in sporting activities (dance, sport). These mothers understood native practices embedded cultural expectations on female body image, caste, and socio-gender roles, which were less pronounced within a group of diverse nationalities. They observed mothers from different cultures participating in PA and sport, to value their need to stay physically active in NZ. As a result, multicultural communities in sport and PA motivated participatory sporting behaviours among these Indian immigrant mothers in NZ. Previously, Vahabi and Damba (2015) found that interacting with other Indian women in their social environment strengthened the morale of the South Asian immigrant women (Vahabi & Damba, 2015). The present study data has drawn agreement with the ‘idea’ of social interaction established by these authors within multicultural contexts. Further agreeing with Vahabi (2012) and Vahabi and Damba (2015) that social aspects such as social integration, emotional support and social reassurance played a vital role in engaging immigrant women in PA. However, these authors emphasised that PA (cultural dance) when set within an approach that reflected fairness, equality and empowerment had advantaged the South Asian women in her own community (Vahabi & Damba, 2015). From a mixed cultural standpoint, Nakamura and Donnelly (2017) added insight that “how people who are different interact with each other (interculturalism)” was a ‘type’ of multiculturalism (p.112). The study may be considered a key study that refined the evidence on participation of mixed (PA with other cultures/ethnicities) and separate (PA practiced with same ethnic community) settings. These authors found that initially, one maintained PA practices within one’s own culture and evolved to include other cultures or cultural (new sport and PA) practices over a lifespan and/or in response to situations (economic needs, competitiveness, less players). From the Indian mothers perceiving benefits from a mixed cultural group in PA practices in NZ, the present study has drawn agreement with the Nakamura et al. (2017) study that recognised social inclusion to arise in view of multicultural communities.

The present data showed that Indian immigrant families perceived the need to adopt an independent and assertive approach (self-assertive ambitions), towards the promotion of Indian cultural modes of PA (Classical Dance, Folklore, Bollywood). They perceived that with diverse nationalities the awareness of Indian culture and its practices were dampened
as a result, traditional Indian sporting games (Koko, Kite flying, Kabbadi) amidst Indian classical, cultural and folklore dances were introduced to provide cultural education/awareness mainly among the NZ-born Indian children (second-generation). Simultaneously, these cultural practices had collectively engaged the active behaviours among other Indian immigrant families. Therefore, the present study inferred that the use of self-assertiveness against co-existing cultural forces in NZ enabled cultural modes of PA to serve dual functions (education, PA). Similarly, Nakamura et al (2017) viewed that ethnic groups turned into associations (groups) that provided a specific service to participate in their own PA practices, on their own terms and conditions. Previous authors Allen et al. (2010) and Ricatti and Klugman (2013) identified for an ethnic group, sport and PA practices were utilised to maintain the ethnic identity that existed from the beginning of time. In the use of self-assertive behaviours to promote cultural PA and games, the present study has drawn agreement with these authors inferring that sport and PA were adopted to combat discriminatory or feeling insignificant from a culturally diverse community.

While the present data had implicitly revealed hints of discrimination at an individual level (few immigrant fathers), racial discrimination was not a pronounced feature within a familial setting. However the present study demonstrated the use of self-assertiveness was an act that reflected an inner state of feeling a sense of cultural discrimination within the forces of multicultural settings. From a discriminatory standpoint, the present study has drawn attention to (Ward, Bochner, & Furnham, 2001) study, that recognised 89% of New Zealanders who conceded to multiculturalism had perceived immigrants to have unique attributes that made positive contributions. These authors also found that ‘separation’ was an approach against the discrimination perceived by immigrants that assimilated to a different culture (NZ). Internationally, authors Barry and Groli (2003) and Ying, Lee, and Tsai (2000) brought attention to separation among Asian immigrants and its link with perceived discrimination.

As Ward et al. (2001) suggested, maintaining one’s cultural heritage favoured the integration of immigrants among many diverse cultures in NZ. This created greater self-assurance and satisfaction of life, where integration has been linked with fewer concerns with behavioural problems in immigrants (Ward et al., 2001). Self-assertiveness may favour integration of Indian immigrants but cannot be inferred, with limited data, in the present study. However, NZ must be vigilant to causes of self-assertive behaviours, so they do not set a ground for greater segregation of Indian communities within NZ’s diverse co-existing cultural practices. It may seem that the present finding on
multiculturalism (cultural disconnect) could share overlaps with neighbourhood-non-spontaneous interactions. Thus, agreeing with Ward et al. (2001), in view that in relation to unsociable responses one must account for prevailing discriminatory factors in NZ.

There stands no doubt for a need to understand the behavioural strategies of Indian immigrants (social issues, mindsets and cultural change) as they make their way into multicultural communities. The present thesis echoes in agreement with authors Nakamura and Donnelly (2017), that we cannot consider multiculturalism as ethnic and linguistic diversity alone, while continue to turn a blind eye to physical cultural diversity (dance, sport, games, activities) in our communities. From the present findings, the need to consider PA and sport as a medium to unite diverse cultures prevails in NZ in relation to Indian immigrant families.

Making the assumption that cultural beliefs pose a challenge to sports participation, draws attention to authors (T. Taylor & Toohey, 1998) that emphasise challenges in sporting activity to stem only when sports providers hold predisposed views of one’s culture. In the present study, all three Indian immigrant families advocated for the future of ‘sport to be perceived as the vehicle that develops social inclusiveness’ for Indian immigrants. When assimilating the Indian immigrant community into the practices of sport and PA in NZ, their current beliefs/insights should be considered and reflected within NZ’s sporting system (initiatives). Moreover, the following theme (evolving social mindsets and beliefs) may affirm the author’s views and the Nakamura (2017) study that PA practices over one’s lifespan can be redefined with the unpredictableness of an individual’s identity.

**Theme 3: Evolving social mindset and beliefs**

The present study revealed Indian immigrant fathers were motivated from experiencing NZ’s physical infrastructure, which has provided an opportunity for these families to partake in PA. As immigrants, Indian immigrant families displayed a shift from traditional housework beliefs and practices, distinct from their native experiences. The experiences of NZ’s egalitarian social principles brought greater advantages for Indian females to evolve from previous native beliefs and practices (native socio-gender roles). Therefore, the present study has exemplified the need to appreciate the present day thinking of Indian cultural patterns of PA that has evolved from traditional beliefs and practices in NZ.
The present data identified NZ’s physical infrastructure supported/underpinned positive experiences (opportunity) which motivated Indian immigrant fathers to pursue physically active behaviours. When compared to their native experiences, NZ’s cycle lanes and footpaths led them to perceive PA as safe and enjoyable. Particularly in contrast to their native experiences, the NZ environment produced unpolluted air and surroundings, with better road/traffic safety. Consequently, these Indian fathers had built their activity in small doses during the course of their day. They displayed ‘willingness’ to perform active behaviours such as cycling to work and engaging in daily walking behaviours. With NZ’s physical structures, Indian immigrant fathers had valued PA as it was a requisite in their daily life. They understood that performing daily exercise was on par with other life priorities such as work, family and financial stability.

Image 5. Illustrates with participant quotes the influence of infrastructure on PA beliefs and practices.

The present study found that experiencing enjoyment and safety motivated the participatory behaviours of Indian immigrant families. Previously, authors Johnson (2000) and Rajaraman et al. (2015) found that in European societies, enjoyment and safety of performing PA, with access to safe space were aspects linked with engaging South Asian participation in PA.

From the present data, the aspect of safety may share overlaps with earlier findings on the built environment in relation to neighbourhood settings. Accordingly, the present study inferred that aspects of safety and enjoyment can be linked with good infrastructure, and thus be built into NZ’s physical environments. Such considerations, through built environments within NZ’s socio-environmental settings, account for the positive experiences that reflect favourable patterns of PA behaviours in Indian immigrants.
In the present study, Indian immigrant mothers acknowledged that the role of the Indian female was to perform regular housekeeping such as cleaning and tidying, including cooking and caring for the family. The data revealed that from observing female family members, across the generations, perform traditional housework single-handedly, that housework practices became a natural tendency for the Indian mother. Such practices were solidified when a male dominated native society considered the Indian male as the breadwinner, responsible for outdoor (as opposed to indoor) behaviours (work, outdoor chores). Accordingly, a male engaging in housework duty was looked down upon in their native community. Hence, Indian immigrant mothers identified native gender and socio-cultural norms often strengthen the female belief to adhere to traditional housework practice, as a single-handed task undertaken by the Indian female. In view of these mother’s native experiences, the present study had drawn agreement with studies that identified different gender roles prevailed in South Asian (Indian) communities (Lawton et al., 2006; Patel et al., 2012; Ramanathan & Crocker, 2009; Vahabi et al., 2012) compared to their immigrant experiences of shared housework.

Interestingly, the present study identified that these Indian born immigrant mothers motivated the involvement of the Indian male and their children to participate in the housework chores in NZ. Furthermore, they recognised a shared housework practice resulted in less dependency, or expectation from other family members, on the mother to perform the housework duties. Additionally, involving other family members in housework had produced greater independence, with more time and energy to engage in other activities (Cultural dance, routine walking). Moreover, cultivating such traditional habits in the daughter was considered to be the role of the mother. Accordingly, a shared practice brought an opportunity for fulfilling the role/expectation of the mother. Thus, by encouraging the involvement of family members in sharing the housework, had advantaged Indian mothers to fulfill their traditional roles (domesticating the female) and making time for active pursuits.

As these Indian immigrants families evolved their traditional housework practices and beliefs in NZ, the present study refined, and therefore, expanded the findings that recognised a lack of time and motivation has hindered the female to participate in sport and PA (Johnson, 2000; Sriskantharajah & Kai, 2007; Vahabi et al., 2012; Vahabi & Damba, 2015). Furthermore, the shared housework practices in the present study drew
agreement with the Ramanathan and Crocker (2009) and Dave et al. (2015) studies that identified a link between performing housework chores and the domestication of female.

The present data identified that a reluctance of the Indian male to partake in housework duty was one aspect that challenged a shared housework practice. As immigrants in NZ, Indian males who continued to adhere to their traditional gender roles, displayed a reluctance (lack of willingness) to spontaneously contribute to the housework. Considering the number of years spent as an immigrant in NZ (NZY) across these families (Table 6 chapter 4), the study inferred that the Indian male mindset had evolved with greater immigrant years in NZ (> 20 NZY). One reason to influence their native beliefs and practices could stem from NZ’s social norms (discussed later in this chapter). Nonetheless, the challenge to stem from the Indian male mindset paralleled the view of previous authors that recognised anchoring to beliefs set within an Indian socio-cultural system, resulted in Indian males and females falling victim to their distinct gender roles (Daniel & Wilbur, 2011; Patel et al., 2012; Vahabi & Damba, 2015).

The present study revealed that joint family systems, and body image in early years influenced the participatory behaviours of the Indian female in adulthood. In the view of one mother, the data revealed that bringing up the younger female generation, among extended family members living in one household (the joint family system), had challenged a shared housework practice as an adult immigrant in NZ. The traditional gender roles and socio-cultural beliefs were imposed upon the younger female members living in the same household, by older members of the family. Under the influence of elders and older extended family members, the younger female was expected to stay indoors performing household duties and roles such as cleaning, vacuuming and cooking. Furthermore, the power of control within the joint family system brought upon restriction on outdoor social behaviours such as interacting with males and playing outdoor sports and other PA. These early female experiences in traditional joint family practices resulted in limited friendships and feeling uncomfortable around men in adult years. Thus, prompting unsociable behaviours that challenged outdoor participatory behaviours of Indian females during adult years. Additionally, the present data revealed that negative experiences around physical body image in early years challenged PA participation in adulthood. Accordingly, in early years, not reflecting the socially acceptable (slim) ideal physical image had influenced their self-motivation and confidence to participate in early sporting behaviours. The data revealed that from anchoring to negative beliefs in early
years, the Indian female as an adult had displayed a reluctance to participate in sporting behaviours. Hence, socio-cultural beliefs of gender-roles, in joint families, and body image acted as barriers in early years, and come to influence the participatory behaviours of Indian females in adulthood.

Previously, Lawton et al. (2006) found for the Indian female, meeting expected demands of increasing PA on migrating in adult years was a challenge. The author identified female patterns of inactivity developed in early years may stem from unsociable environments and lack of participation in sports. Dave et al. (2015) realised family related barriers in younger women were recognised to challenge female participation in PA, where the evidence and findings in the present study, have supported the need to consider an individual’s upbringing as a potential influencer to adult participatory behaviour. Such insights are worthwhile when propelling adult sporting practices of Indian females in NZ.

The Ramanathan and Crocker (2009) study recognised a joint family system provided an opportunity for play and sporting activity through engaging with relatives (cousins, grandparents) of the family. Despite these authors recognising different viewpoints on joint families, the present study has drawn agreement with the view that early cultural practices (joint family) come to influence the experiences towards female participatory behaviours involving PA (Dave et al., 2015; Ramanathan & Crocker, 2009).

Interestingly, and importantly, the present data identified Indian immigrant mothers experienced the egalitarian social principles in NZ’s society and evolved from traditional beliefs (housework, joint family beliefs, body image). They recognised the fulfillment of their traditional female duties in their middle years impeded upon their participation in sporting behaviours. They drew comparisons with their native society, and recognised NZ social norms were free of political influences such as family status-caste, class, socio-cultural and gender expectation. As a result, the Indian immigrant mothers were motivated to participate in sporting and PA practices. In NZ, they experienced equal rights and opportunities that had weakened their need to adhere to traditional beliefs and practices (joint family/ intergenerational practices, gender role housework, socio-cultural expectations). As a result, these mothers had experienced greater motivation (increased self-confidence) to try new opportunities in sport and PA.

In view of native experiences, the present data drew agreement with Lawton (2006) that recognised barriers from gender norms, social rules and cultural expectation pertained more to the Indian female (Lawton et al., 2006). Further agreeing with the Dave et al. (2015) study that traditional Indian beliefs recognised middle-aged women should put
family needs ahead of their own, whereby this hindered their engagement in PA practices. However, Indian born immigrant mothers (first generation) had evolved their social mindset and beliefs to align with NZ’s egalitarian social norms, which the present study has refined and expanded on. The Vahabi et al. (2012) study identified second-generation South Asian immigrants had deviated from their traditional female roles as mother and caregivers in Western cultures. On account of using focus groups, the study was limited for an in-depth exploration of the findings. However, given these findings, the present study has shown that despite knowing collectivist traditions of Indian families, there is a need to capture the experiences (thoughts, beliefs, identity) of the Indian female as a mother, daughter and wife within native and immigrant contexts. A wider awareness of the current evolving mindsets and beliefs (shared housework, time for PA, Indian male participation) may prompt a change among those families that continue to adhere to traditional beliefs and practices in NZ.

Vahabi and Damba (2015) identified that adopting a ‘general’ approach to initiatives fails to recognise specific community-cultural practices that differ from mainstream culture, and have previously faced challenges when aimed at improving population health initiatives. Dave (2015), adopted community based participatory research, and revealed the need to identify socio-cultural barriers as a vital aspect for informing interventions aimed at PA promotion in South Asian women. In the present study, social norms in the host country positively impacted the three Indian immigrant mothers, but have suggested the need for current initiatives, within sporting systems in NZ, to reflect an understanding of the current mindsets of these Indian immigrants within the context of NZ’s social norms.

In summary, neighbourhood design and social interactions influenced Indian immigrant sport and PA participation and practices. In NZ’s neighbourhoods, the lack of common space and non-spontaneous interactions had prompted sedentary behaviours among Indian immigrant children. Indian immigrant families identified the need to be self-driven, and recognised sport as a way to fulfill their need for social connections within NZ’s social contexts. The present study drew upon the need for NZ to consider social connections as an essential aspect of PA and sporting practices for Indian immigrant families. These families traditionally bear their roots from collectivist cultures (see chapter 1), with the present study recognising the need to capitalise on culturally specific neighbourhood ‘patterns’ for Indian immigrant families’ to participate in sport and PA.
Furthermore, as NZ’s diverse nationalities engaged in various sporting interests, Indian immigrant parents have strongly recognised a need to integrate diverse cultures in Indian sport and cultural activities in NZ. As the Indian immigrant fathers experienced safe and enjoyable surrounds from NZ’s outdoor physical infrastructure they drew upon a ‘willingness’ to participate in PA. As the families experienced NZ’s social egalitarian norms they have evolved their social mindset, and deviated away from their traditional housework practices. Overall, neighbourhood, multiculturalism and evolving social mindsets and beliefs may overlap as influencers in the decision of Indian immigrant families to participate in sport and PA in NZ. New Zealanders must ensure that sport provides the potential to define different boundaries, in rethinking the ‘socio-cultural set point’ for the sustainable, active integration of Indian immigrants.

**Where to from here? Insights from previous evidence**

Evidence suggests the importance of education with interventions that promote long-term lifestyle changes, these should account for individual differences within their social, cultural and historical viewpoints (Lawton, 2003; Lawton et al., 2006). Parents and teachers should become involved in efforts that encourage Indian children particularly when transitioning to adolescents to participate in PA. For target populations, school based interventions have been proven successful in improving active behaviours and minimising any injustice between population groups (Vander Ploeg, Maximova, McGavock, Davis, & Veugelers, 2014).

The need for PA to be determined from a ‘culturally specific lens’ prevails, as everyday traditions and cultural practices may involve activities that may not be recognised as being typical forms of PA to researchers and health promoters (Fischbacher et al., 2004; Lawton et al., 2006). Therefore, I draw from the evidence that health promoters/cultural activators should work in support of and not against existing cultural practices, beliefs and perceptions that exist within the Indian immigrant community towards promoting their PA participation and practices (Lawton et al., 2006). Hence, interventions should be thoughtfully carried out in favour of respecting cultural views and backgrounds (T. Greenhalgh, Collard, & Begum, 2005; Hawthorne, 1997). Johnson (2000) emphasised that planning initiatives and interventions that claim to be culturally responsive may be accounting for the ‘fear of racial provocation’ and the ‘modesty’ that prevails among South Asian men and women. The ‘modest standpoint, is a reminder that ‘collectivist’
tendencies among Indian communities (see Indian culture introduction chapter) reflect social behaviours where a powerful sense of belonging and valuing others (family, relatives, friends) comes before one’s own needs and preferences. Such collectivist cultural aspects need to be well understood and reflected by NZ’s sporting providers/systems that urge the participation of Indian immigrant communities in sport and PA. D. Thomas and Dyall (1999) recognised that within the dominant egalitarian style of social interactions, emerges the informal approach in their style of communication (downplay of acknowledging status differences, reluctance in using status markers). Such processes give an example that contrasts the practices of Asians, where respect for higher status is a value in conversation (D. Thomas & Dyall, 1999). In agreement with D. Thomas and Dyall (1999), newcomers should be acknowledged, welcomed, and considered in the formal and informal networks of information for the promotion, attraction and retention of participant rates. An inclusive approach (involving the Indian community in decision, planning, implementing) would advantage Indian female active participatory behaviours.

While Indian communities have recognised the importance of keeping active to positively benefit health and wellbeing (physical, mental, spiritual/religious) (Dave et al., 2015; Ramanathan & Crocker, 2009), it may seem ‘cultural perceptions of PA’ differ within public health or Westernised concepts of exercise (Dave et al., 2015; Sriskantharajah & Kai, 2007). Given the evidence and insights that have emerged in the present study, this demonstrates the need to promote informal daily lifestyle activity, over organised sport or PA (going to gym, playing a sport). I draw agreement with Sriskantharajah and Kai (2007) that emphasised PA becomes a more conscious experience for Indian immigrants when performed in the traditional sense. The author suggested leading a physically active life may stem from adhering to traditional practices (housekeeping, walking to work, active caregiving) (Sriskantharajah & Kai, 2007). Hence, cultural perceptions of PA has linked informal exercise with spontaneous daily activity, which leads to the ‘engagement and sustainment’ of activity among South Asian people (women) (Dave et al., 2015; Sriskantharajah & Kai, 2007).

When aimed to increase participation rates in a culturally responsive manner one must be cognisant of identifying PA practices that conform to traditional perceptions of PA. Evidence suggests a common approach is to subdivide PA on the basis of identifying portions of everyday living which necessitates the demand for activity or active
behaviours (Caspersen, Powell, & Christenson, 1985). With sleep, work and leisure as the simplest level of classification (Montoye, 1975), further subdivisions of leisure may include sports, and household tasks (yard work, home repair) (Folsom et al., 1985). However, the level at which PA may be performed differs considerably between individuals, as with the same individual over their own lifespan. Similarly, individual experiences may result in distinct views that prevail on housework as physical behaviour substantial for health gains. Thus, PA has been considered a “complex behaviour”, classified in diverse ways (Caspersen et al., 1985, p. 127).

**What to consider ‘when culture speaks’**

In the present study, drawing from a few participant’s quotes to provide insight for practitioners and policy makers aiming to develop interventions for Indian immigrants involvement in NZ’s sporting culture.

“I wish my own people could come together and do the same [Swimming]” (Olly).

Considering the present study has discussed the effect of multiculturalism, this comment suggests the need for culturally specific group sporting activity for Indian immigrants towards increasing social networks within the Indian community in NZ. Importantly, necessitating that NZ understands and reflects the sub-cultural diversity embedded within the Indian community. Culturally informed insights (merging evidence based practices with collective-cultural intellect) during the planning stages of interventions and initiatives, can counteract the failings of initiatives implemented, that target Indian immigrant communities in NZ’s sporting practices.

“[cricket] is a common thing, which Indians and they (Kiwis) can share” (Ben).

“I have no idea how, why they’re [European] not coming. We don’t stop them [European] but they are probably not interested…” (Ramaya).

The above comments suggest a need to reflect greater participation of the European community in Indian dominated sporting practices (cricket, cultural dance). In a greater effort towards unifying cultures through sporting practices, effort must be made to counteract challenges associated with engaging Indian immigrants within the co-existing diverse cultures in NZ’s society (multicultural communities).
“We want the local community, the local public to know more about Indian culture, to be more involved in it. It is not the lack but lesser of the awareness that is being created” (Raj).

The comment suggests that a need for creating awareness of Indian cultural practices traditions and activities among non-Indian communities in NZ. Accordingly, educational initiatives, workshops, and providing on-going cultural insight training towards informing non-Indian health care providers, policy makers and community professionals, working with Indian immigrant communities. This also necessitates growth mind-sets, calling to action ‘collaborative system thinking’.

Subsequently, only when cultural insights have been systematically incorporated in the shaping and planning stages, can we claim that the current system should provide cultural responsiveness to the Indian community in NZ (rethinking the ‘socio-cultural set point’).

While initiatives are a sign of proactivity, collaborating initiatives with the community (Indian immigrant families) will represent ‘productivity’ (that reflects reactivity). A leap ahead would be for NZ to neither ignore the suggestions made from past evidence, nor ignore the findings in the present study. One needs to draw from the past, understand the present and recreate value for the future.

The initial steps to when culture speaks

- Neighbourhood street activities, cultural dances and games for bridging neighbourhood social interactions.
- Neighbourhood design- consider building within the framework of housing clusters open spaces with benches, bike stands appropriate lighting and reduced speed limit if needed. Particularly within neighbourhoods with greater Indian immigrant populace.
- Practice of mixed cultural groups as opposed to propagating Indian only programs. Adopting mixed cultural groups of women participating in recreational sport and leisure activity.
- Targeting families over individuals and implement initiatives that reflect evolving social mindsets of Indian families in NZ.
- Media messaging for evolving social mindsets of Indian families in NZ (bringing research awareness to the communities).
- Funding initiatives at schools for Indian children (scholarships, programs)
• School-based initiatives for early social inclusion of Indian immigrant children in sport and recreational practices.
Chapter 6. Conclusion

In NZ, Indian immigrant families’ decision to participate in sport and PA was influenced by the differences between everyday lifestyle activities that arise from culturally distinctive neighbourhood behaviours and practices. NZ’s non-spontaneous interactive neighbourhoods with the lack of a shared common space prompted sedentary behaviours among Indian immigrant children. Diverse nationalities emerged as a theme, with conflicting cultural forces, that brought barriers in finding common sporting interests. With limited involvement from other nationalities (European, Chinese) Indian immigrant families experienced a sporting disconnect in PA participation and practices in NZ. Thus, prompting the need to promote Indian cultural modes of PA for greater cultural awareness while increasing active participation among other Indian immigrants. These Indian immigrant families highlighted the need to use not only sport, but also cultural activity as a medium to connect diverse cultures. Indian immigrant families experienced equal rights and opportunities within NZ’s social egalitarian principles (no caste, gender roles, socio-political impacts) and good infrastructure (cycle lanes, footpaths). Specifically, drawing positive experiences for Indian females as they evolved from their traditional beliefs and practices (shared housework).

This chapter makes explicit the researcher’s experience sojourning as a cultural insider, and weaves in the limitations and strengths that accompanied this study.

Limitations or strengths and vice versa

‘Extent’ of generalisability: A limited number of participants (small sample size) placed constraints on ‘extent of generalisability’ of the findings. Hence, the findings need to be interpreted with vigilance and cannot be extrapolated to the entire Indian immigrant community. Nonetheless, as the first study to investigate Indian involvement in relation to sport and PA practices in NZ, the opinions of three families alone substantiated a better understanding of the overall study question. The researcher identified an increase in sample size may be more representative of the population, and increase accuracy for wider application of the present findings.

Researcher bias: The researcher acknowledged bias to prevail despite the use of a research journal. To fully eliminate the researcher’s bias when reporting the findings, and during the interpretation phase, was a challenge. Nonetheless, bias was ‘controlled’ from making the researcher’s position explicit during the study process.
**Participant self-report data:** This study favoured a qualitative approach to data collection. Using self-report data such as interviews, questionnaires and participant self-reflective reports, may have prompted various forms of participant bias such as exaggeration, telescoping, and effect of selective memory. Furthermore, qualitative data collection may set room for boundless interpretations challenged by time and focus in the process. In using a single method approach, the researcher recognised the need for triangulation of methods (mixed/quantitative) to counteract prejudices against research bias. As self-report data accounts for aspects of greater importance reported by participating families alone, as other aspects may have not emerged within a small sample of self-reported data, for example, social economic variables.

As a result of scoping opportunities, this study accounted for significant aspects that were pronounced within and between each of the three Indian immigrant families’ (neighbourhood, multiculturalism, infrastructure, housework, host social norms). While some aspects found in the present study (weather, time, financial status) drew parallels with previous studies, these aspects were of lesser influence to these Indian immigrant families (compared to three main themes) and therefore omitted in the reporting of the findings in the present study.

Being cognisant of personal biases and idiosyncrasies that influence the research process (Anderson, 2010) the researcher formally acknowledged a position as a ‘novice’. Accordingly, the process of data gathering and interpretation of results may be limited to the highest standard. Nonetheless, the researcher acknowledged to have considered and justified all probabilities that valued rigour and trustworthiness throughout the study process.

Culturally insightful thinking enabled a well-aimed account of information that informed the framework of this research. For instance, planning to approximate an amalgamated Indian culture by choosing three ‘different’ ethnic Indian groups as the participants in the study, was often seen as a limitation in previous research. In consequence, the researcher was able to identify any common and distinctive patterns of PA and sport across these dominant sub-cultures in NZ. The representation of diversity of Indian subcultures may prove to counteract the challenges that accompany a small sample size.
Is research that is conducted by a cultural insider a strength or limitation?

As a cultural insider I drew upon my ethical need to decipher between my own biases and the participant’s experiences. As a first generation Indian immigrant, this necessitated the need for ‘clean slate thinking’ during data collection (interviews) bringing to use researcher journals and memos. Participant self-reflective reports enabled me to check for any disparity of thinking between my own assumptions, thoughts and beliefs with each participant. Using participant quotes ensured I closely represented in context and meaning the experiences of each family in the findings. One example was the use of participant quotes in making recommendations (chapter 5), as highlighting the need to collaborate the vision, beliefs and voices of the Indian immigrant people themselves during decision making, planning initiatives and making policy for their own people in NZ (‘collective cultural intelligence’).

As it may seem, most research has ‘pseudonyms’ picked by the researcher of the study. As a cultural insider the researcher of the study accounts cultural practices and traditions of naming, which are given ceremony as common religious practice within the Indian community. Accordingly, in this study, pseudonyms used are self-picked by the participants in respect of cultural association and religious significance within each family.

As a result research can draw upon the merits in using a researcher whose inherent culture is the same as that of the participants. As in the case with outsider research, a cultural-insider researcher brings merit to this study’s overall making, while bearing caution, as well as acknowledging and providing honesty, and identifying accounts of researcher bias.

Importance of research curiosity

While most studies show a low level of sport and PA in South Asian Indians, the research seems unmapped in deeply exploring what underpins the patterns of inactive behaviours in Indians. Both qualitative and quantitative studies reiterated similar findings, with minor distinctions having fallen short of depth (insightful reasoning). For instance, one study found South Asian Indians were more active in NZ when compared to South Asian Indians outside NZ. The conclusions were drawn from numerical data with limited reasoning that informed such findings. With so much ‘data’ that brings very little ‘insight’, draws attention to the power of research to peel the layers from what is being
found at the surface. Only when in-depth explorations unravel the reasons (insights) that substantiate numerical (quantitative) findings, can research favour the transition of knowledge tested into action. Thus, research findings reflected in the planning and implementation of initiatives, should inform policy makers.

The researcher expressed the need to look beyond presented findings that simply bear a match with previous studies. In other words, the researcher suggests the need for greater ‘depth’ (researcher curiosity) that refines or expands the current thinking. Thus while adding value, and purpose, to the current findings, this also facilitates a ‘functional’ conversion of knowledge to action. Cultural-insider research should favor drawing ‘informed findings’ (evidence-based and cultural insights) that add depth and value to findings and process, of research.

**Future research**

While a case study approach was adopted to explore deeper insights, the researcher acknowledges the use of introducing other methodological approaches to add to the richness of the current findings on Indian immigrants’ active behaviours in NZ. Accordingly, integrating the use of quantitative (data) measures would strengthen the study with a more comprehensive research approach. A tool for measuring everyday active behaviours and other data collection instruments (onsite observation, quantitative instruments) will enhance the richness of data from interviews, in the current study.

As previously mentioned, using cultural informants can strengthen the research that targets cultural communities by adding depth to insights uncovered. On this account, informing improved ‘delivery’ of culturally responsive initiatives, and interventions, for Indian communities in practices of sport and PA in NZ. At this point, it would prove beneficial to explore how culture is systematically being incorporated into current interventions, aimed at engaging active participatory behaviours of Indian immigrant populations. In turn, providing future researchers with the direction to conduct research that will further ‘grow’ the application of cultural intelligence to initiatives that will lead to greater participation by the Indian community in NZ’s sport and PA. Thus, recognising the researchers call to action more qualitative practices that ‘wrap the numbers (data) with participants’ lived experiences to bring the data alive.
Alongside wider research, the present study provides research for NZ to consider the deeper and specific function of social and cultural influences in the active behavioural practices of Indian immigrant families, within NZ’s sporting culture.

As a reminder, ‘not everyone fits the mold’, and being proactive towards increasing PA participation, often done in relation to health care strategies, should be tailored to the adopted cultural practices and traditions. The need to respect and reflect the Indian culture, stems from the appropriate amalgamation of diverse cultural traditions in practice. The acceptability of initiatives will rest on its mode of delivery. With non-homogenous subcultures among Indian communities, we need to consider the mode of delivery of the initiatives, which may impact its acceptability and success.

There is a strong need to integrate immigrant Indian perspectives within initiatives that can help shape social policy. Lastly, initiatives and interventions planned and implemented should incorporate the values and beliefs perceived within the Indian ‘immigrant’ community, as these traditional values, and communal opinions are evolving the social mind-set and beliefs of Indian immigrants in NZ today.


Johnson, M. R. (1995). Coping with data in ethnographic study. In this article, Martin Johnson offers some advice on how the data generated by an ethnographic study can be moulded into a meaningful research report. *Nurse Researcher, 3*(2), 22-34.


Mathew, T. (2013). *Similarities and differences in perceived work motivation, personality, and culture: Snapshots of Australia and India*. Bond University, Australia, ePublications@bond, Faculty of Humanities and Social Sciences.


Dear Erica

Re Ethics Application: 16/323

When culture speaks: Indian immigrant families' participation in sport and physical activity.

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC). Your ethics application has been approved for three years until 27 September 2019.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 27 September 2019;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 27 September 2019 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

Kate O’Connor
Executive Secretary

Auckland University of Technology Ethics Committee

Cc: Siona Fernandes, beingsiona@outlook.com; Lesley Ferkins
Appendix B

Family Information Sheets

Date Information Sheet Produced
20th September 2016

Project Title:
When Culture Speaks: Indian immigrant Families’ Participation in Sport and Physical Activity.

My name is Siona Fernandes and in pursuit of my Masters in Sport and Exercise, I have an opportunity that combines my experiences as an Olympic athlete with my passion to make a meaningful contribution towards my Indian heritage. I like to share this privilege with your family, inviting you to participate in my research study ‘When Culture Speaks: Indian immigrant Families’ Participation in Sport and Physical Activity’.

Joining me is Associate Professor Erica Hinckson and Associate Professor Lesley Ferkins, experts who will lead this research and who welcome your presence in making a difference to Sport and Physical activity (PA) cultures in NZ.

Note: All information relevant to this research is detailed below.

Research Purpose
Most research has investigated western communities when developing recommendations to positively benefit the parent-child experience in sport (Harwood & Knight, 2015). This is limiting, when developing and implementing interventions for increasing participation rates for non-western communities in sport and physical activity (PA) (Weinberg et al., 2000).

In NZ sport and PA cultures, the importance of socially including other ethnicities is growing in recent years. The spotlight of many organizational development plans and interventions has been focussed on inclusion of Maori and Samoan participation. With the principles of partnership, participation, and protection, the growing size and steady migration of the Indian population require the development of opportunities (e.g., facilities, programmes, initiatives) that socially include participation of Indians in NZ sport and PA cultures. As research on Indian involvement in NZ sporting cultures seems uncultivated, exploring underlying experiences of Indian cultures can inform a framework, vital for encouraging early involvement in activity and addressing health concerns prevalent in Indian populations (Patel, 2012).

We want to find out what influences the immigrant Indian families to get active in NZ. Further providing an understanding if immigration (NZ) has impacted physical lifestyle behaviours and practices of your family. Exploring what values and lifestyle factors that prevail among Indian families living in NZ, would benefit healthcare policies in implementing culturally appropriate services for the Indian community. This would be “powerful” in informing policy makers and future interventions. Hence, your family’s contribution will help inform future researchers, policy makers and community organizations to develop interventions that culturally provide for the Indian community and encourage their children and adults, to be active.

This seems to be the first study to consider the Indian immigrant involvement in NZ sport and PA contexts, unique to AUT, your family and sport and PA in NZ.

How was I identified and why am I being invited to participate in this research?
Through word of mouth (friends/networks) or by reading our flyer your family expressed an interest in this research project and contacted the primary researcher via email or phone.

Criteria
One family - no involvement in formal sport and exercise (ex. Gyms, etc) but accumulates activity during the day (walks to work etc)

Two families – parents/children or both are involved in sport or activity (rugby, cricket, soccer, cultural dance training etc).

family settled in NZ from India (Early settlers or long term)
both parents born in India;
children either born in India/NZ; 13 years and over.

We excluded step children and step parents, other descendants (Fijian Indians), one parent not born in India, children living away from family and children below 13 years as interviews can be a challenge. This criteria gives the study an authentic representation of ‘Indian culture’ being examined. Your family fulfilled this criteria, hence, an invitation was sent to consider your participation.

How do I agree to participate in this research?
On handing these information sheets (applicable to all members of the family), a notice period of 1 week is allocated to confirm a response. Signed consent/assent forms (attached) will confirm each members willingness to participate voluntary.
No member of family is obligated to participate in the study. You choosing to participate or not will neither advantage nor disadvantage you. You can withdraw from the study at any time with an offer of choosing to have data belonging to you removed or not. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?
Each family member attends one interview session for 60 to 90 mins, including reading information sheets, signing consent/assent form, with time for any clarification before and after the interview.
The researcher will come to a place and at a time convenient for each member, interviewed separately.
The researcher will ensure the room is free of distraction and that you are seated comfortably before turning on the audio recording devices.
The interview process begins when you are ready.
The researcher will ensure you feel comfortable with the process and the researcher making this process relaxed and fun as possible!!

Snacks and beverages of choice will be made available. At the end you will explain and hand each member with a Self reflection diary: daily entries for approximately 10 days, worth 15mins of your time! (for any help make contact with researcher- details below).
 Interviews are voluntary, that can be stopped, without question. Shared information can be considered “off the record” and will be excluded.
Follow up interviews maybe requested if needed
All this information will not be shared and is treated as highly confidential.

What are the discomforts and risks?
We understand Parents and children are different and will experience feelings at differing levels. When explored at a deeper level, parents may experience a sensitivity about cultural beliefs and parental roles. The primary researcher will be aware of such triggers and will respect your right to stop or withdraw your participation, unquestioned. Our primary researcher shares your cultural background (Indian), thus supporting your family by understanding and respecting this cultural connection. Nonetheless, the research team will endeavour to limit any discomfort and embarrassment.

How will these discomforts and risks be alleviated?
We encourage parents and children to feel able and confident to talk through any concerns with the research team, hence plenty of opportunity will be provided for building the rapport needed to make this possible (frequent contacts, conversations, involvement with family, before/after interviews and ANYTIME!).

- Three free sessions at AUT Health Counselling and Wellbeing with any further additional professional support if required be discussed.

**What are the benefits?**

- The research team would like to value and acknowledge your time
- A small Koha (valued approx. $20 per person per session) - each interview.
- $20 voucher per person per session.
- As a registered exercise professional, our primary researcher can also provide a free hour exercise consultation to "get active the Indian way".

The information and knowledge and co-operation of each member of your family will be formally acknowledged within the research outputs. By acknowledging your contribution towards the outcomes, you will feel empowered and feel included in supporting your community’s physical behaviours to get active in NZ. Moreover, your contribution and participation will be in support of the primary researcher towards obtaining a Master’s qualification in Sport and Exercise Science.

**What compensation is available for injury or negligence?**

We consider a low risk of harm to the health of all your family members. Nonetheless, in the unlikely event of a physical injury rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

**How will my privacy be protected?**

The research study procedures will ensure maximum confidentiality to all members of your family. All families are not known to each other and code names will be given to individuals and families respectively, to protect your privacy in the study.

Your opportunities for checking the researcher has maintained your privacy will be made available with a copy of an overall summary report and when a written record (transcript) will be emailed separately to individual members of your family for approval. No individual will be identified in the final report.

Neither participants (parents, children) nor your family contact details will be used in future research. All written material will be stored in the AUT office in a locked cabinet, and electronic data will be stored on the AUT network in password protected files. As part of signing the consent form, all participants agree to keep all discussions confidential when applicable. All consents will only be read and collected by the researcher and no information regarding specific addresses will be presented in the final report. The security of research data will be undertaken in accordance with AUTEC policy.

**What are the costs of participating in this research?**

NO monetary cost. Your time is a valued contribution to this process.

**What opportunity do I have to consider this invitation?**

A time frame of one week is given to consider your family’s response to participate in the research process. Should you feel the need for extending this time frame, please contact the primary researcher to make it possible.

**Will I receive feedback on the results of this research?**
YES! a written record (transcript) will be sent privately to each family member via email for approval with a copy of an overall summary report (optional), with the study findings. This option is available on consent forms.

**What do I do if I have concerns or further information about this research?**

Contact any member of our team (details below):

**Primary Researcher:** Siona Fernandes M: 021 1133446 being.siona@outlook.com

**Project Supervisor:** Associate Professor, Dr Erica Hinckson T: 921 9999 ext 7224
M: 021 960 887 erica.hinckson@aut.ac.nz

Associate Professor Lesley Ferkins lesley.ferkins@aut.ac.nz, or M 0220 729 787

Concerns regarding the conduct of the research -Executive Secretary of AUTEC, Kate O’Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Please keep this information sheet and a copy of the consent form for future reference

**Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC**

**Reference number 16/323**
Appendix C
Parent consent form

Project title: When culture speaks: Indian immigrant families’ participation in sport and physical activity.

Project Supervisor: Associate Professor Erica Hinckson
Associate Professor Lesley Ferkins
Researcher: Siona Fernandes

☐ I have read and understood the information provided about this research project in the Information Sheet dated 20/11/2016.
☐ I have had an opportunity to ask questions and to have them answered.
☐ I understand that notes will be taken during the interviews and that they will also be audiotaped and transcribed.
☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
☐ I understand that if I withdraw at will, from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
☐ I agree to take part in this research.
☐ I agree to being interviewed at ........ (name the place) on ........ (Date and time of convenience). (If you choose your home/ any other places please provide your physical address).
Address:

☐ I wish to receive an overall summary of the research findings (please tick one): Yes ☐ No ☐

Participant Signature:..........................................................................................................

Participant Name:..........................................................................................................
Participant Contact Details (if appropriate)
.................................................................................................................................
.................................................................................................................................
.................................................................................................................................
.................................................................................................................................
.................................................................................................................................

Date:

Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC Reference number 16/323

Note: The participant should retain a copy of this form.
Appendix D

Parent/Guardian Consent Form

Project title: When culture speaks: Indian immigrant families’ participation in sport and physical activity.

Project Supervisors: Associate Professor Erica Hinckson
Associate Professor Lesley Ferkins
Researcher: Siona Fernandes

☐ I have read and understood the information provided about this research project in the Information Sheet dated 20/11/2016.

☐ I have had an opportunity to ask questions and to have them answered.

☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw my child/children and/or myself from the study at any time without being disadvantaged in any way.

☐ I understand that if my child/children and/or myself withdraw at will from the study then I will be offered the choice between having any data that is identifiable as belonging to my child/children and/or myself removed or allowing it to continue to be used. However, once the findings have been produced, removal of our data may not be possible.

☐ My child/children would like to be interviewed at ……………………… (Name the place) on dd/m/year …………………hrs………………… (Date and time of convenience). (Any other place please provide physical address if different from parents).

Address:

☐ I agree to my child/children taking part in this research.

☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

Child/children’s Name/s: ………………………………………………………
…………………………………………………………………………………………

Parent/Guardian’s Signature: ………………………………………………………

Parent/Guardian’s Name: ………………………………………………………

Parent/Guardian’s Contact Details (if appropriate):
…………………………………………………………………………………………
…………………………………………………………………………………………

Date:

Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC Reference number 16/323

Note: The participant should retain a copy of this form.
Appendix E
Assent Form

Project title: When culture speaks: Indian immigrant families’ participation in sport and physical activity.

Project Supervisors: Associate Professor Erica Hinckson
Associate Professor Lesley Ferkins
Researcher: Siona Fernandes

☐ I have read and understood the sheet telling me what will happen in this study and why it is important.
☐ I have been able to ask questions and to have them answered.
☐ I understand that notes will be taken during the interviews and also audiotaped and transcribed.
☐ I understand that I can stop being part of this study whenever I want and that it is perfectly ok for me to do this without reason.
☐ If I stop being part of the study, I understand that then I will be offered the choice between having any information that other people can know is about me removed or letting the researcher keep using it. I also understand that sometimes, if the results of the research have been written, some information about me may not be able to be removed.
☐ I agree to take part in this research.

Participants Signature: ………………………………………………………………
Participants Name: …………………………………………………………………
Participant Contact Details (if appropriate)
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
Date:

Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC Reference number 16/323

Note: The participant should retain a copy of this form.
Appendix F

Flyer

INDIAN FAMILIES
be first to make a difference!
We, the research team at A.U.T. welcome parents (Indian -born) and children (NZ /Indian, 13yrs above) to contribute to future of Indian involvement in sport and activity in New Zealand.

Give each member of your family

A VOICE TO BE HEARD

In

“When Culture Speaks: Indian Immigrant Families’ Participation in Sport and Physical Activity”

As physical activity you make sure to participate in ANY form of activity most days of the week, from sports to cultural dance, hitting the gym or ditching the car and walking to work!

Whether your family would like to get active or stays active,
Let us explore ‘getting active the Indian way’!

Contact our team representative:

Siona Fernandes
beingsiona@outlook.com
021 1133446

Approved by AUTEC on (29/09/2016) ethics number 16/323
Online flyer invite

INDIAN FAMILIES
be first to make a difference!

We, the research team at A.U.T. welcome parents (Indian-born) and children (NZ/Indian, 13yrs above) to contribute to future of Indian involvement in sport and activity in New Zealand.

Give each member of your family

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Whether your family would like to get active or stays active,
Let us explore ‘getting active the Indian way’!

Contact our team representative:

Siona Fernandes
beingsiona@outlook.com
021 1133446

Approved by AUTEC on (29/09/2016) ethics number 16/323
When culture speaks: Indian immigrant families’ participation in sport and physical activity.

Full Name at birth: 
Age: 
Place of birth: Country of birth: 
Current address: 
Current occupation: Past occupation: 
Level of education: 
Number of years in NZ: 
Spoken Language at Home: 
Any medical conditions/health risks (please state): 
Current sport/activity:

Circle as many responses you think are most suitable to the statements.

1. Staying active requires
   • Hard work, commitment
   • Money
   • Sweating, breathing heavy
   • Joining a club, facility

   Comment:.................................................................

2. Most days in my week I make sure I
   • Play Sport/ Run/go to the gym
   • Do gardening
   • Watch television
   • Practice cultural forms of activity (Indian dance, yoga, etc)
   • Walk to work
   • Perform house duties (vacuum, cleaning, groceries)

Any other (please specify):
Circle (any ONE) that interests you

- Gym training
- Traditional Indian dance
- Learning exercises and nutrition for staying healthy
- Yoga
- Staying active at home
- Sleeping and watching movies!
- Learning a sport

In my free time I

- Assist family work (business)
- Play with friends / meet with relatives
- Go for a walk, run, etc
- Watch television
- Do more housework
- Hit the gym, any sports club

Circle true of false

My busy life in India kept me fit
  T /F

I would like to stay active but don’t know how
  T /F

Life is about getting a good job, and caring for what my family needs
  T/F

Sport is for young people and athletes
  T /F
Family comes first before exercise
T /F

I feel active in NZ
T /F

I don’t know where and who to contact to stay active
T /F

I prefer activities that include my friends /family
T /F

Exercise makes me tired and is boring
T /F

My work life in India kept me active
T /F

Being with my family is more important than exercise
T /F

I prefer to stay indoor when it’s cold and wet
T /F

Yoga, Indian dancing, and daily walking are good for health
T /F

You need to money to stay fit, active and healthy
T /F

Gym will keep me fit and strong
T /F

My work in NZ keeps me active
T /F
I am invited to most activities in community/club in NZ.
T/F

I get many opportunities to stay active in Auckland
T/F

I would participate in cultural Indian practices like dance or yoga
T/F

Staying active is important to all in my family
T/F

I know most members in my community
T/F

NZ has many clubs and activities to stay fit
T/F

NZ provides Indians opportunity to stay active.
T/F

List what sport/activities you would like to engage in future and why?

...................................................................................................................................................................................
...................................................................................................................................................................................

Your time is most valued, thank you!
Appendix H

Guideline questions for children

*When Culture Speaks: Indian immigrant Families Participation in Sport and Physical Activity.*

**Demographic data**

- Name, age, address, ethnicity, religion, occupation, level of education, level of sport/activity, Indian or NZ born.
- Activities /sports, Days /week, location.
- If suffering from any medical conditions or health risks please state

**Children/Parents: family and Immigration**

- How do you feel about your family moving to NZ?
- Who is responsible for decision making in the house?
- Can you describe an environment or culture in which you are most active and happy?
- Do you consider your parents to be successful? What makes you consider that they are or not successful?
- Do your parents encourage you to study or play sport? What do they say?
- What do you like about living in NZ?
- What would you like to change about living in NZ?
- Have you ever felt non-included in school or with friends?
- Do you remember other Indian children who were not given a chance to be included in something?
- How do you mother and father help you in participation of your sport/activity?
- Can you describe any situation when you felt included/not included in your school/others in NZ community?
- How would you describe your relationship with your relatives if in NZ or India?

**Physical Cultures (Sport, activity, dance, any form)**

- What do you like about participating in your sport?
- How important is it to play sport or stay active for you?
• What makes you want to play sport/activity? Probe!
• Did you play sport when growing up? Where (location), what level, probe: what made you join the sport/activity?
• Should all children play sport or be active? Probe!
• Are you aware of sports facilities /amenities in your area?
• Can you make any suggestions to improve your level of physical activity in NZ?
• Would you like to try a new sport/activity? Name
• Are you encouraged to participate in other sports/try new sports by your family and school?
• Are you encouraged to participate in other sports/try new sports at school/club?
• How does your school teachers/environment encourage your participation in other sports?
• How can your school /university/club support your participation in sport/activity?
• Are you aware of any financial grants towards sport and activity?
• Do you have any suggestions on how to encourage other to stay active in NZ?
• What type of physical activities are there available for you to participate in NZ?
• What type of physical activities /sports in NZ interest you? are these available for you to participate in NZ? How often are these activities run?
• Are there sporting /physical activities that allow Indian participation in NZ (Dance, community walks, bollywood, kabbaddi clubs)

**Children born in India**

• Did you play sport when growing up? Where (location), what level, probe: what made you join the sport/activity?
• How has your experience of sport/activity been in NZ?
• What difference can you think of between your participation in sport/activity in NZ compared to India?
• Do you think your level of physical activity increased/decreased or same after you migrating to New Zealand?
• Are you treated the same by friends in NZ compared to friends in India? (If applicable) Probe!
• How do your friends in NZ differ from your friends in India?

**Other questions for parents**

*Cultural perceptions*
• what do you mean by staying active?

*Self efficacy*
• *How important is it for you to stay active?*
• *What makes it important or less important? (Individual thoughts/feelings)*

*Individual history*
• *How did you keep active growing up?*
• *Was your family active?*
• *What ideas and thoughts do you have in relation to sport activity since coming to New Zealand? Are they different in India?*

*Inactivity/ accumulated/structured: NZ migration experiences*
• *How do you keep active now (NZ), how do you spend a typical day?*

*Cultural practices*
• Do/did you participate in cultural activities? What makes you participate /not participate in cultural forms of staying active? (Facilitators, barriers, feelings).

*Social cultural*
• Do your friends influence your participation to stay active/ play sport? (Friendships)
• Do your neighbours influence your participation to stay active/ play sport?
• What activities do you do with other Indians in NZ?
**Family**
- What activities do you do together as a family?
- Do your relatives help you stay active?

**Indian Activity**
- Are you active when you go back to India? (Indian influences, perception on PA sport)

**Physical environment**
- What supports/challenges your participation?

*Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC Reference number 16/323*
Appendix I
Transcriber Confidentiality Agreement

Project title: When Culture Speaks: Indian immigrant Families Participation in Sport and Physical Activity.

Project Supervisor: Associate professor Erica Hinckson
Researcher: Siona Fernandes

☐ I understand that all the material I will be asked to transcribe is confidential.
☐ I understand that the contents of the tapes or recordings can only be discussed with the researchers.
☐ I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber’s signature:.....................................................................................................................
Transcriber’s name:
.....................................................................................................................
Transcriber’s Contact Details (if appropriate):
.....................................................................................................................

Date:

Approved by the Auckland University of Technology Ethics Committee on (29/09/2016) AUTEC Reference number 16/323
Note: The transcriber should retain a copy of this form.
Appendix J

Researcher Protocol

When Culture Speaks: Indian Immigrant Families Participation In Sport And Physical Activity

Project Supervisor: Dr. Erica Hinckson
Primary researcher: Siona Fernandes

In this project the following safety procedures will be implemented to ensure safety of the researcher in case of visiting participants’ homes:

• Although the primary researcher is a cultural insider, it is expected that the researcher will communicate and be instructed by the participant the visit of any protocols/customs, to ensure cultural or social sensitivity is respected. Further observing any protocols/cultural customs at entry to the participants’ homes.

• The researcher is a guest to the participants’ homes and will show gratitude for the participants agreeing to participate.

• Mobile phones will be carried by the researcher, in case of emergency.

• In case the supervisors are not available to be present at the interview, the researcher will inform both Primary and Secondary supervisors of each members/participants preferred place and time of interview and the expected amount of time the interview will take. Physical Address of each interview will also be logged and handed to both supervisors prior to conducting interviews.

• The primary researcher will ensure that the primary supervisor is notified via phone call/text message both before commencing each interview and on completion of interviews with each participant.

• Visit should not take more than 90 to 120 minutes.

• In the event the project supervisor does not hear from the researcher, steps will be taken to contact the researcher and confirm their safety.

Approved by the Auckland University of Technology Ethics Committee on 29th September 2016 AUTEC Reference number 16/323