# WHAT IS A GIRL'S EXPERIENCE OF PHYSICAL ACTIVITY?

# A QUALITATIVE DESCRIPTIVE STUDY

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# **DEDICATION**

For female adolescents around the world.

# ATTESTATION OF AUTHORSHIP

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

Signed:	 	 	
Date			

#### **ABSTRACT**

This qualitative study explores the experiences of female adolescents in relation to physical activity. The study investigates the experience of being adolescent and the meaning of a female adolescent's experience of physical activity. A qualitative description with a phenomenological hue was the methodology used. Their perceptions of their lived experiences in relation to physical activity were revealed through stories.

The participants were six adolescent females. The study data was gathered through open-ended questions and in-depth conversations, to seek meaning of the adolescent's experience of physical activity. The interviews were transcribed and stories extracted from the data.

Results from the findings of the study indicate that physical activity needs to be enjoyable for the female adolescent for her to be motivated to participate. What specifically constitutes enjoyment for the adolescent differs for each individual. The data also suggested that other persons of influence or the female adolescent's environment may also have an impact on their participation. Peers, parents, their gender, body issues, competition, running, and certain restrictions were revealed as making a difference.

For the female adolescent participating in physical activity, it would be advantageous to find an approach that allows a girl to experience physical activity in the way that works for her. Some participants, already good at sports, are likely to be very competitive, want to train hard, and will build friendships among their like-minded peers. These

female adolescents are not so problematic. They already love physical activity and participate in it. The challenge is to target those female adolescents who do not participate on a regular basis, and to design successful interventions which promote and encourage them into physical activity. This change may prevent a further decline in the levels of physical activity for the adolescent who is at a stage when physical activity may be so advantageous.

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Finally, I would like to thank and acknowledge the participants in my study. I am extremely grateful they so willingly shared their experiences with me.

#### CHAPTER ONE: INTRODUCTION

#### Adolescence

Adolescence is a time in a person's life when considerable physiological and psychological change, development, and adjustments are occurring. Santrock (2005) explains how "adolescence is a transitional period in the human life span, linking childhood and adulthood" (p. 4). During the adolescent years these changes occur more rapidly than through any of the other developmental stages, which may have a significant impact on the individual. As the adolescent's environment and independence are widening, so does their interaction with their peers, whilst family influences become less. While adolescence can be a time of challenge, it is also a time of opportunity. Physical activity is one means by which adolescent girls can enhance fitness, prevent obesity, develop strong personal networks, and have fun.

#### Physical activity

Physical activity is any bodily movement produced by the contraction of skeletal muscles that result in a significant expenditure of energy (U.S. Department of Health and Human Services, 1996).

There is a common assumption that physical activity may be good for mental as well as physical health. However, despite the introduction of physical activity schemes into schools and increased public awareness of the value of physical activity, it has been identified there has been a reduction in physical activity, particularly in female

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adolescent girls. Sirand and Barr-Anderson (2008) suggest "regular physical activity

has positive effects on reducing obesity, increasing cardiovascular fitness and health,

and improving psychological well-being" (p. 327).

Sirand and Barr-Anderson (2008) also explain that there is a reduction in physical

activity, particularly among adolescents and how the middle school years may be the

critical time to attempt to intervene in this decline. The specific reasons for the

reduction of exercise in adolescence, particularly in girls, are varied and complex and

not fully understood. Physical activity is a healthy option to encourage life-long skills,

with the added benefit of social interaction important to the adolescent.

Aim of the study

This qualitative study explores the experience of female adolescents in relation to their

involvement in physical activity. The aim of this study was to find insights from stories

of being engaged in physical activity. The study utilizes a descriptive qualitative

methodology with a phenomenological hue to describe and uncover the meaning. There

were six participants. An assumption throughout this study is that it is imperative for

the health of the female adolescent to involve herself in regular physical activity, for

health and general well-being.

Research question and focus of the study

The research question is: What is a girl's experience of physical activity?

The methodology chosen for this study is qualitative description, with a phenomenological hue. Phenomenology as described by van Manen (1997) focuses on the experience through listening to the participants' stories. Sandelowski (2000) implies that qualitative descriptive research stays close to the facts and to the actual words. This approach will be used in an attempt to understand the experience and to identify themes. The methods used to collect and analyze the data included semi-structured interviews and thematic content analysis.

# The significance of the research

Physical activity is important for physiological and psychological health in adolescence. May, DiGrazia and Hug-English (2001) explain that adolescence is an important time to lay the groundwork for a lifetime of fitness and activity and how girls, particularly, are at greater risk of inactivity. Boreham and Riddoch (2001) suggest that despite children's natural affinity for physical activity, they have become less active in recent decades.

Whilst there has been research in this area, it remains a significant issue as there is still a lack of understanding surrounding this phenomenon. According to Valdivia and Bettivia (1999), "While within feminist studies there is an increased interest in understanding the role of popular culture in women's lives in a holistic sense, we have a small but growing amount of research on girls aged nine to fifteen" (p. 160).

Qualitative research permits an insight into the participants' stories, and may uncover issues not already identified. According to Nesbitt (2000), "Some of the best insights into children's perspectives come unexpectedly ... qualitative research provides the

opportunity for this to happen" (p. 149). Furthermore, Cothran and Kulinna (2005) refer to how young people are capable of reflecting on their own experiences and that there is little information on how young people feel while engaging in physical activity and "whether their needs ... are being met" (p. 25).

#### Background and context

Throughout my years of teaching young women, I have become aware of the prevalence of behavioral anomalies such as eating disorders, obesity, depression, and more recently, self-injury. Richards, Reeder and Darling (2004) explain how adolescents may benefit from physical activity and how sedentary lifestyles may be connected to poor mental and physical health.

Scott and Schwenk (2000) explain how even though physical activity may play an important part in the management of mental health problems such as depression and anxiety, there is growing evidence that not enough people participate. It is well documented that physical activity contributes to our well-being and improved health (Boreham & Riddoch, 2001; Trost et al., 2002), but there is an apparent drop-off in physical activity amongst female adolescents (Dwyer et al., 2006).

Ornelas, Perreira and Guadalupe (2007) explain how there is a decrease in physical activity amongst adolescents. The reasons for this decline in physical activity are complex and not clearly understood. Sirard and Barr-Anderson (2008) explain how "more than 50% of girls and 30% of boys were not meeting national physical activity recommendations" (p. 327). This is addressed in more detail throughout the following

chapters, but there appear to be a variety of factors which may hinder the adolescent female's participation in physical activity. They include social, environmental, physiological, and psychological factors. Marshall, Gorely, and Biddle (2006) explain that the increase in sedentary behavior is partially attributable to an increase in the availability of electronic games which may compete with physical activity but this varies depending on the age and gender of the adolescent. Furthermore, French, Story, and Jeffery (2001) suggest that over past years physical activity patterns have changed, and this may have contributed to the increase in obesity. Similarly, Rey-Lopez, Vicente-Rodriguez, Biosca and Moreno (2008) explain how children are increasingly devoting more time to sedentary activities which may be connected to obesity and how "from the 1970's until the end of the 1990's the prevalence of overweight or obesity in school-age children doubled or tripled worldwide" (p. 251). Kohn and Booth (2003) explain how obesity is an epidemic affecting adolescents around the world. In addition, Fowler-Brown and Kahwati (2004) suggest that over the past 40 years, adolescents have become more at risk of becoming obese and that these adolescents are likely to remain obese through to their adult years but do not explain any specific reasoning underlying this. Furthermore, Kautiainen, Koivusilta, Lintonen, Virtanen and Rimpela (2005) explain how they found the use of television and computer usage among adolescents had increased from "3 to 27 minutes" since the 1980s (p. 925). Fewer children are walking or biking to school and more time is spent watching television or on computers or computer games. This is of concern, particularly since there is a much wider range of physical activities available to the adolescent.

Although in New Zealand a comprehensive amount of research has already been published on the benefits of physical activity and identifying the risk groups, to date

there is little information on why there has been an actual drop-off. In addition, Whitehead and Biddle (2008) explain: "Low levels of physical activity among adolescent girls are a cause for concern" (p. 243).

Sport and Recreation New Zealand (SPARC, 2007a) in particular have not only identified the priority areas such as adolescents, but have implemented various programmes throughout schools and communities. "SPARC has a range of programmes to support young people, including Active Movement, Active Schools and Sportfit, all supported by the Push Play Parents campaign and various initiatives within the Government's Mission-On campaign" (SPARC, 2007a, p. 1).

Furthermore, SPARC and The New Zealand Cancer Society undertook a study named 'Obstacles to Action' which identified barriers and motivators to physical activity aimed at the general population. SPARC, too, has recently undertaken a 'best-practice review' of sport and physical activity interventions in order to develop policies which will, hopefully, increase participation in sport and physical activity (SPARC, 2007a). McIver and Pate (2006) also explain how SPARC have provided schools with toolkits to encourage more physical activity for children and adolescents.

Government sectors, such as the Ministry of Health, have identified children and adolescents as priority groups in their Physical Activity Toolkit, and have attempted to address these issues in their 'Healthy Action' guidelines (Ministry of Health, 2003).

There are other policies currently being developed in an attempt to address the alarming increase in obesity and lack of physical activity throughout the community.

The President's Council on Physical Fitness and Sports (2006) from the United States explain how many schools throughout America, United Kingdom, Australia and New Zealand are attempting to address the obesity epidemic, by introducing various programmes and strategies to improve the health of adolescents and increase physical activity in their lives.

Academic researchers, primarily based at tertiary institutions, also contribute to the array of research in New Zealand and overseas in the area of promoting benefits to health, and target groups in relation to physical activity. Hohepa, Schofield, and Kolt (2004) refer to how obesity and physical activity are "two of top four health priorities for New Zealand" (p. 2).

#### Biases/presuppositions

Prior to commencing my study, I needed to be aware of my everyday knowledge, ideas, and assumptions pertaining to these phenomena. Van Manen (1997) suggests "It is better to make explicit our understandings, beliefs, biases, assumptions, presuppositions and theories" (p. 47).

I come into this study with my own memories as an adolescent female, a mother of three, including two females, and as a lecturer who has been exposed to adolescent females throughout 20 years of lecturing. I hold a graduate diploma in child health, which has given me some understanding of the problems adolescents may encounter, and am aware of the current child/adolescent developmental theories which provide insights as to how adolescents may behave.

The pre-assumptions I bring to this study are those of an apparent widespread lack of parental concern, and that time and financial circumstances, exacerbated by negative peer pressure, may be the prime barriers to engaging female adolescents in physical activity. I assumed that it is primarily the parents' responsibility to attempt to encourage their adolescents into physical activity at an early age, as I have attempted to do with my own family.

In my opinion, some of these physical activities do require a lot of time. When both parents are working this may be difficult, but I do feel that due to the benefits of physical activity this should, somehow, be overcome within the family. Whilst some physical activity may place an extra financial burden on families, I also believe there are other forms, such as walking, swimming, or running, that will impose only a limited time and financial burden on the average family.

It is clear that I am a strong advocate for being active. As an adolescent, there was a variety of physical activities available to me, and my parents were fully supportive of any avenues that interested me. This was made easier by having access to farms and beach houses, which made it easy for me to enjoy a variety of physical activities such as horse riding and scuba diving. Having being exposed to a variety of physical activities earlier in life has given me the confidence to engage in and enjoy a wide range of differing physical activities today. Presently, it is easy for me to take pleasure in any physical activity, not only because of being aware of the health benefits, but also because of the enjoyment of the social interaction and challenges the different sports offer. Activities such as horse riding, skiing and boating also allow me to spend time with my family, which is important to me.

My original assumption was, and remains, unaltered, that it is difficult to establish the experience of female adolescents participating in physical activity utilizing quantitative research. Such a situation is of particular concern to me, as it is the norm to use a quantitative research primarily when researching this critical area.

Throughout my study, I have recorded notes which have further helped me to identify any biases whilst researching the adolescent females of my study. Even though initially I had these presumptions in relation to the reasons behind the decline in physical activity, my awareness in the experiences of female adolescents participating in physical activity has been expanded and consequently, my perceptions and understandings have changed. These are further addressed in Chapter Six.

#### STRUCTURE OF THE THESIS

The thesis is divided into six sections, and a brief description of what is included in each section follows:

# Chapter One

This chapter has introduced the focus of my research question "what is the female adolescent's experience of physical activity?" It includes the aim of my study, the focus of the study, significance of my research, background, and context. My biases and presumptions are discussed.

## Chapter Two

In this chapter the literature surrounding adolescent physical activity, with particular reference to females, is explored. It discusses the lack of research in this specific area and shows the critical nature of the problem.

#### Chapter Three

The methodology and method section includes the rationale behind the decision to use a qualitative descriptive methodology with a phenomenological hue. It explores the philosophical underpinnings of the study and includes the design and methods employed to recruit the participants, collect and analyse the data, rigour, and the process of ethical considerations and approval.

## Chapter Four

This chapter outlines the first part of the findings from my study under the heading of "Social Interaction" in relation to participating in physical activity. These findings are descriptions of the participants' stories and are presented under headings or themes. The themes contained in this section include peer influence, fun, enjoyment and boredom, parental influence, gender, body issues, weight loss, body image, and psychological effects.

# Chapter Five

The second part of the findings from this study is explored under the heading of "Sporting Influences". In this section the participants' stories were interpreted and described, and the data is categorized under the following sub themes: competition, running and the restrictions experienced while participating in physical activity.

# Chapter Six

This final chapter discusses the meaning from the data in relation to the research question and how the findings relate to other similar studies. As a result of the findings, the research question is further explored as are further implications in relation to the findings. Recommendations and future research are also discussed and this chapter concludes with the limitations to the study.

#### CHAPTER TWO: LITERATURE REVIEW

#### Introduction

Numerous papers have been written covering the benefits of physical activity, particularly in adults, and on the decline of these activities and the consequent detrimental effects of this decline, such as the rise in obesity. However, there appears to be a gap in the literature regarding how female adolescents, in particular, actually experience physical activity and why there is a decrease in activity in this age group, even though physical activity has been shown to be so beneficial for the growing adolescent.

It appears that a large percentage of female adolescents are not meeting the levels of physical activity recommended as being of benefit to them. A New Zealand study written by Adolescent Health Research Group (2003) found that in a study of New Zealand secondary school students, 43% of females had not participated in regular (more than 3 days per week) exercise during the last seven days. The Ministry of Health (2003) suggests that there is a great deal of data indicating that taking part in 30 minutes of physical activity almost on every day of the week has associated health benefits. These recommendations are not specific to adolescents.

Schofield, Mummery, and Schofield (2005) indicate there are no set guidelines which recommend levels at which adolescents should be participating in physical activity.

Therefore, it is difficult to determine the effect of low to intense levels of physical

activity on the adolescent. Similarly, as noted by the Ministry of Social Development (2005), "physical activity is not centrally measured in New Zealand and is therefore not easy to gauge" (p. 25). Boreham and Riddoch (2001) propose that recent guidelines have suggested that around 60 minutes of average to intense physical activity every day, incorporating exercises that may benefit stretching and bone density, should be adhered to by the adolescent to benefit from physical activity.

SPARC (2007b) however, have recently suggested that young people should "throughout each day, do 60 minutes or more of moderate to vigorous physical activity", and explain how New Zealand is "one of the first five nations in the world to officially adopt physical activity guidelines for children and young people" (pp. 1-2).

Dwyer et al. (2006) report that research has shown that there is a decline in physical activity, and that this is more notable in female adolescents. Similarly, Caspersen, Pereira, and Curran (2000) explain how physical activity has actually been declining and that at all ages, girls are less active. This is of concern, considering the health benefits outlined previously.

Daly and Lumley (2002) explain how "A systemic review of the literature provides the justification for conducting and publishing a research study" (p. 299). The aim of this chapter is to review the evidence relative to adolescents and physical activity, and the barriers to and determinants of female adolescents' participation in physical activity. Of particular interest are the factors which may prevent adolescent girls from participating in physical activity.

The studies reviewed are predominantly quantitative. Humbert et al. (2006) explain how "past studies have focused primarily on quantitatively identifying the various correlates or predictors of physical activity" (p. 468). There appears to be a limited number of qualitative studies and these normally utilize focus groups. As the female adolescent may be influenced by her peers, it may be more advantageous to collect the data through individual interviews. This view is consistent with findings from Whitehead and Biddle (2008) who explain "the focus group situation was clearly threatening for a minority of girls" (p. 277).

Boreham and Riddoch (2001) explain that physical activity improves the health of children. Similarly, Trost et al. (2002) identified the benefits of physical activity to children and adolescents. They have explained how physical activity has positive effects on blood lipid levels, obesity, cholesterol, bone mass, and the cardiovascular system, as well as beneficial psychological effects. Boreham and Riddoch (2001) also suggest that good habits developed in childhood in relation to physical activity may be carried into adulthood. They propose that this is relevant as it may help to prevent disease in adult life.

Adolescence is a time in a person's life when considerable physiological and psychological change, development, and adjustments are occurring, which may have a significant impact on the individual. Adolescents may be more susceptible to stress and consequent health problems associated with this period of development. As the adolescents' environment and independence widen, so does their interaction with peers, whilst family influences become lessened. Problems therefore may manifest themselves in conjunction with this period of growth and, due to the nature and behavior of the

adolescent, may be difficult to identify and treat. Steptoe and Butler (1996) furthermore, have reported that a higher level of physical activity may also have a positive impact on the psychological well-being of adolescents. Their study involved adolescents 16 years of age and utilized a questionnaire to collect data.

There have been papers published on the effects of physical activity on adults, physical activity and sport in both adolescent boys and girls collectively, barriers to physical activity and issues surrounding these barriers. However, there appears to be limited studies specifically on adolescent girls so this literature review is based on data surrounding adolescent females and physical activity. This literature review is made up of four sections: 1) the physiological and psychological factors, including social, sporting issues, and restrictions in relation to physical activity, 2) gender, 3) cultural, economic and other issues. Finally, the review ends with a reference to reports outlining the implementation of procedures to address this issue, the use of pedometers, and the lack of research in this area.

While it would be preferable to explore more literature related to how the female adolescent experiences physical activity, studies were difficult to locate and, furthermore, there did not appear to be any studies available utilizing a qualitative descriptive or phenomenological methodology. A similar finding was noted by Brunton et al. (2003), who explain that while children do have views on physical activity participation, they are usually overlooked "in the development of interventions" (p. 1). In Whitehead and Biddle's focus group study (2008), they suggest that "those with an alternative viewpoint may have also been reluctant to voice them for fear of being mocked or teased by friends" (p. 257).

## Review strategy

Initially an extensive review of literature was made through the Auckland University of Technology Library databases. This revealed a limited number of resources. After contacting Sport & Recreation New Zealand (SPARC) and trying phrases in the Table 1, various articles of significance were identified.

Table 1: Significant words and phrases used in the literature search

SIGNIFICANT WORDS	SIGNIFICANT PHRASES
Adolescent	Adolescence and females and physical activity
Adolescence	Adolescents and female and physical activity
Female	Adolescence and female and physical activity and barriers
Physical activity	Adolescence and female and problems and exercise
Exercise/sport	Adolescence and female and sport
Barriers	Adolescents and sport and exercise and female
Problems	Adolescents and barriers and female and research

Whilst an extensive search was conducted, particularly on the databases, data pertaining to this area was extremely limited. However, through researching the sources listed in Table 2, some literature was identified on the barriers female adolescents encounter, as well as numerous studies identifying the need for further research.

Table 2: Where information for literature review was found.

Auckland University of Technology Library	Reports on physical activity and adolescence Medical and adolescence journals
Online Databases	Google scholar
	Blackwell-synergy
	Cochrane
	EBSCOHost
	Leisure Tourism Database
	Medline
	Ovid
	Proquest
	Proquest 5000
E-mail	SPARC

# LITERATURE REVIEW: PHYSICAL ACTIVITY FOR FEMALE ADOLESCENTS; BENEFITS, ISSUES AND BARRIERS

# Physiological effects

Further to findings already discussed, health professionals have identified that the adolescent may feel benefit from the endomorphic effects which physical activity induces. A further physiological benefit relative to adolescents is the reduction of blood pressure in adolescents with hypertension. Other benefits include an improvement in cardiovascular functioning and higher peak bone masses (Boreham & Riddoch, 2001).

Numerous benefits such as reduction in cardiovascular diseases, diabetes and some cancers have been identified for adults who participate in regular physical activity.

There is increasing evidence that patterns developed in childhood and adolescence may be carried through to adulthood (Boreham & Riddoch, 2001). Wolfe (2000) explains when referring to the benefits of adolescent exercise that "exercise makes the heart and lungs strong, increases strength and endurance, and helps maintain a healthy weight. It can change a person's body shape by building or defining certain muscle groups" (p. 1). Schofield et al. (2005) also explain how "regular activity among young people is associated with improvements in various outcomes including blood lipid profile, blood pressure, body composition, glucose metabolism, bone strength, psychological health and the maintenance of normal growth and development" (p. 2). Hallal, Victora, Azevedo, and Wells (2006) suggest that physical activity may have a positive effect on bone health, breast cancers, asthma, and strengthening the lungs in cystic fibrosis suffers.

In contrast, however, Lee (2004) suggests that different physical activity level requirements differ in individuals, and that too much physical activity in some may prove to be harmful. Lee (2004) goes on to mention how physical activity, if too strenuous, may have negative effects on the growing adolescent. These may include a wish to discontinue physical activity if pressured into performing too much, or adverse effects if the adolescent has an eating disorder. Furthermore, Lee (2004) suggests that if physical activity is too intense the females may experience muscular, bone and menstrual problems, as well as interrupted growth. This is of concern if there appears to be uncertainty surrounding the specific guidelines for the duration and intensity of physical activity amongst female adolescents.

# Obesity

Obesity is becoming more prevalent, having increased dramatically during the past decade. According to Walsh (2005), "about half a million adult New Zealanders are obese – twice as many as 25 years ago. An estimated one in 10 school-age children are obese and one in five are overweight" (p. 1). Hohepa et al. (2004) explain how:

Globally, obesity and physical inactivity are two health issues affecting young people. In New Zealand, the most current statistics indicate that 33.6% of 11 to 14 year olds, and 27% of 15 to 18 year olds, are considered overweight or obese. (p. 1)

Similarly, Ries, Voorhees, Roche, and Astone (2008) explain how obesity in the United States amongst adolescents has reached critical levels.

Hohepa et al. (2004) also suggest that, to combat the problem of obesity, it is imperative to find a balance between the energy input and output. Energy needs for adolescence are higher compared to childhood, and if the necessary energy or nutrient level is not received, overall growth and well-being may be affected. If, however, energy intake is higher than energy output over a sustained period of time, this could lead to obesity. According to Ministry of Health (1998):

Obesity is body fatness significantly in excess of that consistent with optimal health. There are no agreed national standards for assessing overweight or obesity in New Zealand adolescents. The issue of defining overweight and obesity in this age group is problematic. (p. 3)

There is also a difficulty in measuring obesity in adolescents, and the methods used to date are not always reliable even though the obesity may be visibly evident.

An adolescent may be diagnosed as obese but some of the medical effects of obesity during adolescence, such as cardiac or orthopedic problems, may not become manifest until well into adulthood.

As the obesity rate continues to increase, more research has established the short and long-term effects obesity has on the adolescent, as they grow into adulthood. According to Santrock (2005), and also identified by Hohepa et al. (2004), if adolescents develop poor eating and physical activities in childhood, they may be carried through to adulthood. Hohepa et al. (2004) explain how "physical inactivity plays a key role in the development and management of obesity, while obesity often impacts negatively on an individual's level of physical activity" (p. 1). According to Miller (2004), "participants who increased their leisure-time physical activity from adolescence into adulthood were less likely to be obese compared with those whose activity level was stable or decreased over the study period" (p. 1).

All Family Resources (n.d.) explain how "Obesity in childhood and adolescence can be related to: ... lack of exercise (i.e., couch potato kids)" (p. 1). Kautiainen et al. (2005) suggest that consideration should be given to the increased availability of computer technology, television, videos and digital games when addressing the issue of obesity in adolescents. Furthermore, O'Connor (2005) suggests that if children are missing out on physical activity "the long-term consequences could be an increase in diabetes and childhood obesity" (p. 1).

In summary, obesity is on the rise. This is of concern, not only due to the adverse effects associated with obesity, but eating patterns established in childhood may

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influence individuals as adults. While the issue of obesity is complex, physical activity

may play an important role in its prevention.

Motivation

Bailey, Wellard and Dismore (2004) suggest that, historically, physical activity was

regarded as potentially damaging to a young girl's development, as females were

expected to base their careers around being a mother as opposed to something entailing

physical activity. They go on to explain that some of these values are still supported in

our society. Therefore, as women have been assigned the role of child bearing and

raising children, some may have found themselves disadvantaged or have lacked the

motivation to participate in physical activity

Types of motivation: Intrinsic and extrinsic

A study in New Zealand entitled "Obstacles to Action" which researched New

Zealanders' physical activity and nutrition, examined intrinsic and extrinsic motivation

(Sullivan, Oakdan, Young, Butcher & Lawson, 2003). According to Sullivan et al.

(2003):

There are two types of motivation: intrinsic and extrinsic. Intrinsic motivation is found in an individual who participates in an activity without any outside rewards. It usually leads to experiencing the most pleasure. External motivation relies on outside influences to persuade an individual to participate in an activity. When external motivation is removed, the individual often ceases participation in the activity. The level of happiness that is derived from extrinsic motivation is usually not as great as that from intrinsic motivation. (p. 6)

Though the Sullivan et al. (2003) study, which was intended for SPARC's use, researched a wide range of New Zealanders aged from 16 years, it did isolate the research reports into age related groups, which made it easy to identify the research relative to adolescents. This study used questionnaires and asked participants to indicate their level of agreement/disagreement with a range of motivations for physical activity. Amongst the findings were:

many of the intrinsic motivations are age-related ... there is a clear trend that those who believe physical activity is a good thing are likely to be older.... As with intrinsic motivation, extrinsic motivation is also linked with age.... The report also identified factors such as intrinsic motivation may be the most beneficial way of increasing levels of physical activity. For the adolescent, this may mean finding some kind of physical activity they particularly enjoy and if possible, can still participate in well into their adult years. (Sullivan et al. 2003, pp. 15-50)

Similarly, Cury et al. (1996) suggest that if adolescents feel they are competent in an activity, this has a positive effect on their intrinsic interest. Whitehead and Biddle (2008) also found female adolescents who were intrinsically motivated were more inclined to participate in physical activity, despite outside influence.

The factor of identifying intrinsic motivation as a significant issue in relation to physical activity for adolescent females needs more research to be of further benefit to the participants. However, intrinsic motivation is important for individuals to participate in physical activity, and it is usually based on the adolescent simply enjoying that activity. In contrast, with extrinsic motivation, external factors must be available for the individual to want to participate.

#### Enjoyment

Studies have identified that enjoyment is a noteworthy component in motivating adolescents to participate regularly in physical activity. For instance, Rowland and Freedson (1994) state:

that children and youth must develop a lifestyle of regular physical activity to maximize long-term health benefits. To do this, they argued, means "turning children on" to physical activity by making it enjoyable and keeping them coming back because of an intrinsic desire to be physically active. Providing enjoyable experiences is a potent strategy for increasing activity levels in youth, their attitude about the value of exercise, and ultimately long-term health outcomes. (p. 2)

Whilst literature on motivation is predominantly drawn from the United States, a study prepared for the Hillary Commission in New Zealand similarly identified 'fun and enjoyment' as a significant factor as motivation for adolescents (de Bonnaire & Falloon, 1999). This study was completed in two stages in Auckland and Wellington between May and July 1999. Focus groups were used to interview 13 to 18 year olds in groups of 12 with a split of 50/50 males and females. According to de Bonnaire and Falloon (1999), "Research to date regarding this target audience has been quantitative" (p. 4). Due to the nature of peer influence amongst adolescents, it may have been more advantageous to limit the number in each group, and to isolate the groups into either male or female. However, as peer influence is significant, the focus groups may have provided some of the adolescents with a valid window of thinking. Their key findings were that fun and enjoyment, and having an opportunity to socialize, were important for adolescent involvement in physical activity (de Bonnaire & Falloon, 1999). Bailey et al. (2004), report that:

The benefits of participation in physical activities are great, and the potential costs of inactivity can be severe.... Girls do enjoy engaging in physical activities. Strategies should be implemented which build upon this enjoyment, and allow them to participate as fully as possible, in forms that offer them satisfaction and opportunities for achievement. Practices should be established which recognize the importance of fun, health and social interaction in sports participation. (p. 10)

Enjoyment is also noted as a important factor by Sallis (1999) who explained how "There is growing literature that supports the common belief that people must enjoy physical activity if they are to continue" (p. 29). Furthermore Sallis, Prochaska, Taylor, Hill, and Geraci (1999) explain that "enjoyment of physical education classes should be a health-related goal because it is related to physical activity out of school (p. 413). Similarly, as suggested by Stucky-Ropp and DiLorenzo (1993), if the adolescents wish to continue participating in physical activity, enjoyment has a significant influence in participation. If adolescents enjoyed physical activity they may be more willing to participate on a regular basis, and schools in particular should put more time into researching which particular physical activity programs are enjoyable for adolescents.

#### Peers

According to Sallis (1999), when adolescents engage in physical activity with their peers the influence they have over each other is paramount. Furthermore, "the group creates a supportive environment for its members. If the main peer group devalues physical activity, this is an effective deterrent" (p. 29). If the female adolescent's friends lack interest in participating in the activity, it may influence the female adolescent not to participate. Tergerson and King (2002) explain how "having a friend encourage me to exercise" was an important factor in encouraging adolescents to engage in physical activity (p. 375). They go on to mention that the female adolescents

acknowledged that having a best friend who is physically active helps them participate.

Lee (2004) further suggests that if some of their friends enjoy the physical activity, this may have the affect of influencing their other female friends to enjoy it more. Similarly, Whitehead and Biddle (2008) explain how peers were often responsible for encouraging the female adolescent to participate in physical activity.

# Competition

Dwyer et al. (2006) suggest that competition may act as a deterrent, but that some female adolescents experienced competition as an opportunity to be able to demonstrate their skills against other participants. Furthermore, Barr-Anderson, Neumark-Sztainer, Schmitz and Ward (2008) have recommended from their research that procedures should be put in place which should include girl-only classes, to avoid any competitive environments.

#### Restrictions

Badland and Schofield (2005) suggest that to increase physical activity and encourage children to walk to school or activities, the safety concerns of parents should be addressed. However, some adolescents need transportation, not only to surmount the distance to school or their physical activity, but also to cater for gear bags that hinder walking. Humbert et al. (2006) suggest that adolescents are reliant on their parents for transportation, and if this is not readily available it may hinder their involvement. While they found that students did not seem deterred if they had to catch a bus, it would

need to be a local facility. They go on to mention how lack of, or perceived inadequacy of facilities, may hamper participation.

#### Time

Wiese-Bjornstal (1997) explain that they found female adolescents complained that they did not have enough time for physical activity, which they suggest was similar for adults. They suggested homework, part-time jobs, or family responsibilities made this difficult. Furthermore, Tergerson and King (2002) explain how the female adolescents preferred to do other things with their time rather than engaging in physical activity.

#### Parental

A report from the New Zealand Ministry of Social Development (2005) highlights the issue of poverty, or those surrounding financial matters, which may be significant barriers for adolescents participating in physical activity. The report explains how most young people drop out at year seven and eight, as their families cannot afford the club fees. Though isolated studies specific to financial issues as barriers to physical activity for female adolescents were not identified, literature available does indicate this may be a important issue, and it should not be overlooked. The report suggests: "Parents work long hours to support their families. They have no time to take their kids to activities outside of school hours. One parent might be working night shift and there is only one car or no car" (p. 60). A study in California by Quintero (2004) researched parents' perceptions of their daughters' participation in sports, and explains how girls' rates of physical activity decrease as they enter adolescence. Parental support has been

identified as key for the retention of girls in sports" (p. 4). Whitehead and Biddle (2008) also suggest that parental support and the parents' own physical activity levels may influence their female adolescent. De Bonnaire and Falloon (1999) similarly identified that main reasons for adolescents not participating in sport included both access and adult involvement. Their study prepared for the Hillary Commission explains: "Parental interest is also a factor that may negatively impact on young people's participation. The worst case scenarios are those who put pressure on their children to participate and excel" (p. 28). The report also identified fear as an underlying barrier. De Bonnaire and Falloon (1999), reporting for the Hillary Commission, explain how fear of "being hurt, rejection, humiliation and failure" may also be barriers to physical activity, as with access, lack of adult involvement and competing activities, such as parties and hobbies (p. 29).

Wightwick (2008) suggests that over-protective and overworked parents may be responsible for a lack of physical activity in young people, and that too many 7 to 18 year olds are not meeting the government's recommended level of physical activity levels. This decrease in physical activity may also be attributed to over-protective parents not allowing their children to freely participate in sports, or to walk to and from sports grounds and schools, or pre-occupied parents who allow their children to watch television for extended periods.

O'Connor (2005) explains that "children from broken homes are missing out on weekend sport as they juggle time between parents" (p. 1). With the rise in the incidence of marriage breakdowns, it is inevitable that children and adolescents who are dependant on their parents for not only encouraging participation in physical activity,

but also for providing the financial and transportation means, may suffer as a consequence. Kolt et al. (2006) also explain how "nuclear family structures may not always exist" (p. xviii). They explain that in the nuclear family it is common for both parents to work. While this may mean the family is better off financially, there are still issues with being able to find the time to transport adolescents to and from their physical activities.

Parental support, therefore, plays a major role in assisting or restricting adolescent females' participation in physical activity. Assistance may include financial, transportation, encouragement, or being a role model for the adolescent. Some parents may simply lack the means or motivation to be able to support their daughters in physical activity due to commitments or to other circumstances.

# Psychological benefits

This section reviews the argument that regular physical activity may have the potential to impact on specific psychological problems in adolescence, such as depression, poor body image, and eating disorders.

## Depression

Paluska and Schwenk (2000) explain how physical activity may have the potential to play an important role in the "management of mild-to-moderate mental health diseases, especially depression and anxiety" (p. 167). Santrock (2005) suggests the female adolescent is more likely to develop depression than the male adolescent. While

research on adolescents is limited, it appears that physical activity has a positive effect on depression and anxiety in this age group too (Paulsuka & Schwenk, 2000). Johnson (2003) has found that physical activity is of benefit for girls as it helps them feel good about themselves and improves their emotional well-being. The U.S. Department of Health and Human Services (1996) explain how physical activity may relieve symptoms of mental health problems such as depression, disposition, and apprehension, and further may prevent depression.

Depression may have serious consequences on the adolescent's life, impairing day-to-day activities and, without treatment, it risks continuing into adulthood. Depression in adolescents is also associated with an increased risk of suicidal behaviors. According to Mental Health Information New Zealand (2002), depression in adolescence may prevent the development of skills necessary for life and may also leave feelings of inadequacy in the world which surrounds them. Physical activity may, however, lessen the impact of stress on female adolescents who, particularly as they age, may be more susceptible to stress than males, by providing enjoyment, improving body image, and providing the adolescent with the peer interaction needed.

Brown and Siegal (1988) explained that an "investigation of 364 females in grades 7 through to 11" in Los Angeles, discussed that "the negative impact of stressful events on girls' health declined as their exercise levels rose", suggesting that exercise can be a valuable resource for combating the adolescent's life stresses (p. 101). Similarly, Nabkasorn et al. (2006) explain how, following regular exercise, depression, stress, and physiological fitness were all found to improve, in their study of female adolescents who had depression.

Therefore, it has been shown that there is a connection between physical activity and a reduction in anxiety or depression, and that female adolescents who participate in physical activity may be less likely to suffer from these conditions.

Poor body image and eating disorders

The fear of becoming overweight may develop during adolescence and those fears may lead to poor body image, low self-esteem and eating disorders. The Tucker Center for Research on Girls and Women in Sport (2007) explain how "Girls' self-esteem influences - and is influenced by - physical activity participation and girls ... typically associate body image dissatisfaction with self-esteem" (pp. 19-20).

A report by the President's Council on Physical Fitness and Sports (1997), supports the use of physical activity and sports as a means of improving self-esteem and body image for girls. The report concludes that physical activity has the potential to improve the mental health of the adolescent female, improving their feelings about their body image, self-esteem and improving their feelings of competence while participating in physical activity.

This may be important for the growing adolescent female who may be confronted with a variety of challenges threatening her self-esteem and body image, and therefore confidence and mental health.

Most of the studies reviewed appear to be conducted by researchers coming come from sporting backgrounds, as opposed to researchers such as child psychotherapists or

psychologists, who have an understanding of the nature of the adolescent. Since areas such as body image and self-esteem are so sensitive to the adolescent, questionnaires may not be the most appropriate methodology of capturing how the female adolescent actually experiences physical activity in relation to them.

For instance, Douthitt (1994) researched psychological determinants of adolescent exercise adherence. Douthitt (1994) explains how "the results indicated that... Perceived Athletic Competency, Perceived Global Self-Worth, and the Perceived Physical Appearance were predictive of female exercise adherence" (p. 1). Data was collected twice through questionnaires, the first time in a classroom setting and the second in an instructed summer vacation exercise. The participants were all physical education students and therefore did not represent a true sample of average adolescents.

As with other research on adolescent girls, it has been shown that there is a direct relationship between physical activity and increasing self-esteem and body image in female adolescents. Furthermore, Fox (1999) explains: "There is growing evidence demonstrating that exercise can be effective in improving the mental well-being of the general public, largely through improved mood and self-perceptions" (p. 411).

However, female adolescents who regularly participate in physical activity may feel restricted by specific comments, from not only their peers, but also from adults in their lives. Although the "ideal" physique in today's society is a slender, lean female body, it is much less ideal with respect to physical and mental health (Gill, 1993). Sport-based pressures may include factors such as negative comments from coaches, teammates, and officials, and the standards and demands of the specific sport. Females who do not

match this ideal, particularly those who are overweight or obese, are evaluated negatively and discriminated against (Gill, 1993). For example, some elite female swimmers lose self-esteem "due to derogatory comments or punitive measures for failing to meet what may be an unfair or unhealthy assigned weight standard" (Benson, 1991, p. 107). Similarly, Whitehead and Biddle (2008) found adolescent females "feel embarrassed putting themselves 'on show' during sport or physical activity (p. 256).

It is imperative that female adolescents are adequately nourished during this crucial period of growth and development, but as females, in particular, are self-conscious about their growing bodies, consequent self-esteem problems may intensify with increases in weight.

Any adolescent who has a poor body image or low self-esteem may have a lack of motivation to participate in physical activity. Physical activity, however, may also be able to reduce a poor body image or low self-esteem but some adolescents may be vulnerable to negative comments whilst participating, which may also affect them.

### Gender

## Female's participation in physical activity

Females' achievement in relation to physical activity has come a long way in recent years, but many sports which receive considerable coverage by the media are still male dominated. Allison, Dwyer, Goldenberg, and Fein (2005), explored the reasons for male adolescents participating in physical activity, the barriers they may encounter, and

suggestions on how to rectify male's involvement. They explain that with females participating less in physical activity, it is to be expected that there is more literature devoted to males.

Suris and Parera (2005) assessed whether physical activity amongst adolescents decreases with age and, if so, whether this decrease depends on gender. They considered whether physical activity is related to personal, family, and school factors, as well as healthy behaviors. The data was collected in Spain among adolescents aged 14-19 years. The analysis was performed according to gender. This study was consistent with other findings and showed that physical activity is more common in male adolescents. The study also showed that physical activity decreases with age and that physically active youths perceived themselves as healthier, and happier with their bodyimage. They also had a better relationship with their parents, better connected at school, and had a healthier lifestyle.

Similarly, a study by Alley and Hicks (2005) discussed how the issue of sex stereotypes for certain sports may influence who elects to participate and how participants are viewed by others according to their gender. Participants were asked to write a paragraph in relation to the research question. According to Alley and Hicks (2005), "There is a consistent decrease in rated femininity and increase in masculinity for both male and female adolescent targets as they switched from participating in a 'feminine' (ballet) to a neutral (tennis) to a 'masculine' (karate) sport' (p. 1). This study may indicate that if female adolescents wish to participate in a variety of sports, some of which may be quite physical, the female adolescent may be disadvantaged purely by the fact of her gender.

Bailey et al. (2004) from Canterbury Christchurch University College, U.K., compiled a report on girls' participation in physical activities and health. The report shows that, clearly, physical activity amongst females is declining, and this decline increases as they age. Bailey et al. (2004) also suggest that male adolescents are notably more active than their female adolescent peers.

The reasons for this appear to be unclear and the research is limited. According to Bailey et al. (2004):

Although boys are generally more physically active than girls, little is known about a possible explanation for this.... From an early age, many parents, in a range of cultures, treat boys and girls differently and encourage different styles of play in physical activity contexts, most commonly by providing gender-based toys and encouraging boys and girls to engage in gender stereotyped activities, usually with boys encouraged to play vigorously and girls quietly. (p. 7-8)

Further studies are needed to identify specifically why this is occurring, and attempts should be made to tailor educational physical activity programmes according to gender. As Bailey et al. (2004) have explained "the more opportunities that are available for girls to be physically active, the more they are active. Strategies need to be put in place that ensure activities, settings, and facilities are easily accessible and safe" (p. 10).

The influence of males on females participating in physical activity

A report compiled by a working group formed to identify issues pertaining to physical activity in New Zealand found "girls do not want to participate with boys in schools and may not even want boys watching" (Auckland Regional Physical Activity & Sport Strategy (2005-2010), (2005). These female adolescents may have either experienced

negative comments or have found the males too competitive. Gabbei (2004) refers to how females do not receive neutral physical education whilst participating in the class with males. They go on to suggest they will possibly give up or hold back whilst participating in games with males. In contrast however, Hannon and Williams (2008) suggest that males may hold back while participating with females and that the females may actually have a lower skill level, therefore lowering the team's ability. While some females clearly do enjoy participating with their male counterparts, for females to be given maximum opportunities, the above factors need to be taken into consideration.

#### CULTURAL, ECONOMIC AND OTHER ISSUES

#### Cultural

As with other research on physical activity and female adolescents, literature surrounding culture was difficult to find. According to The President's Council on Physical Fitness and Sports report, Physical Activity & Sport in the Lives of Girls (1997), "Little is known about the dreams, interests and physical activities of girls of color ... few opportunities exist for emotionally or physically challenged adolescents to engage in exercise and sport" (p. 26). With the lack of data specific to cultural barriers or adolescents who have disabilities, it is difficult to ascertain exactly what impact these issues may have as barriers to physical activities.

The Tucker Center for Research on Girls and Women in Sport (2007) explain how girls of colour may especially be well represented in "lower socioeconomic groups" and therefore, may have limited access to physical activity (p. xv).

A study by Mabry et al. (2003) used focus groups to research physical activity attitudes of African American and white adolescent girls. The purpose of the research was to compare the attitudes of African American adolescent girls toward physical activity with those of white adolescent girls. The study suggested that the African American adolescents were more accepting of their body image but that both groups mentioned appearance and hygiene, value of physical activity and the issue of masculinity and social support. The researchers would have needed to be careful regarding the ethical issues of comparing these two groups of females and also would have needed to take into account that different cultures may not be so forthcoming in front of their peers.

Another study by Kimm et al. (2002) researched the decline in physical activity in black girls and white girls during adolescence. The researchers followed 1,213 black girls and 1,166 white girls from the ages of 9 or 10 to the ages of 18 or 19. The researchers concluded that substantial declines in physical activity occur during adolescence in girls and are greater in black girls than in white girls. Some determinants of this decline, such as higher body-mass index, pregnancy, and smoking, may be modifiable.

A report for the Hillary Commission explains how their study does not provide a comprehensive understanding of the situation and that there are clearly some dimensions which have yet to be explored, i.e. cultural and socio-economic differences (de Bonnaire & Falloon, 1999). The range of participants in this qualitative study was from those with a modest level of activity to those sustaining high levels of activity. Thus, the voice of the girls who did not participate at all in physical activity was missing. The report recommends further research on understanding issues and specific

communication requirements of Maori but makes no reference to Pacific or Asian communities, or to adolescents with either disabilities or health problems.

The Auckland Regional Physical Activity and Sport Strategy 2005-2010, (2005), explains how the younger population of Pacific Islanders are considerably less active than the younger population of Maori or Europeans. According to the Ministry of Health (2003), "Fifty-two percent of young Pacific people are active, compared to 68 percent of other young New Zealanders ... fifty-nine percent of young people from minority ethnic groups are active.... Sixty-three percent of young people with a disability are active" (p. 3-4). While identifying research gaps, the Ministry of Health (2003) has included a gap in research on "physical activity participation by 'other' ethnic groups (including migrants and refugees)" (p. 1). Issues for these groups such as language barriers and cultural issues such as clothing should also be taken into account. According to the Ministry of Health (2003), children and adolescents are included in their priority group to increase physical activity (p. 1).

As explained in the President's Council, Physical Fitness and Sports (1997) "because of the lack of available data and analysis, the authors of this report were unable to address in any depth some key aspects of girls' experiences with physical activity and sport" (p. 26). Not enough research has been done in this area, where female adolescents have so much to gain (President's Council, Physical Fitness and Sports, 1997).

Little is known in relation to how adolescent females of different cultures, or how those who may face disabilities, experience physical activity. Most of these studies are based on healthy female adolescents who do not have any significant cultural reasons for not participating in physical activity.

#### **Pedometers**

Schofield et al. (2005) utilized pedometers to measure the step counts of female adolescents who were inadequately participating in physical activity. They suggested that the use of pedometers may have short-term results. Similarly, Oliver, Schofield, and McEvoy (2006) utilized pedometers in an attempt to educate children in physical activity. Furthermore, they hoped that the pedometers might increase motivation in the children, and suggested that the group most likely to benefit would be the inactive children.

## Lack of research

The issue of motivation in relation to physical activity, particularly early in the past century for female adolescents, has been an area of low priority in both research and of concern for health professionals. A number of papers have reviewed motivational factors in relation to adolescents' involvement in physical activity. Few, however, have focused specifically on females only, usually researching males and females collectively.

Bailey et al. (2004) also identified the need for more research in relation to physical activity and they too found that "Studies specifically focused upon girls' perceived barriers to physical activity are still relatively rare and predominantly come from the U.S., but themes are beginning to emerge" (p. 6). More research on young people

should reflect upon the diversity of the differing cultures from both developed and developing countries around the world, taking into account their differing experiences of physical and sporting activities. Bailey et al. (2004), similarly, found that research on the psychological effects of females participating in physical activity to be very limited. Furthermore, Fox (1999) explained that the area of mental health and physical activity is an area that is not broadly researched. This assumption by Fox was made in comparison to the area of health service research which Fox implies is widely researched. Fox (1999) suggested that "the work on exercise and self-esteem amounts to little more than one randomized controlled study per year for the last 30 years" (p. 416).

Research on female adolescents participating in physical activity is limited in researching those who may encounter cultural issues, disabilities, or who, for some reason, do not participate at all. Furthermore, the research is predominantly quantitative and may not give a true reflection on how the female adolescent actually experiences physical activity, should they be influenced by their peers during the data collection process. Lee (2004) explains how it would be advantageous for teachers to actually ask their students questions and elicit their point of view in relation to participation in physical activity. Cothran and Kulinna (2005) also suggest very little is known about how young adults feel while participating in physical activity. They go on to comment that this is hard to explain since young people have the knowledge and communication skills to be able to relay this important information. To identify how the female adolescent actually experiences physical activity is a critical component in being able to rectify the progressive decline in physical activity.

#### Conclusion

Physical activity can be identified as any body movement produced by skeletal muscles that results in an expenditure of energy. Throughout the review, it has been shown that there is a decline in physical activity, particularly in females at the adolescent level. There are considerable research gaps in identifying why such a large percentage of New Zealand female adolescents are not participating in physical activity on a regular basis, when it offers numerous physiological and psychological benefits for them, at a time when they face considerable change in their lives and become more dependent on their peers.

Adolescence is a particular phase in life wherein positive diet and exercise behaviors which have originated in childhood may be established, possibly being carried through to adulthood. However, despite the introduction of schemes promoting physical activities into schools, it has been identified there is a reduction in this area. The specific reasons for the reduction of exercise in adolescence, particularly in girls, are varied and complex and not fully understood, but there should not be any reason why adolescents might not benefit from its positive physiological and psychological effects, especially since their bodies are at a stage where they are adapted to physical activity. Regular physical activity may have the potential to impact on the adolescent through physiological effects which include increasing muscle mass and shape, increasing strength and endurance, stronger heart and lungs, reduced hypertension, reduced or maintained weight and, potentially, reduced incidence of osteoporosis which could affect the female later in life. Physical activity also has beneficial psychological effects which may also impact on the female adolescent, including reduced stress, anxiety, or

depression, improved body image and self-esteem, better relationships with peers, and a reduction in the mental health or psychological effects of obesity.

Studies reviewed found that issues such as motivation and enjoyment were major factors in engaging this group. Significant barriers such as psychological issues, gender issues, cultural, economic and other issues were found, but most studies were from the United States and not specific to the New Zealand culture.

Purpose and significance of the literature review

Whilst data is available on the physiological and psychological benefits of physical activity, there is limited data or explanations as to why there is a drop-off in physical activity amongst female adolescents when, clearly, physical activity has been shown to be so beneficial. It would be advantageous for researchers to isolate the barriers that are specific to female adolescents in order to provide access, or further opportunities to participate in physical activities. Though these barriers are similar to those faced by adults, without research specific to the female adolescent it is difficult to gauge accurately how and why so many female adolescents do not participate regularly in physical activity.

This literature review highlights the limited research and gaps in our knowledge on female adolescents participation in physical activity, and the important barriers that prevent them from enjoying the associated benefits. If we can understand how female adolescents actually experience physical activity alongside the issues they may face, then drop-off in physical activity of adolescent girls may be understood. It will then be

possible to develop programmes to accommodate the vulnerable growing female adolescent.

### CHAPTER THREE: METHODOLOGY

### Introduction

This chapter discusses qualitative research and its relevance to the study, the research methodology, and the philosophical underpinnings. The reasoning behind the selection of qualitative description as a methodology and the rationale behind the phenomenological hue is explained. The research question, "What is the female adolescent's experience of physical activity?" will be referred to and an explanation of why this methodology is suited to explore the phenomena surrounding it is provided.

This chapter also includes a description of the methods and processes used to gain ethical approval, participant recruitment, data gathering, data analysis, rigour, and ethical considerations.

### Qualitative research

Qualitative research describes research in a number of different paradigms which encompass a collection of methodologies. The qualitative methodologies are involved with the complexities of humans by directly researching human experience (Carpenter, 1997). Qualitative research attempts to ask different types of questions than those normally asked within reductionist traditions, as it attempts to describe and interpret phenomena systematically (Carpenter, 1997).

Talking to the people involved in a specific experience takes one to the initial interpretation of the phenomenon of interest. For this study, interviews were conducted on adolescent girls who had the experience of physical activity.

Marcus and Fischer (1986) explain how qualitative research methods originated within anthropology and were utilized for "understanding, describing, interpreting, translating and presenting the inside, or native point of view" (p. 25). Furthermore, Spencer, Krefting and Mattingly (1993) noted how "qualitative traditions have grown out of a long-standing concern about how to best study and represent human life and human action as meaningful activity" (p. 304). Spencer et al. (1993) further suggest that the intention of these approaches is to describe the human experience in the participant's own language in everyday situations. The adolescents themselves, who have their own voices, have an opportunity to tell their stories as they are. Smythe and Giddings (2007) suggest that "qualitative research always seeks to find the issue of concern in its everyday context, and by means of interviews and/or observations and/or accessing text, hear the voices of those closely involved" (p. 37).

The female adolescents in this study were able to relay their stories the way they experienced them. They were in a safe environment of their choice, away from major disturbances and distractions. The settings were frequently in their own homes, with their caregivers in close proximity.

Patton (1997) also suggests the philosophical underpinning origin of qualitative research places emphasis on the significance of understanding how humans behave. This includes, as Patton (1997) suggests, "the social-cultural context of social

interaction" (p. 20). This involves the inclusion of how to empathically understand the participants and their connections between their behaviors and personal insight (Patton, 1997).

Understanding of how the participants behave is of importance to the phenomena being investigated and qualitative research allows for this to be further explored. I hold qualifications in child/adolescent development and exercise prescription, which provide me with an understanding of adolescent behavior and their engagement in physical activity. For the researcher to be able to have an understanding of the phenomena they are researching, it is beneficial for them to have some understanding of the phenomena under investigation for validity of the research (Patton, 1997).

## Research methodology

Incorporating qualitative description with a phenomenological hue was the most suitable methodology to uncover the stories of female adolescents allowing me to describe their stories as the way they were. Sandelowski (2000) explains how "the qualitative descriptive study is the method of choice when straight descriptions of phenomena are desired" (p. 339). The use of a qualitative descriptive approach incorporating overtones of phenomenology permitted me to reveal meaning in the stories of the female adolescents in relation to participating in physical activity and to stay close to the stories themselves (Sandelowski, 2000).

Sandelowski (2000) suggests that qualitative descriptive studies present the data in the adolescent's everyday language as opposed to other methodologies which may require

the researcher to change the language or text to permit further interpretation. Therefore, the intention was to gather a substantial amount of data to capture insights into the experiences of the female adolescent participating in physical activity while seeking descriptive soundness (Sandelowski, 2000).

### Phenomenology

Crotty (1998) explains how "the phenomenological movement was launched under the battle cry of 'Back to the things themselves!" (p. 78). During this study, I aimed to understand the phenomena surrounding the female adolescent engaging in physical activity and explore the experiences in relation to this in order to reveal meaning within the experience (Crotty, 1998). Polit, Beck and Hungler (2001) explain how during a phenomenological study, "The phenomenologist investigates subjective phenomena in the belief that critical truths about reality are grounded in people's lived experiences" (p. 214).

While the philosophical writings underpinning phenomenology were beyond the scope of the study, having a phenomenological hue did allow me to explore the lived experience of the participants. The phenomenological overtone permitted the participants to reveal how they actually felt about the experience which in turn enabled me to identify common themes. The influence of this methodology allowed me to investigate and describe the phenomenon I was researching by staying close to how the adolescents experienced it. As adolescents are influenced by their peers, one-on-one interviews have the advantage of ensuring that an optimal environment is created for the participants to express their personal experience.

Phenomenologists as van Manen (1997) explains "always ask the question of what is the nature or meaning of something...it is descriptive (phenomenological) methodology because ... it wants to let things speak for themselves" (pp. 180-181). Smythe and Spence (1999) explain how "phenomenology seeks to uncover meaning from experience" (p. 1). Phenomenology allows for the interpretation, understanding and revelation of the hidden meanings behind the participants' stories.

#### RESEARCH DESIGN

This qualitative descriptive study with a phenomenological hue used an emergent design and attempted to extract data concerning the lived experience of the person. In having an inductive approach, it allowed the gathering of qualitative data through indepth interviews. This is different from typical studies in the field of adolescent physical activity which normally utilize questionnaires (Patton, 1997). According to Gullotta, Adams and Markstrom (2000), "The most common method of collecting data about adolescents is through surveys or interviews" (p. 35). As already explained, the intention was to conduct this research in a manner that would be most advantageous to the phenomena being explored.

## Ethical approval

The Auckland University of Technology Ethics Committee granted the study ethical approval on 6 June 2007 (Appendix 1). I adhered to my ethical commitment by carefully considering and adhering to the ethics committee's recommendation of

making the assent form easier for the adolescent females to fill out and making sure I included Maori participants.

Furthermore, I was careful to communicate the underlying principles of my study to the participants and their parents or caregivers prior to the interviews. This gave them the opportunity to either ask any questions or have the option to withdraw from the study.

### Participant recruitment

The participants were six female adolescent girls. The amount of data generated from this number was extensive and six was an appropriate number to work with, considering the amount of data that was collected and analysed. To acquire in-depth data pertaining to this phenomenon, it was essential that participants be interviewed in a manner which enabled them to tell their stories. The participants were selected on the basis they could verbally communicate their experiences of physical activity, and were recruited through personal contacts. Following discussions with the parents or caregivers, a formal invitation by means of an invitation sheet, which further outlined the process, was given to the parents and caregivers (Appendix 2). The adolescents were then initially invited to participate by their caregivers on my behalf with an arrangement that if they were interested, they should notify me by phone or e-mail (Appendix 3). During this process I was conscious of keeping the language to an age-appropriate level, and stressing that they were under no obligation at all, being free to withdraw at any stage, should they wish. In general, the participants were more than willing to participate and, in particular, they appeared to be excited and curious to be given the opportunity to be involved. It was also important that they could fill out the consent forms satisfactorily (Appendix 4),

communicate their experiences, and be willing to engage in an interview session of approximately sixty minutes. Parental consent was also required for participation, prior to commencement of any research (Appendix 5).

With any New Zealand study it is important to hear the voices of Maori, and early in the recruitment process contact was made with a local Maori elder who had been introduced to me by a Maori colleague at AUT University. After e-mails and telephone conversations, I met with Mrs D. and discussed how best to accommodate the Maori participants, including a review of the type of questioning, with reference to the Treaty of Waitangi. We further talked through any problems that might arise and what consequent action to take, such as their possible reluctance to engage in a conversation. As a result of this connection two Maori adolescents were recruited into the study. Their pseudonyms are Larissa and Luisa.

#### Data gathering

The process of data collection included semi-structured, individual interviews. Polit et al. (2001) suggest that open ended questions permit the participants to impart the data in their own words. Sandelowski (2000) implies that collection during a qualitative descriptive study may involve discovering the experiences through open-ended questions. Data gathering commenced on 7 June 2007 and was completed on 15 November 2007. Two interviews were completed within close proximity to each other and then transcribed before beginning the next interviews. Prior to the commencement of the study, I ensured all required forms were filled out and that the participants and caregivers were fully aware of the interview process. They were reminded they had the

right to withdraw at any time. I had previously contacted the AUT Health and Counselling service, lest I should need to seek their advice or make a referral of a participant who had become distressed as a result of the interview (Appendix 6).

Information was gathered through open-ended questions and in-depth conversations, thus allowing me to seek meaning to the adolescents' experience of physical activity. These lasted between 45 and 60 minutes and were taped and transcribed verbatim. I ensured the use of high-quality recording equipment with new tapes and used two tape recorders. Furthermore, a notebook was used to record notes or words, which I completed after the interview. This included notes on body language, cues for further questions to ask, my biases and extra notes recorded at the time. Initially, it was difficult to write full notes as it meant losing eye contact, which disrupted the flow of the interview. Therefore, I wrote words or brief notes where applicable. Attempts were made to record the interview in a quiet atmosphere at a mutually acceptable place, date and time. Unfortunately, there were a few interruptions such as an inquisitive sister and a barking family dog, but as the participants appeared to be unfazed by such intrusions I was able to continue the interview without interruption. Four were interviewed in their homes, while two were at school which was negotiated with the Head of Department of the school.

Initially, I was concerned that the participants would not openly communicate with a stranger, but it soon became apparent they were more than happy to share their stories. Cues such as body language and pausing during the conversations prompted me to move to the next question. I was conscious of letting the participants reflect on their stories within these brief pauses and also conscious of keeping them engaged. The

questions (Appendix 7) were open ended, and a few times the question was repeated in a different context to check clarification. While remaining impartial as I listened to the participant's stories, it was important for me to offer encouragement and reassurance in response to their stories. This was in the manner of a head nod, a smile, and shared laughter. No issues surfaced that were significant enough to require referral to the caregivers or to a counsellor.

# Analyzing the data

The process of analyzing the data began at the commencement of my interviewing, in June of 2007, and the majority was completed by the end of May 2008. Brown (2008) suggests that in qualitative research, it is the norm to begin preliminary analysis of the data after each interview. The first tape was transcribed by myself using the equipment from the AUT University postgraduate office, but as this process was found to be extremely time consuming, even though I am a proficient typist, it was necessary to utilize a professional transcriber (Appendix 8) to transcribe the data. I revisited the tapes while referring to my notes. This assisted me during the analysis process and allowed me to become immersed and dwell in the data. As the adolescents' text was sometimes disjointed, it was necessary to re-write and interpret some of the text into plausible language while staying close to their data, stories or experiences. While I invested a considerable amount of time into analyzing the data, it was imperative for me to endeavor to understand the participants' stories and elicit the meaning from the data. According to Streubert and Carpenter (1999), "Data analysis requires that researchers dwell with or become immersed in the data" (p. 103). A process of theme and content analysis enabled me to find the meaning of the experience for the participants. Van

Manen (1997) explains how "theme analysis" is the procedure of extracting the themes that are embedded in the data in order to reveal the meanings of the experience. "Phenomenological themes maybe understood as the structures of experience" (pp. 78-79). After reading and writing and re-reading and re-writing the data alongside reflecting and dwelling in the data, recurring themes emerged. Van Manen (1997) believes that through writing reflection takes place, and it may take considerable time before a sense of the essence of the experience is identified.

The themes that emerged were found to be common amongst all participants. Data was initially coded, considering the data and identifying categories, and then similar data was grouped together. This process was completed in consultation with my supervisors. Patton (1997) suggests such content analysis allows the researcher to identify significant themes in the data. Polit et al. (2001) explain how content analysis is "the process of organizing and integrating narrative, qualitative information according to emerging themes and concepts" (p. 459).

The themes were further divided into logical headings relative to the research question and the phenomena being explored. Patton (1997) refers to how in content analysis the researcher not only brings all the data together, but divides the data into categories, patterns and themes. Sandelowski (2000) suggests content analysis is an appropriate method to use for qualitative descriptive studies and that qualitative content analysis moves into the area of interpretation.

Some of the emerging themes were consistent with issues I had earlier identified in my literature review. However, some significant areas were not, and these are discussed in subsequent chapters.

In summary, a content and thematic analysis was carried out whereby the stories or data of the participants were categorized and assimilated into themes. Finally, a description of the phenomenon surrounding the experience of the female adolescent and physical activity emerged. These themes capture the voices of the participants and describe the phenomenon as experienced by them. The interpretation of the themes is discussed in chapters four, five and six.

# Rigour

Even though qualitative research is sometimes criticized for lacking scientific rigour, various strategies are available within qualitative research to protect against any bias and to enhance the credibility or trustworthiness of the findings. Koch (1995) suggests that there is a lack of understanding amongst researchers in regards to the issue of rigour and that the researcher should adopt the most appropriate method for ensuring that the study is trustworthy and believable. In the following, the discussion surrounds the area of how the rigour of my research study was ensured and the strategies that were employed.

Consultation was sought from experienced researchers and people who were familiar with my areas of research throughout the process. Furthermore, a detailed record of the research process was kept. One of the most important ways to ensure that research is

rigorous is to make sure the research is verified both during and at the completion of the study. Koch (1995) explains how "trustworthiness may be established if the reader is able to audit the events, influences and actions of the researcher" (p. 178). Particularly in working with older children, it is important to place emphasis on verification of the research data collected, checking that the stories crafted from the data represent what they 'said' (Caelli, 2001).

According to Grbich (1999), "Most qualitative researchers believe that 'truth' lies in gaining an understanding of the action, beliefs and values of others, from within the participant's frame of reference" (p. 16). As a researcher, who is trained in the area of child/adolescent development, it was evident to me that if I was to establish a satisfactory rapport with the adolescents concerned, this would assist me to see the data from their view and uncover important insights.

Denzin and Lincoln (2000) suggest it is important the researcher builds a rapport with the participants to make it easier to view the situation from their point of view. Furthermore, Gullotta et al. (2000) suggest that when researching adolescents, the researcher needs not only to be skilled in the area of adolescent development, but it is preferable to use interview techniques whereby the researcher is able to build trust and establish a rapport with the adolescent. During the research process, after gaining the trust and respect from the adolescent participants, it was easier to extract data which allowed the meaning of the stories to be uncovered.

In trying to uncover the meaning of their stories, time was of importance as most adolescents are likely to become bored with prolonged questioning techniques.

Questioning, therefore, was kept to 45 to 60 minutes, and was age appropriate. Having trained in child development allowed me to be aware of any therapeutic issues, such as engaging the adolescents or resistance during the interviews. However, during the interview process, there was no evident resistance to the extent that there was a need to attempt to engage the participant or feel a need to end the interview.

My experiences in the issues that adolescent girls may face made the data easier to interpret and understand. This also made me aware of the need to be aware of my assumptions, so as not to pre-judge the data. Miller and Glassner (as cited in Silvermann, 2004) explain, "The meaning systems of adolescents are different from those of adults, and adult researchers must exercise caution in assuming they have an understanding of adolescent cultures because they've 'been there'" (p. 128).

Carpenter and Hammell (2000), (as cited in Hammell, Carpenter and Dyck, 2000) suggest how "Trustworthy' in the qualitative paradigm, means that the processes of the research are carried out fairly and that the products represent as closely as possible the experiences of the people who are studied" (p.109). Trustworthiness is considered to be established when credibility and confirmability have been identified; for instance, the participant's perspectives have been reported clearly and correctly. The competence of the researcher, too, is important for the credibility of the research study. To ensure that there was a familiarity with the issues around the research question, a thorough literature review on issues surrounding this phenomenon was completed, ensuring the interview, data collection, and analysis, were consistent with the qualitative descriptive/phenomenological methodology. Establishing rigour throughout this process is of importance to the trustworthiness of this study. As a researcher, it was necessary for me

to develop research skills to enable me to extract the 'lived experiences' without contaminating the data, while staying close to it. These were developed in conjunction with guidance from my supervisors, and from earlier experience which I had gained under other experienced researchers. Further skills that were acquired included the use of clarification, interpretation, description, writing and adequate listening and communication skills. It was also important for me to ensure the types of questions fitted the research methodology, also reflecting the research problem and question and the purpose of the research. Reflection and participant feedback further ensured rigour in the study.

Help was sought from experienced researchers, such as my supervisors, to assist me through the process. This has helped ensure the research is not only of an acceptable standard, but has assisted in identifying any problems associated with the overall research design and interpretation of the findings, as well as ethical considerations. According to Carpenter and Hammell (2000), "Researchers are encouraged to solicit the help of colleagues who have experience with qualitative methods in reviewing field notes and transcripts to see whether they identify the same categories and themes within the data ... a further instance of triangulation" (p. 111).

# Ethical considerations

The main ethical considerations are related to suitability and rigour, issues relating to research on adolescents, and the Treaty of Waitangi. To safeguard all concerned, it is imperative ethics are adhered to when undertaking any form of research. According to Davidson and Tolich (2001), ethical codes may be summarized into the following

"collection of common principles. These are: 1 first, do no harm; 2 all participation needs to be voluntary; 3 preserve the anonymity or confidentiality of participants; 4 avoid deceit; 5 analyze and report data faithfully" (p. 376).

#### Do no harm

The participants should suffer no adverse effects throughout the study. Taking the age of the adolescents into consideration, they should be fully aware of what the study entails. There were arrangements made to refer them to counselling, with parental consent, but that was not necessary.

In the ethics application, possible risks due to the connection of emotional issues between adolescents and their body image were acknowledged. However, it seemed all the participants were comfortable about discussing such issues, though they were not specifically addressed. Participants were free to withdraw at any time throughout the research, but this was not necessary.

## Voluntary participation

Participants were informed that this study was voluntary, and that they had the right to withdraw without giving any reason at any stage. They were informed they had the right to refuse to answer any questions, and were treated with respect (Appendix 2).

## Informed consent

Prior to the study, the participants were allocated time to ask questions pertaining to the study and were required to complete and sign, with parental or caregiver permission, an assent form (Appendix 4) and their caregivers were required to complete and sign a parent/guardian consent form (Appendix 5).

### Confidentiality and anonymity

All participant information was treated confidentially, in that there will be no personal identification in the records. Throughout this script, pseudonyms were allocated to protect the participants and only the researcher knows their identities. Furthermore, the transcriber has signed a confidentiality form (Appendix 8) and all the information, including tapes, is securely locked away in a cabinet. According to Davidson and Tolich (2001), "A respondent is 'anonymous' when the researcher cannot identify a given response as being that of a given respondent ... 'confidentiality' is where the researcher can identify a certain person's response but promises not to make the connections public" (p. 377).

## Avoid deceit, analysis and reporting of the data honestly

There was no deceit in this study. This thesis represents an honest and true account of my research study. I ensured this by keeping accurate records, seeking regular guidance and consultation from my supervisors and at all times, adhered to professional and ethical standards.

# Treaty of Waitangi

Whilst researching in New Zealand, it is necessary to take into account the Treaty of Waitangi. Durie (1989) refers to the principles of the Treaty of Waitangi as: partnership, participation and protection.

I consulted Mrs. D. with the view of building a rapport and identifying any issues which may have arisen regarding Maori participants in relation to cultural issues. Mrs. D. is a contact provided to me through an AUT Maori lecturer and is also a known Maori elder in the community. As a result of this consultation, I modified my introduction to the research questions, not only to attempt to engage the Maori participants, but also to minimize any resistance. The consultations were ongoing throughout the research as I sought to maintain cultural safety ensuring that the participants felt comfortable and safe throughout the process. During our meeting, we discussed a range of topics from the participant's viewpoint, taking into account the Treaty. Furthermore, I consulted a website specific to Maori to better understand the Maori participants from a cultural point of view, including how their answers come from their Whakapapa (in Maori culture, the ancestors of a family).

Throughout data collection, participants were encouraged to have their whanau (family) present if they wished and were also allowed them to decide on a culturally appropriate place to be interviewed. Prior to and during the research, there were ongoing consultations with my Maori peers to ensure I was acting in an appropriate manner with respect and sensitivity to the Maori culture. According to Jahnke and Taiapa (2001), "research about Maori requires clear goals and objectives, and reliable information

based on actual Maori experience. This does require that Maori themselves should be involved in the design, delivery, management and monitoring of the research process" (pp. 49-50). In my findings, there were no apparent claims that any of the insights pertain particularly to Maori. This was beyond the scope of the study.

# Summary

During this chapter, I have discussed the use of a qualitative descriptive study with a phenomenology hue, explained the philosophical underpinnings, and discussed the reasoning behind my choice of the selected methodology. I have also described the process of participant recruitment, gathering of the data, and the data analysis process. I have, furthermore, explained the process of my ethical considerations, including ethical approval.

CHAPTER FOUR: SOCIAL INTERACTION

Introduction

Socializing and building social networks are important for the female adolescent. The social influences they encounter may be from peers, parents, siblings, male adolescents or teachers. These groups may either influence or play an important role in the female adolescent's behaviour, providing opportunities for engagement or support. In contrast, however, these groups may have a negative impact on the female adolescent, either preventing or hindering participation in physical activity. This chapter outlines how the participants experienced social support or influence. Included are the issues of fun, enjoyment, or boredom, and body issues, all of which may have a strong link to social influences.

Peer influence

Social interaction is an important component of life and sport, particularly team sport, bringing people together in a unique way. Adolescent girls are open to the possibilities of peer influence and peer pressure as they engage closely with each other during their daily lives, including physical activities. Humbert et al. (2006) argue that if an adolescent's friend participates in physical activity, it is highly likely the adolescent too will be influenced to participate in physical activity.

Alongside this influence from their friends, the adolescent is separating from parents or caregivers. Peer pressure in their daily activities, including physical activity, may be

significant enough to influence how much or little they engage themselves in such activity. Therefore, if the adolescent's peers withdraw from a physical activity such as a sport played at school, even though the adolescent herself may enjoy it, this may increase the likelihood of withdrawal as well. Conversely, friends may encourage more involvement in physical activity however some have to endure experiencing their peers drop out.

Larissa reveals the contrasting nature of engagement:

I've seen heaps of girls drop out and stuff. I play basketball and I do basketball and netball. I just love sport It's really my passion to do sports but I've seen, I've seen heaps of girls drop out and stuff. I'm captain of the netball team and the basketball team and, I just like it. It makes me fit and healthy and I just love sport.

Larissa's reveals her love of the sports and her involvement, but this story demonstrates the disappointment she has encountered with players withdrawing from her netball team when she herself finds it so advantageous to her own health and general well-being. She has the responsibility of being captain of her team, and is frustrated and disillusioned when her peers make the decision not to play. This predicament is also disturbing, for Larissa appears to have an intense enthusiasm for her sport and is fully committed to her team and game. She also explains:

One of my friends told me that they want to ditch training. It's mainly training not the game. They say they want to come to the game but they won't come to training. I think it's because not a lot of girls like running around, because it's hard out our training. Most of my friends don't like training. When I was out running with my friend, all my other mates were just staying back, just relaxing. We told the girls all the time to get up and let's go for a run but they don't want to.

Larissa feels that most of her friends do not like the running around, nor did she like the high level of intensity expected of them that goes with the sport. Some are committed, but the others would prefer to substitute the training for more leisurely activities.

Larissa explains how, when she was out running with her friend, her other peers' preference was not to participate. Even when she attempted to coax them into coming out with her for a run they resisted, saying they did not want to go. There is a sense of frustration on Larissa's part, but she still finds the experience of running and training invaluable, even though she has to leave the majority of her peers relaxing while she is out exerting herself. She appreciates the potential benefit that running contributes to her training schedule, and even though she fails to engage her peers, this does not deter her from running and training for her games. Nevertheless, she still has one friend who enjoys running with her. How committed would she be to training if she was the only one prepared to make the effort?

Many of the participants referred to the influence of engaging in physical activity with their peers, implying the enjoyment factor may be intensified by having their peers participate with them. For example, Melanie explains in her story:

At ... I basically walk around with my friends. Sometimes like when we're in a hurry we always run and sprint and have races to where we're going. So really, I am quite active at ... because we are walking around a lot and doing bush walks and swimming and everything like that. I like boogey boarding with my friends a lot more because it's sort of more social. It is way more fun because my friends are there. You can just do whatever you want and talk about whatever you want. I can just be as crazy as I want and just go wild in the waves and stuff. It's really cool when my friends are there. We didn't have to worry about anything like school or exams or tests or anything. All we could think about was how much fun we'd had and it was really good. It made me feel really active and more energetic.

Melanie finds herself having more fun while engaging in sports or physical activity with her friends. Melanie expresses the feeling that when she is with her friends, she experiences this time as creating a sense of feeling quite active. Similarly, Tergerson and King (2002) suggest that females are more prone to be involved in physical activity if their best friends are. Melanie enjoys boogey boarding with her friends. Having her friends present gives her the feeling of being social and therefore having fun, allowing her to talk about whatever she pleases without constraints.

Larissa also gives some insight into engaging in physical activity with her friends. "When I exercise with my friends that is pretty cool because you just talk a lot about stories and stuff about what has been happening". Her story reveals how when she is engaging in physical activity with them, this time permits her to socialize freely with her friends making the experience even more enjoyable for her. It is a time that permits the socialization and communication that Larissa needs with her peers. Similarly, Gemma explains:

My friends are quite active so, normally, if we're in St. Lukes for more than an hour we'll go to a park fairly close by and we'll just muck around outside. We don't really realise we're doing so much activity, because everyone's talking at the same time you don't feel like you're doing activity which is kind of good because you don't feel tired or anything.

Her story discloses how Gemma is not only benefiting from the effects of physical activity, but has an appreciation of the benefits and socialization, as the other participants have also commented. As she is distracted through communicating with her peers, she does not realize how much physical activity she is accomplishing. When Gemma is with her peers, she demonstrates a motivation to continue walking as she

enjoys and values having her peers around her. Furthermore, even though Gemma may be walking for extended periods she does not feel at the time that she is over-exerting herself or becoming fatigued.

Alongside the other participants, Gemma divulges how participating in physical activity with her friends is advantageous because with the companionship of her peers, this experience is found to be more enjoyable. Nikki also explains "sometimes my friends influence me to play longer, because when you're not playing with your friends, it is not as fun". Similarly, Jamie mentions: "It is fun to get out and do active things with your friends".

Despite the enjoyment factor of participating in physical activity with her friends, Melanie also explains how she endeavors to 'keep up' with the other girls.

I love to play netball but I wasn't put in a good team. I felt a bit put down because there was only one Year 8 at my old school and, they were all sort of a bit better. That made me feel really left out and put down about myself because I thought that they thought I wasn't good enough to be put in that team. I think I will play netball next year because I sort of miss it and hopefully I can get in to a better team. It sort of makes me feel a bit left behind that I am not playing netball this year and I should be at that level that they are. It makes me want to play it even more because my friends are doing it now and I want to do it with them, or just in a different team. It makes me feel a bit held back and that I should catch up the next year.

Alongside the fun factor of engaging in physical activity, Melanie has also experienced a sense of feeling left out. Melanie was not selected to play in the netball team of her choice, as she wanted to be with her peers. This experience has left her feeling she is missing out and unable to keep up. Due to her exclusion from this netball team, Melanie has missed out on involvement in any extracurricular team sports. As it is

imperative she keeps up with the others in her team, Melanie feels she is missing out on playing netball and has a sense of feeling demoralized due to her non-selection in a good netball team. Melanie has to endure the experience of knowing her peers are participating in netball and feeling that she is missing out and may not be able to keep up with them. Melanie felt she was up to the grade to be selected for the team she wanted to be in with her peers, and this has her feeling left behind. Her enthusiasm to play outweighs her disappointment, however, and Melanie is optimistic about playing next year, having been left with a hope that she will make a team which is satisfactory to her needs and requirements.

As with Melanie, Gemma's story reveals the negative aspect of engaging in physical activity with her friends:

This year I was doing waka ama which is like rowing, and I went to one training and then I had this massive fight. Our group kind of fell apart earlier last term, it kind of fell apart. So, I didn't even want to see or talk to this. After I gave up the waka ama I thought, what a waste because, now I've got back to friends with the girls that I didn't want to, and so I'm actually really annoyed.

Gemma's story illustrates how vulnerable she is and how influential peers can be in an experience. Gemma regrets not continuing with the waka ama (a type of boat) training she had previously started. This was attributed to an argument and falling out with one of the peers in her group. At the time, she could not possibly countenance continuing to participate in physical activity with someone she did not like, and felt she had no choice but to pull out of the waka ama. The implication of this was that she was not able to participate in her chosen physical activity. However, Gemma did reinstate her friendship and then regretted the decision to pull out. Gemma's story demonstrates

how influential peers can be. Gemma's attitude toward her friend was initially positive, but due to the falling out she no longer felt able to participate in a sport she really enjoyed.

The stories illustrate how these female adolescents have a preference for involving themselves in physical activity with peers. The fun and enjoyment factor of physical activity is heightened with the presence of peers. Furthermore, whilst participating in physical activity together they have the opportunity to communicate, which is of importance to the adolescent as it is the norm of the adolescent to want to confer and talk with her peers. In a team environment with their peers, participants can feel safe, experiencing the joy of winning or sharing the disappointment of a loss. This social influence however, can be experienced as either positive or negative. Some of the participants experienced negative aspects within physical activity, such as falling out with their peers, or being excluded.

# Fun, enjoyment and boredom

For the adolescent female to be motivated to participate in physical activity, enjoyment and fun are significant factors (Stucky-Ropp & DilLorenzo, 1993). As the dependence on parents lessens, so does the dependence on their peers strengthen, and they look for different ways to hopefully enjoy finding social engagement during physical activity alongside their peers. Some participants enjoyed the physical activity, but experienced the training as boring.

# Luisa reveals in her story:

I kind of like sports. I'm really interested in netball and basketball. I like it. It's the only time when we can have fun and lose a little bit of weight. Training for netball's pretty boring. When I was like form one, two and three, I was pretty into my sports I used to play, because I used to live in Taupo. I used to play like rugby and netball, and basketball, hockey and volleyball, heaps of sports. It was cool, I felt busy but it made time go fast and waka ama too, it was cool. It just felt more fun in Taupo; it wasn't as serious as up here. It didn't feel like it was serious down there, it was for fun but it wasn't, it was competition but it felt like it was for fun for us. We used to just, just get a buzz. I kind of got shy of doing sports in my first year here. I only did netball and basketball. Oh no just netball. I was shy.

While Luisa participates in a variety of sports, she demonstrates a specific interest in netball and basketball. This interest and participation in netball and basketball is fun, whereas the training is experienced as boring.

In Auckland however, she describes how she feels sports are more competitive and therefore the fun element is somewhat removed. There is more pressure for her to achieve a result as opposed to just having fun whilst playing. As a consequence of this, during her first year in Auckland, Luisa describes how she felt repressed from playing the sport she used to enjoy so much in Taupo. This left her feeling shy and withdrawn. Similarly, Nikki does not always enjoy physical activity, as her story reveals:

I don't know what type of exercise I like, it sort of depends like what type of exercise it is. Some can be, some are fun but then some not. So it sort of depends. The exercises I find fun are dance, netball sometimes running, sometimes walking. Those would be my main ones.

I just play netball and it is sort of the same dance as I sort of do it for exercise as well. When I am playing netball if I enjoy it, it depends on who I am playing with because sometimes I can have some girls in my team and they can be frustrating because they, they're not exactly the greatest at playing. Then some are better than me so it's sort of just depends on who I'm playing with really.

The enjoyment factor, is dependent on the physical activity Nikki is engaging in, and as with the other participants, she does not always find the training sessions enjoyable. Furthermore, the extent to which she enjoys the activity may be dependent on with whom she participates in the activity. Nikki demonstrates a preference for definite activities. The enjoyment factor, in netball in particular, may be threatened if she perceives the other team mates lack the necessary skills for the game. This leaves her with a sense of feeling frustrated and annoyed, therefore removing the fun element. In contrast however, if she believes that her teammates may be better than herself, the gratification and challenges of the game are more enjoyable for her.

However, in the following story, Gemma expresses how much she enjoys physical activity, how she loves the water, and has the sense of being good at swimming:

I love swimming and I'm like a water baby, I just love it. I'm pretty good and I'm in the top swimming squad. There are some girls who do it professionally but when I was younger, think I came third in Auckland for backstroke. When I am in a competition and doing really well, I feel awesome. I am just, not sure what word you would use to describe it, but I just, I just get heaps of energy and feel like keeping on going and going. If I am not doing well in a race, I almost pull back because it depends how far back I am.

Gemma's story shows how she enjoys the experience of swimming in a race if she has a sense that she is achieving a good place. She describes the experience as overwhelming, leaving her feeling elated, with extra energy to keep on swimming and enjoying the experience. It gives her the motivation to keep going. She clearly finds it fun and benefits from the experience. Humbert et al. (2006) describe how 12-18 years olds explain that fun was a significant issue in their engaging in physical activity.

Furthermore, when they were asked to clarify what fun entailed, it emerged that fun was

connected to the individual's perceived achievement in a particular sport. If, however, Gemma is not doing as well as she would like to, she feels like pulling herself back. The extent that she pulls herself back is dependant on how inadequately she is performing. For example, if Gemma is in the top three, this motivates her to push herself with the hope of achieving a good placing. During the race Gemma makes her decision to either push herself or hold back, depending on her view of how well she is doing in the swimming race.

Similarly, Nikki reaps the benefit of physical activity when she runs in the crosscountry, and in her story she explains:

I usually don't feel like doing cross-country but every time I do, do it, I get pretty in a good position I think. I feel proud because I didn't think I could do it when I did. I feel like I have accomplished something that you didn't really think you could do. When I was at primary I got like seventh or something, so I still did pretty well there as well.

As Nikki is still at school, and is encouraged to participate in the school physical activities, and even though she does not enjoy it, Nikki feels compelled to run in the school cross-country. If, however, Nikki feels she is capable of gaining a good placing she feels proud of herself and her achievement. This leaves her feeling she enjoys this aspect associated with the cross-country, even though initially she did not feel like participating in this event. Nikki therefore does not specifically enjoy the run, but does enjoy the benefits associated with her achievements. It is advantageous to her self-esteem, making her feel happy and proud of her achievement.

Nikki explains in another story how the lack of fun and enjoyment contributed to her ceasing to play hockey:

I stopped playing hockey because it was on early Saturday morning, so I wasn't really bothered getting up earlier on a Saturday morning. I enjoyed it the first time I played but then I got, it just sort of started getting really boring. Then I was just getting a bit sick of it. It was boring when the other team got a goal because it's usually, it's really hard to get a goal because the turf's so big. The training that went with hockey was usually just like once a week but that was in the morning as well. I enjoyed the game more than the training. When I used to play hockey at primary you had a quarter of a turf but when in intermediate you have a whole turf. So it's just makes it more tiring.

Nikki used to play hockey, but discontinued due to finding the game had become boring and tedious instead of fun. This was partially due to the difficulty of having to play on a full-sized turf. Nikki is more accustomed to a smaller turf from her primary school days and the step-up to a full-size turf meant she found it necessary to exert more energy to achieve the same result. Nikki finds that she and her teammates have more difficulty playing hockey and attempting to score a goal. Nikki's consequent feelings of boredom or lack of fun, had negative implications on her participation in hockey. This ultimately eventuated in her ceasing to play altogether. In addition to the full-size turf, other feelings which contributed to her not wanting to play included not enjoying the training, and having to get up early on a Saturday morning.

In summary, if the participants find the physical activity fun or enjoy it, they are more likely to want to engage themselves in it. Perceived competence whilst engaging in physical activity was identified as an important issue too. If the participants felt they were competent in their activity, this affected the extent to which they enjoyed the activity or found it fun. If they experienced the activity as being too difficult, this

removed the fun element to some extent and they felt the activity to be boring.

Activities that are boring or too hard may discourage participation to the point of the adolescent female abandoning the activity, altogether.

## Parental influence

Parental influence on the female adolescent is a significant factor in engaging the adolescent in physical activity. In its turn, this allows invaluable time together between the parent and female adolescent. Ries et al. (2008) suggest that if adolescent females are supported or encouraged by their parents, this will have a significant impact on whether they participate in physical activity or not. Not only do parents encourage the female adolescents, but if parents themselves participate, they provide valuable role models. Furthermore, parents normally play a major role in providing transportation, and they pay for costs associated with the activity. Most of the participants disclosed how they enjoyed and valued this experience with their parents, such as in Gemma's story:

I've gone tramping for my last holidays and I went tramping with my family and I found it hard but I thought "oh well" because I knew once we got up to the top we would have a break. As I go tramping with Mum and Dad, we always used to say once you got up to a significant point, or like an hour in to tramping, you'd always stop and have a break, or if you got to the top hill you'd always stop and have a break.

Gemma values the experience of tramping with her parents. This is time which allows her to participate in activity in the outdoors with her parents offering support and encouragement. They also encourage her to extend herself, and Gemma is confident to keep on going when she can be assured that she will be rewarded with a break. Gemma

has the sense that her parents are quite active, and therefore she has a variety of physical activities available to her. Gemma explains "With mum and dad I do walking, biking, mountain biking and swimming. Sometimes, I do kayaking with them". Gemma admires, appreciates, and feels proud of how her father, in particular, engages in physical activity. Gemma also suggests that she feels she mirrors her father, in that she describes how "he is not the person to sit at home and you know watch television all afternoon. He is like me". In Gemma's experience her father and family are very active, and consequently this influences her. Not only does it permit her to engage in a wide range of activities, but it gives her a role model. They also encourage her to participate in activities of her choice. Gemma also shows an appreciation of how engaging in physical activity with her parents is not only beneficial for physiological health gain, but also permits time for family bonding. In her story she discloses how:

I love exercising with mum and dad because if I do get angry at them I can just go off and they won't worry about me. Then, normally mum and dad end up dragging me out because I kind of like I sit there and say "no I don't want to go out". I don't normally talk to them at the start. If I'm going out and they've dragged me out I just don't talk to them. Then once I keep on going and get like hotter or you know warmer, then I think this is probably good for me and then I end up talking to them. It is really fun being out there with them.

Gemma's experience of being able to participate with her parents in physical activity is one she has learnt to appreciate. If a situation arises and Gemma does not want to communicate with them, and if they attempt to engage her in physical activity, she feels this is beneficial due to the fact that she will feel like communicating with them again after a period of time. Gemma values the experience of participating in physical activity with her parents, finding it fun.

Similarly, Nikki enjoys engaging in walking with her father. Although at times she may not feel up to walking the extra distance, with the gentle encouragement of her father she does walk further. As with the other parents, Nikki's father is a valuable source of encouragement and transportation to where she participates in physical activity and with the added benefit of receiving an ice-cream, this all helps keep Nikki enthusiastic. She explains:

When it is in the school holidays I sometimes usually just go for walks. I usually walk with dad and we usually like just walk around the waterfront or we go up One Tree Hill or something like that. I sometimes get sick of it because he wants to just keep going. But it's usually fine. We just normally go along the waterfront in Mission Bay and we usually stop half way. So when we get to the end we usually stop and have an ice cream and walk back.

Nikki does not live with her father on a full time basis. These walks she experiences with her father therefore allow her to have precious time with him, which Nikki enjoys. While she is walking along the beach with him, this is her time not only to enjoy her father's presence, but also to benefit from her walk in a pleasant environment.

Jamie too enjoys time with her father and the walks they are able to experience together.

She describes in her story:

In the holidays I go camping with dad and that is good because we just go swimming and we went to the East Cape and it's so different. We go camping and go for walks all over the place. It means we get to go to different places and that is really neat. There is usually like walks and we go on lots of different places. We go for walks quite a bit. Normally everyday because there are lots of places to go.

As with the other participants, Jamie relies on her parents for transportation. She values the experience of going to different places camping, normally in close proximity to beaches, enabling Jamie to experience different places to participate in activities with her father. Walking is a significant part of her life on these trips and Jamie normally walks every day. It is their time together to experience the beautiful beaches and camping grounds. This time allows them to find new and exciting places to walk and swim together.

Luisa too, appreciates quality time with her father. She explains, "I am happy that I am with my dad. I am my dad's only daughter". She feels special, and the physical activity they engage in together gives them time to enjoy each other's presence. In her story she reveals:

I do waka ama with my dad. When I exercise with dad it is good but you can't slack off because he's your dad and he'll growl but it is pretty fun. I normally go for four or five hours with my dad. We just go out there and, get some exercise. I am happy that I'm with my dad. I like finding time for me and him. So it is pretty cool and I don't think about that, I just do what he tells me too really. I do not have any choice with waka ama because my Dad forces me, because he thinks I do nothing. I just do it just for fun. He teaches me techniques as well.

Even though her father puts pressure on her to exert herself, she still enjoys waka ama. Luisa senses that she spends considerable time on the water, but she has an appreciation that her father wants her to benefit and engage herself in this activity, and Luisa respects this and co-operates. She values not only the time, but also the fact that they can find the time to be together. Luisa enjoys this experience, describing it as fun. It is her time to enjoy the water with her father, and while he is encouraging her into this physical activity she can also benefit from his teaching her valuable techniques, for not only waka ama, but skills that she may apply to other water sports.

Melanie also mentions in her story how she experiences running with her mum:

Having mum there made me feel pretty good because if I wasn't holding myself right, like my posture wasn't good, she'd tell me. I can therefore improve and I like running with Mum, it's really nice. We can talk and things, it makes it a bit more fun when I'm jogging with her. I don't run with her very often but when I do I have more fun and it makes me go a bit further and feel a little bit more powerful because I've got somebody next to me.

As with the other participants, Melanie finds it advantageous to have her mother with her while she is running. She finds she extends herself further whilst her mother is accompanying her. It is their quality time together away from other siblings and peer influences, where they have time and space to communicate without interruptions.

She expresses that when her mother is present with her on a run, it makes her more conscious of her posture. Whilst running with her mother, she feels that if she is not holding herself upright, then her mother will point this out to her. Melanie feels this is advantageous in assisting her improving her running style, making the running a more enjoyable experience. It is not only fun for Melanie having her mother present, but also makes her feel more powerful. Melanie's story discloses an appreciation of having her mother present, not only for the company, but also in the way her mother influences her running in a positive way.

In summary, Tergerson and King (2002) suggest that the influence parents have over their adolescents is a significant issue in engaging them in life-long activities. They refer to how adolescents view their parents as role-models and look to their parents for resources for engagement in physical activity. In this study on female adolescents, it was apparent to me how these girls were reliant on their parents for some of the

physical activity engagement in their lives. Furthermore, the parental role in physical activity was not just limited to engagement, but had added benefits such as improving technique, and encouraging participation further and in a wider range of activities.

Having their parents there while they were engaging in their physical activity provided a safe and secure environment, and provided valuable time between the parents and their daughters. Parents are also useful for transportation and as a means of financial support.

#### Gender

An important social factor which all the participants had identified as an issue was the influence of gender on their participation in physical activity. Some experienced restrictions from specific sports, whilst others felt disadvantaged or challenged while having to participate in physical activity with the opposite gender. Studies to date have reported that involvement in physical activity is significantly higher in male adolescents. Primarily, as Sallis (2000) has explained, males are more active than females. Reasons for this are numerous and complex but this study did identify important issues for these participants which, if addressed, may help to further engage female adolescents in physical activity. Dwyer et al. (2006) have suggested that research has found when adolescent boys are participating in physical activity with adolescent girls, that the girls become more self conscious of their appearance. Furthermore, the girls also felt the boys, if given the opportunity, also intimidated the girls verbally. This would maybe depend on the adolescent herself, but is a noteworthy factor, and one which came to light during my research. Most of the research identified appears to be within the school environment but Gemma, who is enrolled in a single sex school, describes in her

story how during extra-curricular activities, such as Scouts, she has sensed how male adolescents have influenced her.

I'm in an all girls' school so it's all girls for most of the sports that I'm playing. Sometimes when at Scouts, when the boys and girls are tramping, and the girls are behind when we are tramping the boys try and say "the girls are just being behind". I am not really sure why they do this but I think they are thinking that we are a bit unfit. The boys' team are always like slag you off because you they know you're a girl and if you're playing something they'll always be like, oh you know don't hurt the girl and you have to win against the girl. I feel like okay I've got to beat them just to show them that girls can do it too which is kind of cool.

As opposed to focusing on and enjoying the tramping activity, Gemma has to compromise some of her fulfillment, due to the influence of the males participating with her. It is Gemma's experience that she feels the boys verbally intimidate the girls in activities such as tramping and in team sports. It is her perception that the males in her group are intimidating Gemma and her peers and challenging their skills. If the girls are behind in the group whilst tramping, she has a sense that this signifies to the boys that the girls are inferior or not as capable as the boys. In retaliation, Gemma feels a need to justify and defend the girls, to prove to the boys that this is not the case. Furthermore, it divides the group along gender lines and Gemma feels compelled to defend herself and her female peers. She can not comprehend why the boys would put the girls in this predicament, but has a sense this may be attributable to the fact that they think the girls are weaker or unfit.

This scenario leaves Gemma feeling that she is determined to succeed against the boys to demonstrate to them that girls are just as accomplished in the games they are playing. Gemma enjoys this experience, leaving her feeling that she has achieved her goal by proving to the boys that girls are just as competent.

Similarly, whilst at school, Melanie feels threatened when playing in a mixed gender team.

It is mainly the boys and it makes us girls feel that we sort of can't play sports and we're just useless and they don't really give us a chance to like show what we can do. The boys think we are weak. They think well, that we just can't do anything right and that we're going to screw up.

Melanie describes how when she is playing basketball in a mixed team, some of her peers, predominately the boys, think that some of the girls, including Melanie, cannot play sports. Melanie feels that the boys think the girls are worthless, and consequently do not give the girls an opportunity to demonstrate their skills on the basketball court, and prove that they can play basketball. She further describes how the boys think the girls, due to their lacking the necessary skills and attributes, are not competent enough to play basketball with them.

Melanie's story reveals the anxiety of playing basketball as part of a mixed gender team. It seems that Melanie's story is identifying the gender issues normally experienced in a mixed team of her age group which may leave some of the players, including Melanie, feeling powerless and subservient. Perhaps the team sport leaves Melanie with the concern that when she feels that she would like to look good, some people feel she is just going to 'screw up'.

Melanie has also played soccer with the boys, which she enjoyed, but felt once again that the boys took over. She mentions "We also play soccer and that was fun but once again, the boys kind of took over and didn't let the girls do anything". It is her

experience that during this soccer game, the boys did not let the girls play soccer with them, to the extent of excluding them totally.

Nikki, too, whilst not through her preference, engages in physical activity with the boys at her school. In her story she reveals:

I don't like doing it in front of the boys, because they, they think that they're better than the girls, so then they usually laugh at the girls. So the teacher splits us up in a girls team and a boys team. So that the boys don't laugh at the girls and stuff. And so I sort of don't really mind it when it's just the girls. When the boys laugh at us they just laugh because of the way we run or something, or sometimes they just do it to put us down or, or make us feel bad or something like that. This makes me feel that don't think you can actually do it. I then feel I sort of just don't really want to do it, so I just usually hang back and wait until everyone's gone. The teachers normally split us up in different teams straight away. So I do not play any sports with the boys.

While Nikki is expected to partake in a mixed gender team at school, she does experience relief when her teacher splits the teams according to their gender. Nikki has a sense that the boys view themselves as superior, or can demonstrate more competent skills than the girls, and this leaves her feeling intimidated and incapable of participating. This influence makes her feel she is inept in this particular activity and as a consequence she feels like withdrawing completely. It is her preference, therefore, not to participate in physical activity with the boys. Nikki's interest in participating in physical activity is not deterred however, as she appreciates that the teacher normally separates the boys and girls immediately. Nikki has only a limited time of having to experience the daunting behaviour from the boys, such as being laughed at. It may be that the males on Nikki's team are demonstrating that they have a higher opinion of their physical competence. If so, it may be that Nikki and her peers need to be placed in a positive, supportive environment away from boys to encourage involvement based on

fun, and with the aim of developing their skills in order to heighten their sense of capability.

While it is obviously difficult to accommodate the variable requirements of both genders, it was apparent during this study that males did significantly influence the females, particularly when they engaged in physical activity on the same team.

However, in contrast to Gemma, Melanie and Nikki's story, Jamie explains:

When I am playing sports with the boys we do it with the class and we know the boys quite well. When we get out of the classroom it's quite fun. It's quite fun because my class is quite close. It is fun to get out and do active things with your friends. They're all, or most of them are from my old primary school. All the subjects have the same people and we all do the same sports as well.

Jamie has enjoyed a close relationship with the boys and girls from her class and attributes this partially to having known each other for some time. She has had the opportunity to build up a friendship with both the boys and the girls, and when participating in physical activity together this friendship and rapport is also extended to those activities. Jamie clearly enjoys this experience, describing it as fun. She knows the girls and the boys well, viewing them as her friends, whose companionship she enjoys. Jamie finds the activities enjoyable based on who she is participating with, such as the boys in her class who she knows and whom she is close to.

As previously discussed, a significant factor in engaging female adolescents is the issue of them perceiving the activity as being enjoyable. Larissa explains in her story how she enjoyed playing rugby at her previous school but, due to her gender, she was not permitted to play at her current school. In her story she reveals:

We used to play rugby at my old school. We're not allowed to play rugby at this school. A lot of us girls at this school are pretty aggressive and we, we've always wanted to play rugby but for some reason the principal won't let us. They think it's because it's, he said it's not a female type of sport. I reckon that if they did let us, then a lot of girls will come to practice. A lot of the girls here have said they want to play. I don't really know why we're not allowed to. It is pretty dumb, not being able to play rugby. I have kind of forgotten now and moved to another favorite sport.

Larissa is required to adhere to the school regulations which restrict the girls from playing rugby. Whilst the reasoning is not entirely clear to Larissa, she surmises that the Principal feels it is inappropriate for females to play rugby, and hence the edict. Therefore, only the males are permitted to play rugby, and even though Larissa and her friends have the skills to play the game, and have not only previously played but enjoyed the rugby, she is still not permitted to play. Larissa feels frustrated and annoyed with what she views as an irrational decision. It is her view that "A lot of the girls have said they want to play. I reckon if they did let us, a lot of the girls would come to training". Even though she has not played the game for five years, she still expresses a yearning to play. She can not comprehend this restriction when she feels it would clearly benefit herself and her peers. Larissa has identified that her peers resist some of the training associated with other sports, and she feels that if they were permitted to play rugby, then the girls may become more committed to the extent that they would attend training.

However, as Larissa is compelled by the rules and boundaries of the school, she has no choice in the decision, and as a consequence cannot play the rugby she used to value so much. She has had to accommodate this decision and has successfully diverted her attention to other physical activities which she is permitted to engage in, and which can

fulfill her needs. The girls therefore, are socialized into particular sports or activities because of the rules made externally to them.

Similarly, Luisa reveals that in her school "I only came up here because I thought there'd be a girls' rugby team but they didn't have one, but I just forgot about it and wasn't worried. I was gutted though". Luisa describes how her decision to attend the school she is currently enrolled in was based on her assumption that she would play rugby there in a girls' team. However, to her disappointment, as with Larissa, she found rugby was restricted to the males only at the school.

Having to endure this exclusion from the game Luisa had previously enjoyed and benefited from had initially left her feeling distraught. As with Larissa, she has had no choice but to live with the decision, and has accommodated it. Penney and Harris (2000) have suggested that research studies have identified that males have access to a wider variety of sporting activities and that in general "boys were taught football, rugby and basketball...while girls were taught hockey and netball only" (p. 255).

Decline in physical activity has been shown to be more notable in female adolescents. In this study the participants experienced gender inequality in their having had restrictions placed on them for some sports. They experienced intimidation by their male team members making them feel self-conscious of their participation. One, however, clearly enjoyed the experience of having the opportunity to participate with the males in her class, whom she regarded as her friends.

Body issues, weight loss and body image

Developing female adolescents have been known to be concerned about their body image, perceived weight, and dieting (Santrock, 2005). Harter (1999) also suggests that adolescence is a crucial time for the developing image, identity, self-worth, and awareness, which are all important for social acceptance. In turn, the different individuals all comprehend and manage both negative and positive comments from peers, parents, coaches or the opposite gender who may challenge any of these emotions. Tergerson and King (2002) argue that physical appearance is a prime motivator for female adolescents to engage in physical activity and suggested that weight loss and staying in shape were the main benefits of physical activity.

The issue of body image or any psychological reasoning connected to or surrounding body image, were not raised with the participants, or further discussed if they did arise. Nevertheless, the participants did reveal in their stories how engaging in physical activity gave them a sense of being conscious of how it affected their bodies both physiologically and psychologically. Furthermore, the participants did explain how they had identified a definite connection between physical activity and weight loss. This is evident in Melanie's story when she reveals "After I have had a jog, I feel good because I've burned off some calories". This story suggests not only that Melanie is aware that jogging helps her to lose weight but that she also has a sense that this is what she wants, and it makes her feel good. Similarly, Luisa also explains in her story:

I kind of like sports. I'm really interested in netball and basketball. I like it. It's the only time, when we can have fun and lose a little bit of weight. I don't really have any influences when it comes to exercise, I just do it for my own self. Like I don't want to get fat but I don't want to get skinny, I kind of like my build.

Luisa explains how she has a love of sports, in particular netball and basketball. As with Melanie, Luisa has identified that it can help her lose weight, and she also has a sense that this weight loss can be achieved while playing the netball and basketball she enjoys so much. While Luisa reveals she is happy with her current weight, she is also conscious of not becoming too over or underweight. Luisa reflects how engaging in physical activity is for her benefit only and she does not have a sense that there are any outside influences which effect her motivation to play. Furthermore, Gemma mentions in her story how, in her experience, if she is in the water her perceived weight does not matter. Gemma says: "I like the water because like no matter how much you weigh or whatever, you can still just feel capable". Gemma's story suggests that while swimming, as she is immersed in water and her body is not visible, this leaves her with a sense of feeling competent regardless of how much she may weigh. Gemma therefore benefits and gains enjoyment from this activity.

### Body issues and emotions

Psychological issues have been known to be important barriers to adolescent girls, preventing or influencing how they engage themselves in physical activity. Both positive and negative issues emerged as part of the participants' stories, such as in Larissa's, when she explains: "It makes me feel fit and healthy, I just love sport ... I've been the athletic junior girl champ and the intermediate girl, senior girl and it's just been pretty cool". Her story highlights how, if the participants have a sense of achievement, physical activity may benefit them psychologically. Larissa not only feels that she enjoys her participation, but has a sense of achievement as well. Cury et al. (1996) also argue that when female adolescents are engaging in physical activity, if the

girls feel they are competent in the activity, they show more interest. Larissa has a sense that she is competent in her athletics, leaving her with the feeling that she loves engaging in that activity. Furthermore, Larissa feels that participation in physical activity has the added benefits of leaving her feeling fit and healthy. Similarly, Nikki also mentions "When I am dancing, I usually notice it. I feel like I am getting stronger and that I am getting more fit. It also makes me feel better". Nikki feels better whilst she is participating in her dancing. She attributes this to benefits of dancing which include building her strength and increasing her fitness level. As with Nikki, Melanie benefits from her cross-country running, not only for improving her physical attributes, but for psychological reasons too. In her story she explains:

It makes me feel quite proud that I got quite a good place and I sort of can't wait to tell my parents. I feel good about myself and good because I trained and that I did not feel I was hurt at the end. I was proud of myself because normally when I do a cross country course, I'd be huffing and puffing at the end and I'd be all sore. This time I wasn't as sore as I used to be so it seems like the, all the jogging and training is worth it to get a good place in cross country.

As Melanie felt she achieved a good placing in the cross-country, she was left feeling very proud to the extent that she could not wait to inform her parents of her achievement. Melanie attributes her placing and feeling good as a result of the time and effort she put into the training. As a consequence of this training, she did not feel any pain or the breathlessness which she had experienced previously, and which is sometimes associated with this type of event. She demonstrates an appreciation of the value of having trained for this event, and appears to reap the physiological and psychological benefits as an outcome. However, when Melanie is playing in a team

environment she has a different experience of the psychological effects of physical activity. In her story she explains:

If I am playing in a team with boys and girls and if the girl looks quite athletic, the boys will pass the ball to them. If the girls do not look fit, they leave them out. It makes me feel sorry for myself and the other girls that are playing because you're just not given a chance at all. It makes us feel really put down and like self-conscious because the boys sort of just keep the ball to themselves.

Melanie explains that when she has to play in a mixed gender team of boys and girls, this can make her feel nervous. She describes this experience as not feeling sure what the boys are thinking, in relation to depending on how the girls look. She feels this will influence whether the boys will pass the ball to the girls or not. She discloses that if the girls look athletic and fit, the boys will pass the ball to them. If however, they do not look fit, the boys will not pass the ball to them, herself included. This situation leaves Melanie feeling sad. She feels the girls are not given a chance to demonstrate skills. Consequently, Melanie describes how the girls are left feeling self-conscious and put down. While in this environment, Melanie feels she lacks confidence whilst playing with people who lower her self-esteem, and it does not make her feel good about the predicament. Gemma too has experienced a similar situation and explains in her story:

I tried out once for volleyball but I didn't get in because it was like, I'm not that good but I just like volleyball. I didn't get in and so, I kind of gave up on that.I was gutted when I didn't get in to the team for volleyball. I don't even think I told anyone. I just told my mum that I'd had practice after school because like I was pretty sure I thought I might make it. I thought I would be like a reserve or something. I remember going home, because we don't live that far so I walk home, and feeling absolutely gutted. I think I wanted to be in the team but I had set my aims a bit too high. I was like the worst player there probably. I hit the ball like five times and there were ten others there. So, looking back I probably was like, they had really good people there. I wasn't that good a player so, I don't really mind.

Gemma previously played softball and netball, but when she tried out for the volleyball team she missed out on gaining a place on the team. Gemma enjoyed playing volleyball and was very upset at not making the team. She kept this to herself, but as Gemma was confident of making the team, at least as a reserve, she had already informed her mother of when the practice sessions were. Gemma remembers how it felt to be left out of the team, and going home feeling really upset. She accepted that her exclusion was probably due to her inability to hit the ball and that the other players were more capable than herself. Gemma also felt that maybe she had unrealistic expectations of making the grade, having set her aims too high. After the initial disappointment, Gemma concluded that she was probably the worst player there, but as there were so many others who had better skills, she did not mind so much. In another story Gemma explains how influential her dance teacher was on her while at her dancing class:

She was the reason I quit. I hated her. I would come home after some nights and I would be so sad I would cry at nights because I hated her. She said things like; I remember one comment that's just stuck in my brain, like my first week there. She's like your back, because I don't have really good posture, she said your back looks like what they call the pipes underneath the sink bench, like all crooked. I took that really personally. You know in ballet with her as a teacher and you're not supposed to take it personally and you're just supposed to correct it and remember that and store it in.

While participating in physical activity such as ballet, Gemma had to suffer from her dance teacher attempting to correct her posture. Gemma was already conscious of her posture and these remarks were not advantageous to her. While Gemma accepted it was part of the teacher's responsibility, she did not experience it as being beneficial, and this left her feeling extremely upset. Gemma had an immense dislike for her teacher, and having the teacher make derogatory comments in front of her peers about her posture

was too much for Gemma. This teacher, whom she disliked, challenged her self-worth and self-esteem, leaving her feeling extremely distressed.

In summary, the participants demonstrated a clear understanding between physical activity, weight loss and improved body shape. Furthermore, they found physical activity advantageous in helping them feel better if the activity they were engaged in did not threaten or challenge their self-esteem or perceived worth. The physical activity that the participants engaged in had the potential to either positively contribute to, or to undermine their self-esteem. If the participants felt they were competent in the activity it generated interest for them, and they experienced the activity as being enjoyable.

## Overall summary

Fun or enjoyment was found to be an important factor for the female adolescent to want to participate in physical activity, particularly if it was with peers. Their perceived competence whilst engaging in physical activity also determined their level of fun or enjoyment. Parental influence appeared to be an important component in encouraging the participants in this study to take part in physical activity, and some participants experienced gender inequality or intimidation while playing in mixed gender teams.

The connection between physical activity and body issues for the female adolescent was evident, as was the positive or negative impact physical activity had on the participants' self-esteem or perceived worth. While this chapter considered the social influences physical activity has on the female adolescent, the next chapter discusses the sporting influences.

### CHAPTER FIVE: SPORTING INFLUENCES

#### Introduction

As a consequence of participating in physical education at school, all the participants at some stage have experienced either running, competition in a team environment, or encountered restrictions in relation to engaging in physical activity. While competition and running may be viewed as being beneficial to the growing female adolescent, and restrictions are part of our daily lives, the participants had varying views on how they experienced these.

# Competition

Clearly, competition was a significant part of the participants' involvement in physical activity. How the participants felt about competition whilst engaging in physical activity varied, and this was influenced by the perception of their, or the team's view of competence, and whether they found it enjoyable. Campbell (2004) suggests that girls tend to shun competition, preferring to engage in activities that disperse any conflict. She implies that this is inherent. However, some of the participants took competition very seriously, and if the outcome was not as they had anticipated, were very upset. This is evident in Luisa's story who explains: "The last game we played in netball, we lost. I was gutted as it was the first competition game we lost. I was gutted as. I was angry at the referee and some of the girls." After playing in a netball game, the loss Luisa experienced left her feeling angry and frustrated. The disappointment of her loss left her feeling anger against not only the referee, but some of the girls in her team as

well. This was the first competition game the team had lost, and Luisa's discontentment was evident. In contrast however, Luisa reveals in another story how it is her preference to play, not for competition and winning, but for the fun element. She explains:

It just felt more fun in Taupo; it wasn't as serious as up here. It didn't feel like it was serious down there, it was for fun but it wasn't, it was competition but it felt like it was for fun for us. We used to just, just get a buzz. I kind of got shy of doing sports in my first year here. I only done like netball and basketball. Oh no just netball.

In her story she reveals she had a preference for playing sports when she lived in Taupo, where in her experience, she was able to enjoy the games more. Since living in Auckland she has had a sense that the girls are more competitive, and that there is more emphasis on winning, as opposed to having fun. As a consequence of this, during Luisa's first year in Auckland, she withdrew from participating as she found that the other girls took the game more seriously. Similarly she also explains:

It is like more is at stake when you're at a higher grade, like when you're a rep team. The girls are really nasty in rep teams. Like, they're all; they forgot that it was for fun. Like they were good at playing but they just had really different attitudes. Yeah it was cool. Being in reps is cool but I'd never do it again. It's too stressful, I don't do sports for stress.

Luisa feels added pressure and stress while competing in a representative team. She has a sense that this is a negative component of participating in a team at a higher level or grade. There is more pressure to compete, and the fun element is removed and forgotten when their attitudes change. Luisa has a sense that the other competitors are not nice to play with, and while it should also be fun for them, they do not place

emphasis on this. As a consequence, Luisa finds the representative teams very stressful, and as this is not the reason she play sports, hence the resistance to play at this level.

As with Luisa, Larissa's experience of competing in a team, and how she enjoys the experience, is dependent on the team and whether she wins or loses. She explains:

We played netball last Tuesday and that was our first loss. That was the worst game ever. We lost by one goal. We always go to the finals, oh the school usually always goes to the finals and we never lose a game in like four years, three years maybe. This time we just lost and that made us feel pretty stink and all the girls were just angry because we lost, including myself. So the games that we have won, have always made the girls happy and always make me happy and stuff.

Larissa experienced a recent game of netball as being the worst game ever. As this was an inter-school final, she felt under pressure to compete and do well. The sense of feeling upset and angry was attributed to experiencing the team's first loss in three or four years. This was made more difficult due to the loss being a single goal. Her team is accustomed to competing and winning, so it was difficult to endure this loss. When Larissa and her friends feel they are on a winning streak, it has the effect of leaving them feeling happy and content. Nikki also reveals the importance of winning and losing games.

When we are playing and losing, it sort of makes me feel really disappointed because we felt that we could win and we didn't, like the game last week. It does not really affect me because like the week before, we won. When we win I think we can win again usually. Then when we lose we feel really annoyed because we thought we could win and we didn't.

Nikki's story reveals the importance and emphasis she places on winning, and not losing games. It is her preference to win the game, and she is disappointed if she has to

endure a loss. It leaves her feeling annoyed and frustrated that maybe they should have actually won. However if Larissa does experience a loss, she has the sense that if she experienced a win the previous week, the chances are that the team will not have to wait too long to experience another win.

When Nikki is dancing, however, her perceptions are entirely different. Nikki explains:

Dance is the sport that I love the most. I think the girls are competitive but it doesn't show as much as it does when you play something in a team, because you're not like versing them or anything like face up.

As Nikki is not directly competing with the other girls as in a team situation, the competitive experience is different. The competitive aspect is not as obvious for Nikki, as even though the girls are competition in dancing, they do not directly have to compete against each other.

In contrast, Gemma appears to clearly enjoy the competitive element of a game. In her story she reveals: "I'm kind of competitive when I am playing netball. I love the whole person against person, trying to get the ball, or defending the ball. I just love playing it." While Gemma is playing netball, she finds herself with a partner who needs to either catch the ball, or to defend against another player catching the ball. She enjoys the sense of playing in a team environment with other players. She goes on to explain:

I love it when we're winning. I think it just gives you that kind of motivation and our team sometimes slacks off if we're winning, because we think "oh yeah". I actually like it more when we're losing because then you get that thing that motivation which goes when you're down by like three points? If our team can keep on going; we just keep on going as we can catch up to them really good, like

we're oh okay we're winning, we don't give our full 110%. We kind of just lay back a bit. I like when they're really close games, when we win.

Gemma loves playing netball, and finds it particularly enjoyable when she and her team are in a predicament wherein her team is a little behind and must try harder in an attempt to catch up and win the game. She therefore likes the close games where Gemma and her team are challenged and must work harder to win, which is important to her. Being behind gives her the motivation to attempt to win, as opposed to already winning when she feels she can be more laid-back. She goes on to mention: "When I am in a competition and doing well, I feel awesome. I am just, not sure what word you would use to describe it, but I just, I just get heaps of energy and feel like keeping on going and going".

Gemma's experience of competition, particularly if she is winning, not only leaves her feeling elated but it gives her motivation to keep on playing, giving Gemma the energy to exert herself even more. The feeling of competing against others is a joyous experience for her and she benefits from the competitive environment.

In contrast however, Melanie does not share the same experience. In her story she explains:

We did lots of basketball drills and dribbling and practicing shooting and things like that. It's quite fun cause it's sort of like a team sport and you get to shoot the balls and things, its fun. I don't like it how lots of people are a bit too competitive, and a bit rough. There is a few people that just don't care about any one else and they think they're just the only person on the team. They have to, like, do everything, and they don't really pass the ball to anyone or anything, they just sort of do it all themselves.

Melanie's story reveals the tension of physical activity that came with being part of a team. On the one hand she finds it fun, while on the other hand there is the tension of not feeling valued by the other players. She feels that people become too competitive, and this removes the enjoyment element for her. Perhaps the drill aspect of training overcomes these tensions; being alongside others but able to 'play' as an individual. In other words, she can master the skills of dribbling and shooting by applying herself. No one else interferes with that enjoyable challenge and she does not have to endure the competitive element or the feeling that people are rough, which removes the enjoyment for her. Similarly, Gemma does not enjoy competition, to the extent that she does not partake in any competition at all. In her story she reveals: "The teachers do not pressure us into doing any of the sports. I don't really like the competition stuff. I usually probably exercise with my friends at school. We just normally walk around". Gemma does not experience any of the teachers pressuring her to enter into any competition. As a consequence, Gemma involves herself during any team sports with her friends only, as she has the sense they are not going to pressure or challenge her to compete. This makes Gemma feel comfortable, as she is not committed to having to endure any competitive activities, especially since Gemma does not enjoy the experience of competition.

In summary, the participants all experienced competition as part of their school-based activities or through extra-curricular activities. Some did not enjoy the competition, partly due to the pressure associated with the necessity to win, but some clearly did enjoy and benefit from it. The experience of competing and, in particular, winning, left them feeling exhilarated.

## Running

Running can be an integral part of the female adolescent life, particularly when participating in physical activity that requires training or running. Some participants showed a preference for running, and demonstrated an appreciation of the physiological and psychological benefits associated with the activity:

I like running and I run all the time. I run every second day in the afternoon after school. I want to get fit, and get even fitter as makes me feel good and it keeps me motivated. I run for about an hour. I started running at the beginning of last term and I'm getting used to it now, it's getting better and better. It's cool. I like it. I just run because I want to get fit and train. Before I came here I didn't really used to run and stuff. But ever since I've been exercising and stuff I've improved my physical abilities to run and I've succeeded in most sports. It just makes me feel good.

Here, Larissa describes her experience of running. She is currently running every second day after school. Because she is running more than previously, her enjoyment of the experience is enhanced. While enjoying running, Larissa appreciates that it can assist her fitness level as well, something she wishes to improve even more.

Larissa, who started running only at the beginning of last term, feels that she is becoming accustomed to her running routine, and since she enjoys it Larissa becomes more motivated as she progresses. Prior to coming to this school, Larissa did not run on a regular basis. Her physical abilities have improved due to her exercising, and consequently this has led to success in most of her other sports. Her dedication to running is evident and she appreciates the connection between her other sporting activities and the benefits derived from running and training.

Melanie, like Larissa, also explains her love of running:

I love exercise, I love running around and being active and going for jogs and things up the road so, yeah I love exercise, it's important to me. When I go out for a jog I go by myself normally. It just clears my head and makes me feel good. Normally I just jog up the road here for about two kilometers. I try to go further every time, so I increase my distance every time, I go for a jog. It just makes me feel free. I don't have to think about anything. It just takes all my worries away so I don't have to worry about anything.

Melanie describes how she loves exercise, and in particular jogging. She goes alone, and tries to extend herself by running further each time. There is a sense of personal challenge and the experience itself is also valued. She loves being by herself, feeling clear-headed, with nothing to think or worry about. It makes her feel free. It is 'her time', away from demands and expectations. She can simply run, and enjoy the feeling that comes with running.

Like Larissa and Melanie, Nikki also enjoys running, but has a preference for sprints. She explains:

I just like doing sprints really because I don't really like long distance running because it just tires me out heaps. I don't really like doing anything else, for running. For fitness we do heaps of running and we just sometimes even just play on the playground, like climbing and stuff or we do relays. This is all done at school.

Nikki runs frequently for her fitness classes at school. Sometimes she competes in relays, but has a preference for sprints. Nikki does not, however, enjoy running if she is required to run for long distances, finding that she has to exert herself to the extent that Nikki becomes tired out. Due to the school curriculum, even if Nikki does not feel like

running, she is expected to run during physical education. At times Nikki does not feel like participating, but has no choice.

Similarly, in Jamie's story, she too explains:

I like short distance running like the 200 metres or 400, so I chose to do the 400 as well. I really just enjoy like running, doing sprints and sports games and stuff like that. When I am out there doing my running it feels quite good. I don't know why it just feels good. It is good to go out and do the running and sports as it gives me a break from classes.

Jamie has a preference for the shorter distances such as the 200 or 400 metre track. Running the shorter distances makes her feel good. She cannot specifically identify why it leaves her feeling like this, but she does have a sense that it permits her to get a break from her school classes. This allows her to get outside with her friends and experience the sprints and games while away from the classroom.

Gemma explains in her story how she had to overcome her difficulty with running for extended periods, as it was part of the training for her netball team.

We had two trainings on Wednesday and Friday mornings and it was really full on. When I started the season I hadn't really like practiced or trained for it. I didn't keep up with them because we had to do about four laps around the courts for warm ups then we had to do three shuttles back and forth, and then we played. I wasn't really ready because I hadn't trained specifically for netball and I found this quite challenging. After a while though, I got used to the runs and I would catch up. Now, though, I normally come around the middle and I am not too far behind and I can still keep up with them.

Gemma initially found the netball training quite challenging, pushing her outside the normal levels of exertion she was accustomed to during physical activity. Gemma had

not previously trained for netball and found it difficult to commit to the two trainings per week she was required to attend. This was partially attributed to feeling unprepared for the running and intensity of the training sessions. However, to remain part of the team Gemma had to partake in the sessions. After a while, whereas previously keeping up with her team, had been an issue, with perseverance, Gemma became accustomed to the training and running. She found she had improved to the extent that she felt she had reached a level where she could keep up with the other girls in her team.

In summary, at some stage, the participants must partake in running as part of the New Zealand school physical activity curriculum. Some have a perception that the experience is invaluable, and that they reap the physiological and psychological benefits associated with the running. Others however, find the long distance running particularly difficult, and they have a preference for shorter more manageable distances. Some also found that after becoming accustomed to running, through experiencing the positive associated benefits, they accepted running, finding that participation became easier as they progressed.

### Restrictions

For diverse reasons, all the participants have experienced varying forms of restrictions which have prevented them from participating in physical activity at some stage.

Melanie explains in her story:

There is quite a lot of times because of my allergy and everything that I just feel so weak and that I feel really sad because I can't get out in the fresh air and go for a jog. When I normally go for a run it makes me feel much better, but when I'm sick

it makes me feel worse. When I've sort of been sick and I want to go for a run again, I sort of worry about what if it's going to affect my training for something. I worry if I can't run a further distance than I did the day before because I feel like my body has shut down. This is because I've been sick and my body is a bit weaker. It makes me feel sad.

Melanie suffers from an allergy which at times prevents her from jogging. This leaves her feeling weak and depresses Melanie as she is unable to get out in the fresh air and go for a jog. Under normal circumstances, when Melanie jogs it makes her feel better. When she is experiencing problems with her allergy and attempts to participate in the jogging she loves, instead of feeling better, Melanie is left feeling very uncomfortable. As a consequence of this, at the time or after she has had this problem, Melanie worries over what impact not having being able to jog is going to have on her training schedule, which is an important part of her life. Melanie feels that due to her sickness her body may shut down and become weaker. It is her concern that she may not be able to run the same distance and with the same intensity as prior to her illness. Subsequently, this leaves her feeling sad, frustrated, and despondent. Particularly when Melanie can see herself improving when she jogs regularly, having this feeling of not been able to stick to her schedule is difficult for her.

Larissa too, has experienced restrictions in her physical activity, as she was prevented from participating in athletics which she had previously enjoyed at her old school, due to the lack of facilities at her current school. "We don't get time to practice any athletic events and we don't have the facilities, which is pretty dumb". Larissa is discontented with the lack of facilities available to her, which prevents her from participating in athletics. Dwyer et al. (2006) found that due to lack of facilities some participants of their study were not able to participate in physical activity. They also found that at

some schools physical activity prospects for the students had decreased. Larissa also goes on to mention:

I would like to play squash. I've played it before but because we're only allowed to play two sports in one season it's like, yes we only play two sports. Sometimes I get away with playing more than that but that's the rule. I really want to play squash though. I can't do much about it but it makes me feel pretty stink. It makes me not want to play it ever actually. That is just the way it is.

Larissa describes the experience of being permitted to play only two sports per season. As a female adolescent at school, there are specific rules enforced by the school that students must adhere to. Larissa would like to play squash, which she has played before, but she must comply with the restriction imposed on her. Larissa has previously managed to get away with playing more than two sports. She is forced to accept the rule as it is, but is left with the feeling that it is inappropriate, and still feels unhappy about the situation. As a consequence, Larissa misses out on playing games like squash that she has previously enjoyed. Despite the restrictions, she manages to keep positive and focus on the sports she is permitted to play. She has a busy schedule with other games coming up, and attempts to stay positive about the predicament. In contrast, Gemma's story reveals how she felt the dance teacher was difficult to tolerate, and was forced to give up the very dance she had trained so hard for. In her story she explains:

I think I started ballet because one of my friends recommended it to me. I actually had to have heaps of training to get up to the level which my age group was. Finally, when I got up to there, I felt really pleased with myself, but then we got a really mean teacher. I hated her. The only reason I stayed on because on the weekends on Saturday, we'd have Miss C and I liked her. I really liked contemporary because you could express yourself and I really liked that. So, I think that was the only reason I actually stayed was for that and I put up with the other teacher. But then as Miss C left, Mrs S started taking contemporary class as well. I liked the end of year concerts because all that hard effort paid off but I ended up quitting because of her, I really didn't like her.

After commencing ballet Gemma realized she was behind, and put a lot of effort into having extra training to bring herself up to the standard that she felt was expected of her. Gemma was pleased she had achieved this goal, but her enjoyment was dampened due to the fact she experienced meanness from her new dance teacher. Gemma disliked her intensely and felt that the teacher had a negative attitude towards her. With another teacher, Gemma continued to participate in contemporary dance. However, her dance classes became unbearable when the teacher she liked left, and Gemma had to endure both classes with the teacher she disliked. Even though Gemma really enjoyed the end of the year concerts and felt she had put a lot of effort into her dance throughout the year, abhorrence for her teacher eventuated in her removing herself from her dance classes altogether. She felt restricted from attending classes due to her dislike of her teacher.

In Jamie's story she identified that time might be an issue and could prevent her from participating in some sports. She explains:

I have not really found one that I enjoy yet. It is good getting to choose different sports and I like getting the opportunity to play the ones that you quite enjoy. I don't enjoy it because I don't really have enough time to fit it all in together. We just do we do different sort of sports and I like swimming but it takes up a bit of time.

Jamie appreciates the opportunity to attempt different sports, but she feels she has not found one that she really enjoys yet. She does, however, like swimming, but as with the other sports, finds it quite time consuming. Tergerson and King (2002) also found that time was a significant barrier in participation in physical activity for female adolescents. They either felt they wanted to do other things with their time, or that they did not have

time to exercise. Jamie also goes on to reveal how her homework takes up a significant amount of her time. She explains:

At this school we have a lot of homework after school because as soon as we get home we do lots of homework. I find it hard to do sports after school because I have lots of homework. It does not make me tired but some of it is a bit hard. It has not really stopped me from doing sports but it pretty much stopped me from doing other stuff.

Jamie experiences being given a lot of homework for her to complete after each school day, and finds this very time-consuming. With her homework taking up so much of her time, it makes extra-curricular activities, such as sports, difficult. While Jamie does not feel this homework prevents her from partaking in sports, it does reduce her ability to enjoy other activities.

Jamie mentions how she goes to the farm at the weekends with her mother, but in doing so she is prevented from participating in any sports, as the majority are played during the weekend. She explains:

I really love going down to the farm in the weekends but you have to do a weekday sport only and can not play a weekend sport as go away to the farm. I would like to find something in the week to play. For the holidays we did not do any sports but we went to G's farm. We really like the farm.

Jamie loves the experience of spending time on the farm at the weekends. This does, however, restrict her from any sporting activities that are played during Saturdays. It would be her preference to involve herself in a sport which did not require participation on the weekend, but during the week instead. Jamie's holidays, too, are spent on the farm. Even though Jamie thoroughly enjoys her time at the farm and is engaged in a

variety of activities there, going to the farm every weekend prevents her from becoming involved in specific sports which she may have participated in, had she remained at home. Furthermore, Jamie is reliant on her parents for transportation to the sporting activities, and as her mother is committed to going to the farm, Jamie must go too.

Luisa, like Jamie, has experienced problems with getting to sporting activities. Since moving to Auckland Luisa has found that, due to the distances, she is dependent on transport, as opposed to being able to walk to her physical activities. In her story she explains:

I was going to play for one of the clubs but I didn't want to cause any hassles, like getting picked up and dropped off and stuff like that. It wasn't the same as being at my house and just getting, walking there and walking back home. I had to drive. I was pretty sad but I got over it after a year.

When she was at Taupo, the physical activities that Luisa wanted to participate in were within walking distance. She therefore did not have to depend on anyone for transportation. After moving to Auckland, however, and not wanting to cause anyone disruption by having to drop her off or pick her up from games, she decided it was easier not to participate. This consequently affected what physical activities she could involve herself in, as opposed to living in Taupo when she had not experienced these restrictions. Dwyer et al. (2006) suggests that adolescents find transportation a barrier to participating in physical activity as they may face difficulties getting themselves to physical activities if they are not able to access public transport, or their parents are not able to drive them.

In summary, the participants have identified a variety of factors that have either prevented or made it difficult for them to participate in physical activity. In their experience, illness, lack of time, transport, inadequate facilities, weekend sport, dislike of their teacher, homework, and rules such as being permitted to play only two sports were all significant factors.

# Overall summary

There are many different factors that converge to influence the activity of adolescent girls. Certain factors, like competition, may encourage some and discourage others.

Other participants experienced restrictions which hindered their participation in physical activity. Running imposes difficulties for some of the participants, and some felt there were restrictions that prevented their involvement. 'Having fun' seems to be a key component. These multiple factors will be discussed in the final chapter.

### CHAPTER SIX: DISCUSSION

This study explored the female adolescent experiences of participating in physical activity. Utilizing a qualitative descriptive methodology with a phenomenological hue, themes that emerged were interpreted from the data. These included peer influence, parental influence, fun, enjoyment and boredom, gender, body issues, weight loss and body image, running, competition, and restrictions.

As already discussed, physical activity may be a critical part of a female adolescent's life, in maintaining physiological and psychological health and well-being (Boreham & Riddoch, 2001; Trost et al., 2002). Furthermore, patterns of physical activity established at this stage in their lives may ensure they continue into adulthood, ensuring life-long participation in physical activity. However, previous studies have identified that there is a decline in physical activity patterns during adolescence. The reasons for this are complex and not fully understood. The intention of this study was to explore how the female adolescents actually felt about participating in physical activity. Through their stories, I was able to uncover insights from their experiences. This will give a different perspective from previous studies which have been predominantly quantitative or if they were qualitative, have utilized focus groups. Some of the findings in my study are consistent with previous research, some challenge previous findings, and some are findings are not reported in previous studies.

This chapter will offer a synthesis of the findings of my study and conclude with discussion of implications, limitations, and ideas for further research.

Social interaction, peer influence, parents and gender

The findings of the study exposed the significant social influence peers and parents may have on the female adolescent's participation in physical activity.

Peers have the potential to have a positive or negative effect on the female adolescents engaging in physical activity, either encouraging or discouraging participation. If peers lacked interest, or did not participate in physical activity, disappointment on the part of the participants was frequently evident, to the extent that they attempted to coax and encourage their peers to partake. They described feelings of disillusion and frustration when peers withdrew from the physical activity. Some attributed their friends' lack of interest partially to their dislike of the trainings associated with regular physical activity.

In contrast, the participants stressed their enjoyment of exercising with their friends, as evidenced in Larissa's story: "When I exercise with my friends that is pretty cool because you just talk a lot about stories and stuff about what has been happening".

Other studies have similarly suggested the need for female adolescents to have their peers participate with them (Tergerson & King, 2002). Lee (2004) further suggests that if certain friends enjoy the physical activity, this may have the effect of influencing their other female friends to enjoy it more.

It seems when peers join together in physical activity in a manner that brings fun and enjoyment, then they are more likely to continue with such involvement. Sallis (1999) suggested when adolescents engage in physical activity with their peers, "the group

creates a supportive environment for its members. If the main peer group devalues physical activity, this is an effective deterrent" (p. 3). Tergerson and King (2002) also found that "having a friend encourage me to exercise" was a significant factor for adolescents to engage in physical activity (p. 375).

Team coaches should consider peer relationships in team selection. Whereas priority is normally given to grading teams according to the individual's perceived ability, instead, consideration needs to be given to relationships of influence. If it is clear that certain girls attract and hold the involvement of less active players, then perhaps building teams around such combinations may keep more players involved.

However, the purpose of a team in a sporting context is to win, and it may be the coach's preference to have the best combination of players together in order to win.

Such being the case, the findings of this study indicate that it is preferable to encourage social teams alongside the competition teams, normally available to the female adolescent.

There does not appear to be literature available on the negative aspect of participating in physical activity with their peers. The findings in this study indicate that peers may discourage participation, particularly if there has been a falling out within the group. It appears that adults looking on as coaches, teachers and/or parents need to pay more attention to group dynamics, and help resolve tensions in relationships that may otherwise influence a player to lose interest in participation.

In summary, fun and enjoyment matters, and it has been revealed that relating with others has a strong influence on these positive emotions and thus participation in physical activity. Nevertheless, a strong player will also be keen to play with girls who share a similar skill and fitness level. Attending to relationships is not enough in itself to hold involvement but needs to be considered in connection to a sense of achievement and competition.

## Parental influence

Another fundamental social factor that surfaced from my study was the significance of parental influence in fostering physical activity. Whilst participants were reliant on their parents for obvious support, such as transport and financial means, my study identified other significant links.

While the participants did not specifically discuss their parents' influence on partaking in physical activity, through their stories, it appeared that parents had a significant impact in their degree of involvement in physical activity. It appeared that if parents encouraged and participated in physical activity, this provided a strong source of encouragement to the female adolescent. Not only did it permit engaging in a wide range of activities, but it also provided a role model, while encouraging participation in activities of their choice in a supportive environment. These findings are similar to those Tergerson and King (2002) who suggested that the female adolescent may view parents as role-models, and that parents are important in influencing the female adolescent into life-long activities.

Not only did some of the participants in this study consider that their parents serve as their role models, furthermore, they provide a valuable resource of knowledge, information, support, coaching, and help improve the adolescent's technique whilst engaging in physical activity. It was also noted that, through participating in physical activity, the participants were able to spend valuable time together, allowing time to talk to each other and build relationships. This may have the potential to not only improve their performance in sport, but also to impact on their general sense of well-being.

Adolescence is known to be a difficult developmental stage, through the transition from childhood to adulthood. Two of the participants in this study lived primarily with their mothers, and engaging in physical activity was a point of connection with their fathers. This is in contrast to O'Connor's (2005) suggestion that it is the norm for children from broken homes to miss out on sports. Through physical activity, either parent, who may not be in a 'nuclear family', may come to enjoy valuable time with his/her daughter.

Furthermore, the female adolescent may have the opportunity to spend valuable one on one time together with the parent. Activity, while valuable in itself, may be the means to supporting the adolescent through important relationships with parents. If finances are limited, physical activity such as walking, does not add too much of a monetary strain to the adolescent and her family. However, it cannot be assumed that all adolescents are able to enjoy participating with their parents, as not all parents will be able or willing to join in such activities. It is further likely that there may come a time or a context in which adolescents will perceive it is 'not cool' to be seen with their parents.

## Gender

While gender issues are complex, the participants were all able to explain the implications physical activity had on them in relation to their gender. Particularly due to the lack of research in this area, the implications that gender have on these female adolescents is not fully understood. The findings in my study indicated that, while engaging in physical activity alongside males may have disadvantages, it may also have the potential to positively affect their enjoyment and participation. The participants revealed in their stories that, when it comes to physical activities, there appeared to be a division amongst the genders. Some of the participants expressed a concern over having to participate in physical activity with boys in a mixed gender team, feeling vulnerable and threatened by their behaviour. This is consistent with findings from Dwyer et al. (2006) who also reported that when female adolescents participate in physical activity with males, they tend to feel more self-conscious which may prevent them from participating.

In contrast however, one participant, Jamie, stressed that she found such experiences 'fun'. She did not feel threatened by the boys, and attributes this to having known them for a long time. Again, the answer is likely to be complex and situational. If a girl is particularly good at a sport it may be that she will find participating with the boys more advantageous and enjoyable. On the other hand, it seemed that boys had a sense that the girls would not be good enough. It could be beneficial to have mixed gender groups whilst engaging in activities that did not require competition. Coaches and facilitators should be aware of the challenges that females potentially may face, and manage the activities taking them into consideration.

Another issue identified by one of the participants was that, due to her gender, she was not permitted to play sports such as rugby. Having previously enjoyed playing rugby at her former schools, she found this difficult to endure. Alley and Hicks (2005) also found specific sports were available according to gender. Penney and Harris (2000) explained that some males have a wider access to a variety of sporting activities and that sports such as rugby were often restricted to males. This study does not attempt to address the question of whether girls should be encouraged to play rugby, but it does show that some girls are keen to do so and that they are restricted to societal norms or rules.

In summary, the findings showed participants felt either "I want to be around boys" or "I don't want to be around boys". For adults, coaches, or parents, this creates a dilemma as boy/girl activities may be advantageous, particularly if it helps to keep the girls active, but equally it may be problematic as it may deter girls from participating.

Any area that may potentially threaten or encourage the female adolescent to participate in physical activity should be taken seriously. It may be that when organizing mixed gender teams, the level of the intensity or difficulty needs to match the skill and levels of competence in both genders, and it may be preferable for the females and males to be separated.

# Fun, enjoyment and boredom

Consistent with other studies (Sallis, 1999; Stucky-Ropp & DiLorenzo, 1993), having fun or enjoying the activity was identified as a significant incentive for female

adolescents to engage in physical activity, and was intertwined in the themes of peers, parents, and gender. In contrast, the findings of this study indicated that some aspects of physical activity were boring. The training regimes associated with the physical activities appeared to be a negative factor for some of the adolescents. This is demonstrated by Luisa's story, who complains "training for netball's pretty boring".

Rowland and Freedson (1994) also identified that physical activity must provide an enjoyable experience in order to provide intrinsic motivation. Similarly, de Bonnaire and Faloon (1999) found that enjoyment in physical activity is imperative for engaging the adolescent. Stucky-Ropp & DiLorenzo (1993) and Sallis (1999) both suggest that for the adolescent to increase participation in physical activity, it must be enjoyable.

Through the interviews, it emerged that many factors impact on enjoyment. The type of physical activity and an individual's perceived self-competence while participating in the chosen activity is one important factor. This is consistent with findings from Cury et al. (1996) and Humbert et al. (2006) who suggest that when female adolescents are engaging in physical activity, if the girls feel they are competent in the activity, they show more interest.

It would be virtually impossible to cater to all female adolescent requirements, but as "fun" is a critical factor in engaging the female adolescent in physical activity, the provision of this stimulus needs to be given the highest priority. With the importance of "fun" and "enjoyment" having been identified, it is clearly necessary to determine what actually constitutes these elements. As the adolescents are at an age when they are

capable of making judgments and expressing their thoughts, it may be advisable to ask them what constitutes "fun" and "enjoyment".

The majority of the participants also described how the training associated with the physical activity was boring and was also a deterrent. If they experienced the physical activity as being too difficult, too boring, or lacked motivation, their participation in activities either decreased or ceased. Training is an integral and necessary part of playing sport but, as explained under the peer section, training sessions contributed to some of the participants' peers withdrawing from the physical activity altogether.

Coaches need to be mindful of the balance between increasing fitness and skill and sustaining enjoyment.

## Competition

The findings show if the participants felt that they were winning or achieving, the fun and enjoyment element was intensified for them. In contrast however, if they felt they were not achieving, they consequently lost the motivation and pulled back. Some of the participants appeared to have an aversion to competition in certain forms, but others felt that if they perceived themselves to be doing well, the competition was advantageous.

This is consistent with the findings from Dwyer et al. (2006) who suggested that while competition may act as a deterrent, some female adolescents experienced competition as an opportunity to demonstrate their skills against other participants. It was evident, however, that competition induced pressure and consequent stress, which the participants may not have found beneficial.

Campbell's (2004) findings are similar, suggesting that girls tend to shun competition, preferring to engage in activities that disperse any conflict. Some of the participants explained that competitors sometimes acted too roughly, which acted as a deterrent.

In general, the competition element seemed to remove the "fun" component from the physical activity for the participants. However, some enjoyed it if they were either winning or felt competent. One of the participants prefers to engage in dance, whereby she felt the competition element does not affect her ability to enjoy herself, or leave her feeling either inadequate or incompetent. The 'win or nothing' attitude needs to be addressed, as potentially this may be discouraging a considerable number of females from participating in physical activities. Findings in this study illustrated how competition threatened the participants with feelings of inadequacy or incompetence. Furthermore, the participants loved winning and detested losing. While no coach can ensure a team wins all the time, he or she can strive to support players, through both wins and losses, in a way that keeps motivation strong. The female adolescent who has difficulty with competition may need to be encouraged into accepting that competition is a way of life. It may be that the girls simply need to learn to cope with competition better, and to accept it.

## Running

All the participants explained how they had to partake in running from time to time, due to the school curriculum. Whilst some enjoyed and appreciated the benefits of running, a few clearly did not. One of the participants found that after being required to run, in time, running did become easier and became more effortless for her. Other participants

enjoyed running, but showed a preference for sprints. Nikki mentioned: "I just like doing sprints really because I don't really like long distance running because it just tires me out heaps". The findings revealed that a few of the participants found the long-distance running too difficult, to the extent that it acted as a deterrent to participate.

As with some of the other themes, if the participants found the activity too difficult, the physical activity became a deterrent to participation. However, as one participant found, running became more tolerable and easier. This may have been attributed to an increase in her fitness level.

If running is acting as a deterrent to the training sessions, or to engaging in other physical activities, ways need to be explored to either engage the participants in running or to find alternative ways of increasing their fitness levels through modified training sessions. These may include sprints or other higher intensity activities. As running is an activity that can easily be carried through to adulthood, it may be advantageous to encourage the female adolescents in this physical activity, but consideration should be given to the fact that some girls simply do not enjoy running. In summary, with persistence, some found that running became more enjoyable. Initially however, partially due to finding running difficult, others did not find it an enjoyable experience, although some clearly benefited from running.

# General well-being

Participants discussed their perception of physical and psychological issues during my study. They explained how participation in physical activity made them feel fit and

healthy. Furthermore, they explained that physical activity made them feel good. This appeared to be connected to their feelings of competence. Fox (1999) also found: "There is growing evidence demonstrating that exercise can be effective in improving the mental well-being of the general public, largely through improved mood and self-perceptions" (p. 411). Similarly, a report by the President's Council on Physical Fitness and Sports (1997) supports the use of physical activity and sports as a means of improving self-esteem and body image for girls. In my study participants such as Larissa reveal how she feels while participating in physical activity: "It makes me feel fit and healthy, I just love sport".

In contrast however, some of the participants experienced negative psychological effects while engaging in physical activity. They explained how, for a variety of reasons, physical activity left them feeling quite disillusioned. Melanie mentioned that when she was playing in a mixed gender team, "It makes us feel really put down and like self conscious because the boys sort of just keep the ball to themselves". Gemma also explained "I was gutted when I didn't get in to the team for volleyball".

Gemma reported feeling let down when engaging in physical activity due to failing to be selected for a volleyball team and in another story further expressed a dislike for her dance teacher and the impact that this had on her.

It appears that if the participants feel their self-esteem or worthiness has been challenged or threatened, then they may not enjoy the physical activity, to the extent that they may withdraw altogether, even if they have previously enjoyed the activity.

Some of the participants also explained how weight loss during physical activity was a predictor of their participation. This is consistent with findings from Tergerson and King (2002) who have suggested that physical appearance is a prime motivator for female adolescents to engage in physical activity, and suggested that weight loss and staying in shape were the main benefits of physical activity. Melanie explained "After I have had a jog, I feel good because I've burned off some calories". Similarly Luisa mentions: "It's the only time, when we can have fun and lose a little bit of weight", when referring to playing netball.

Several participants indicated that they were not only aware of the health benefits of physical activity, but also understood the connection between engagement in physical activity and weight loss. Physical activity has the potential to either increase or decrease general well-being, and parents and health care providers need to take this into consideration when designing and implementing physical activity programmes. The participants seemed aware of the physiological benefits of physical activity, the influence on body image, and felt generally 'better' for being active.

## Restrictions

All of the participants reported restrictions, either permanent or temporary, which affected their participation in physical activity. One participant had found that a recurrent allergy problem prevented her from engaging in physical activity.

Some of the participants were concerned about the lack of facilities. This was particularly evident when they moved to secondary school from primary school where

they had previously enjoyed access to the specific activities. This is consistent with findings from Dwyer et al. (2006) who found that due to lack of facilities some participants in their study were not able to participate in specific physical activities. This is evident in Larissa's statement: "We don't get time to practice any athletic events and we don't have the facilities, which is pretty dumb".

Other restrictions included the type and amount of physical activity they were permitted to engage in. Another participant explained how her intense dislike for her dance teacher had acted as a deterrent. Another explained that as the sports were mostly in the weekend, and she went away on weekends, she was not able to participate.

Consistent with findings from Tergerson and King (2002), some of the participants also found that time was a significant barrier to participation in physical activity for female adolescents. They either felt they wanted to do other things with their time, or complained of lack of time to due to other activities such as homework. Jamie mentioned: "I find it hard to do sports after school because I have lots of homework". While not identified as a general theme, transport to and from physical activities emerged as a problem for some of the participants. Luisa mentioned: "I was going to play for one of the clubs but I didn't want to cause any hassles, like getting picked up and dropped off and stuff like that". Similarly, Dwyer et al. (2006) suggests that adolescents find transportation a barrier to participating in physical activity particularly if the use of public transport is necessary.

In summary, due to restrictions, participants were either not permitted or unable to participate in some physical activities. Furthermore, some teachers had the capacity to either inspire or deter participants engaging in the physical activity of their choice.

### **Considerations**

For the female adolescent participating in physical activity, it would be advantageous to find an approach that enables a girl to experience exercise in the way that works for her. Some participants, already good at sports, are likely to be very competitive, are keen to train hard, and will build friendships among their like-minded peers. These female adolescents are not so much the problem. They already love it and do it.

The girls who need attention are the ones who are not very good, who are not motivated to train because it is perceived to be boring, who have not yet experienced physical activity as being "fun", and who are yet to experience the feeling of achievement. These girls do not enjoy competitive sport because they are likely to be in the losing team. There may also be a chance that they do not have a good body image, causing them to be hesitant about revealing their bodies while participating in physical activity. There is little to encourage them into physical activity. The challenge is to find ways that help them take the next step and the following may be taken into consideration:

- How can the female adolescents improve in a way that is fun and make physical activity a more enjoyable experience leading to increased participation?
- How can they build friendships through activity?
- How can the competitive dimension be down-played, or how can they learn to accept loss as part and parcel of the game?

- How can coaches/teachers/parents work with girls in a way that encourages them in a supportive environment while promoting an optimistic attitude toward physical activity?
- How can they feel comfortable about revealing their bodies? Do they need to reveal them?
- How can coaches/teachers/parents help the female adolescents improve their self-esteem through physical activity and avoid making them fear that physical activity may challenge it?
- How can the social and environmental barriers be reduced?

In most families, if the parents are already inactive, it may be too late to encourage a regular physical activity pattern. The girl is already 'not sporty'. This may be problematic to the female adolescent who may look to their parents for support, but fail to receive it.

Other considerations need to take into account the restrictions female adolescents experience, while wishing to partake more. If possible, it would be advantageous to increase the various types of physical activity, preferably at school, and increase the times they may participate. The times may include prior to and after school, or during school holidays. As well as school-based competition sports, schools should offer a variety of sports throughout holidays and weekends for the female adolescents to participate in. While this raises economic issues, it may make physical activity

available to more female adolescents, and may also help working parents who struggle to keep their adolescents busy during the school holidays.

While there may be extra costs incurred, physical activity should be available through to year 13, and not have to be taken as an option paper. If possible, schools should offer similar types of physical activities so the adolescents do not have to change their activities from school to school, or from primary to secondary school.

Health professionals, coaches, and teachers should be educated in the physiological and psychological benefits which physical activity gives adolescent girls. A more enlightened approach by these groups may reduce their resistance to, or apathy over, encouraging the girls' participation. In making physical education a priority area for children and adolescents, it would be preferable for government to allocate more funding for both research and the physical activities themselves, to make them accessible to more adolescents. Alongside the government, local groups, sport clubs, service organizations, and parents, should all be contributing to making physical activity more accessible to the female adolescent.

Peer involvement was identified as a significant influential factor, and it could be utilised to encourage the female adolescent into physical activity. This may include promoting special social teams for the older adolescents, who no longer have physical activity as a compulsory part of their school curriculum.

While facilitators of physical activity may be aware that it is preferable for the female adolescent to experience the activity as "fun", they may not fully understand what

constitutes "fun" for individuals. Adolescents themselves should be asked, and further attempts made to identify how training sessions associated with the sports can be more enjoyable for them. If, for instance, non-participation is due to the adolescents' dislike of running, attempts could be made to incorporate alternative activities. Running is an activity that, with persistence, may become enjoyable, and also an activity that can be carried through to adulthood, so it may be advisable for female adolescents to be encouraged to find ways of enjoying this activity. For example, either sprints or crosscountry may be more enjoyable for an individual, or games which involve running in a non-competitive environment.

As parents have the potential to encourage or discourage their daughters, it is imperative that they are well informed on how physical activity may be beneficial in their daughters' lives. Not all physical activities need to be costly, and even encouraging their daughters to go for a strenuous walk or run, or swimming at the beach, can all have a major impact on fitness levels, and consequently health. Activities that the female adolescent is already enjoying and participating in, such as even walking to and through the shopping mall, should be encouraged.

Transport to and from activities may be an imposition for parents. This may be alleviated if schools were able to provide buses, or to assist in organizing car pooling if this proved too costly.

Consideration needs to be given to the fact that some girls do not wish to participate in physical activity with boys, to the extent that it overshadows the potential benefits of physical activity for them. Coaches and teachers should frame the school curriculum to

accommodate both males and females, but taking into account the difficulties females endure, and their special needs. As some female adolescents do not benefit from competition, it would be advisable to place less emphasis on winning and losing, with more on building confidence and ensuring enjoyment. It is important that there should be recognition of the effects, both positive and negative, that competition may have on the female adolescent. Females who do not appreciate competition could be directed into other non-competitive activities, such as dance.

While attempting to engage female adolescents in physical activity, priority should be given to including those which will set up activity patterns that may be carried through to adulthood, thereby introducing lifetime routines in sport and recreation. To encourage this, female adolescents should be exposed to a variety of physical activities, especially throughout their school curriculum. If one is mindful of the part played by the "fun" element, female adolescents should be given the opportunity to communicate their requirements.

Aspects that influence female adolescents in physical activity participation, as identified in my study, may be advantageous in preparing interventions to reduce barriers and increase physical activity involvement. They further may contribute to supporting the female adolescent into life-long involvement, from adolescence and through adulthood. Everyone should be able to find a physical activity which they can engage in, especially when physical activity may be so beneficial, and the adolescent has so much to gain by participating.

Results from the findings of the study indicate that physical activity should be enjoyable for the female adolescent, to encourage participation. What specifically constitutes enjoyment for the adolescent differs for each individual. The data collected also suggested that "influential others" or the female adolescents' environments may also influence and have an impact on their participation. These factors included peers, parents, their gender, body issues, competition, running and certain restrictions.

### Future research

More research is needed to validate and encourage intervention programmes which increase participation in physical activity. As well, it may be advantageous to focus on the adolescents who are not participating at all.

Findings from my study generated numerous questions, and suggested further research projects. In the following I have prioritized the initial four suggestions and listed the subsequent ideas.

Research surrounding parental involvement may include their influence on the adolescents' participation, their perception of their daughters' participation, strategies that may make it easier to encourage their daughters' participation, and any connection between their own participation in physical activity and their daughters' current or future involvement.

Another future research area may be to identify physical activity in the schools and the community which the female adolescents are currently engaging in, and which they are

likely to carry through to adulthood. As researchers have noted a decline in physical activity from adolescence, it may be advantageous to identify those particular physical activities which encourage the female adolescent to want to participate in, and ones that they are more likely to continue well into adulthood.

Physical activity should be available to every female adolescent of every nationality and ability. My study researched able-bodied female adolescents. A study which may have a enormous impact would be researching the disabled female adolescent, considering that physical activity maybe so advantageous to these girls. How do they experience activity? What are the barriers they and their caregivers experience in attempting to engage them in physical activity.

Another possible research area is enjoyment. My study found enjoyment was a critical area in engaging the female adolescent. What constitutes enjoyment for the individual? How can enjoyment be utilized to assist in engaging the female adolescent in physical activity?

In brief, other areas of research may include: Peer influence, mixed gender teams, competition and its effects on self-worth, running and alternatives to running in training sessions, how the barriers may be minimized for the female adolescent participating in physical activity, and how siblings or family relationships may affect the female adolescent partaking in physical activity. Furthermore, possibilities for future research may include a study on female adolescent participation in different decile schools or rural schools.

### Limitations

My study explored "what is the female adolescent's experience of physical activity?" which may potentially contribute to the research knowledge already available. While my study was able to extract an accurate account of the experience of the female adolescent participants and their experience of physical activity, as with other research studies, there were limitations to my study as identified below.

The small number of participants in my study may not have represented the experience of other adolescent females, as the experience is unique to these specific adolescents who volunteered for my study. Another limitation was that these participants were all able-bodied and of European and Maori descent. Disabled or other ethnic groups are not represented in my study so, their stories are not represented and therefore the difficulties this group may encounter were not identified. Furthermore, as none of the participants were familiar with me, they may have withheld data, particularly if it was sensitive to them.

In conjunction with advice from my supervisors, I have attempted to identify any potential bias, but acknowledge that in writing this thesis, my personal assumptions will have influenced my interpretations.

# Concluding statement

The intent of this study was to understand and describe the experience of female adolescents' participation in physical activity. Through their stories, I was able to uncover some of the complexities and challenges this section of society endures in relation to participation or non-participation in physical activity.

Physical activity is declining and there is an urgent need to review and overcome the complex factors which contribute to this situation, to attempt to prevent this decline. This has resulted in the recognition of a need to develop innovative programmes.

The challenge is to encourage participation by providing support and opportunity while making physical activity enjoyable for the female adolescent. In turn, this may increase and help to sustain participation through to adulthood, while also accommodating any other outside needs or influences.

Physical activity should be available and enjoyable for female adolescents while they are at a stage of their lives when participation offers so much benefit. It is a health imperative for parents, schools and communities to promote the factors identified in this thesis as encouraging physical activity, and to seek to minimise restrictions. It matters that adolescent girls should participate in physical activity enthusiastically.

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#### **APPENDICES**

Appendix 1 - Memorandum, Ethics Committee



#### **MEMORANDUM**

#### Auckland University of Technology Ethics Committee (AUTEC)

To: Liz Smythe

From: Madeline Banda Executive Secretary, AUTEC

Date: 20 June 2007

Subject: Ethics Application Number 07/19 Girls' experiences of physical activity.

#### Dear Liz

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 14 May 2007 and that I as the Executive Secretary of AUTEC approved your ethics application on 6 June 2007. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement at AUTEC's meeting on 9 July 2007. Your ethics application is approved for a period of three years until 6 June 2010.I advise that as part of the ethics approval process, you are required to submit to AUTEC the following:

- A brief annual progress report indicating compliance with the ethical approval given using form EA2, which is available online through <a href="http://www.aut.ac.nz/about/ethics">http://www.aut.ac.nz/about/ethics</a>, including when necessary a request for extension of the approval one month prior to its expiry on 6 June 2010;
- A brief report on the status of the project using form EA3, which is available online through
   http://www.aut.ac.nz/about/ethics.
   This report is to be submitted either when the approval expires on 6 June 2010 or on completion of the project, whichever comes sooner;

It is also a condition of approval that AUTEC is notified of any adverse events or if the research does not commence and that AUTEC approval is sought for any alteration to the research, including any alteration of or addition to the participant documents involved.

You are reminded that, as applicant, you are responsible for ensuring that any research undertaken under this approval is carried out within the parameters approved for your application. Any change to the research outside the parameters of this approval must be submitted to AUTEC for approval before that change is implemented. Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this. Also, should your research be undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply within that jurisdiction.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all written and verbal correspondence with us. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at <a href="mailto:charles.grinter@aut.ac.nz">charles.grinter@aut.ac.nz</a> or by telephone on 921 9999 at extension 8860.

On behalf of the Committee and myself, I wish you success with your research and look forward to reading about it in your reports ours sincerely

Madeline Banda
Executive Secretary

**Auckland University of Technology Ethics Committee** 

Cc: Caroline Dickson cdickson@aut.ac.nz, Rosemary Godbold

From the desk of ... Madeline Banda Executive Secretary AUTEC Private Bag 92006, Auckland 1020 New Zealand ext 8044 E-mail: madeline.banda@aut.ac.nz Tel: 64 9 921 9999

Fax: 64 9 921 9812

Appendix 2 – Participant Information Sheet

# Participant Information Sheet



#### **Date Information Sheet Produced:**

#### 25/6/07

#### **Project Title**

Experience of female adolescence in physical activity.

#### An Invitation

My name is Caroline Dickson and I would like to invite your daughter/student to take part in my research project which is to assist me to complete my qualification, Master of Health Science. She may stop at any time during the research which will be explained to her prior to the interview. The purpose of this information sheet is to allow you to find out what the research project involves and also allows you to decide if you would like or will give permission for your daughter to be involved or not. Parental or caregiver permission is required prior to your daughter's participating in this research project so please contact me on 9219999 extension 7754 if you would like further details or clarification after reading the details below. Please phone me before one day prior to the commencement of the research date.

#### What is the purpose of this research?

The purpose of this study is to question the experience of physical activity as an adolescent.

#### How was I chosen for this invitation?

I am going to interview adolescent girls between the ages of 11 and 16 years of age. Girls are recruited through my personal contacts or through advertising in the local newspaper. This research is entirely voluntary.

#### What will happen in this research?

After completion of the appropriate documentation, an interview of approximately sixty minutes will be arranged between myself and your daughter at an appropriate time and place. This will be discussed prior to the interview. I will use a tape recorder and I may take some notes. I am interested in listening to your daughter's/student's stories of how she experiences exercise. After the interview, my supervisors will help me to look at the information and analysis it. I may need to contact your daughter/student again to confirm what she may have said on the tape was the same as I had written down on the paper. When I have finished the study, I will invite you to have a look at the results.

#### What are the discomforts and risks?

As most adolescents are conscious of their bodies, some emotional issues may arise but you will be notified immediately. If I have any concerns, your daughter/student may be referred to the AUT University Health and Counselling, if necessary.

#### How will these discomforts and risks be alleviated?

Your daughter/student may stop the interview at any stage and withdraw without question. If the interview raises issues or questions for your daughter/student, I will link you to people who can help you resolve these.

#### What are the benefits?

I hope that this study may contribute to understanding how some adolescent girls identify issues relating to physical activity. At this age, some girls may have problems and I hope, by doing this research in this area it may make a difference.

#### How will my privacy be protected?

Your daughter's/student's name and private details will not be made available to anyone except me and my supervisors. Before, during and after the study at no time will other people be able to identify your daughter and we do not use your daughter's name on the forms. All the information collected is kept confidential and locked away.

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

Only the time required for the interview which is around 60 minutes and another 30 minutes if we need to check some details.

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

One week.

#### How do I agree to participate in this research?

Parents or caregiver and participants will need to fill out separate forms to agree to be included in the research.

#### Will I receive feedback on the results of this research?

If requested, feedback on this research will be made available to you.

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

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Associate Professor, Liz Smythe, LSMYTHE@aut.ac.nz, ph. 921-9999 extension, 7196.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, *madeline.banda@aut.ac.nz*, 921 9999 ext 8044.

#### Whom do I contact for further information about this research?

#### Researcher Contact Details:

Caroline Dickson, cdickson@aut.ac.nz, 921-9999, x 7754

#### Project Supervisor Contact Details:

Provide the name and all relevant contact details. Note that for personal safety reasons, AUTEC does not allow researchers to provide home addresses or phone numbers.

Approved by the Auckland University of Technology Ethics Committee on 6 June 2008, AUTEC Reference number 07/19.

Appendix 3 – Participant Information Sheet

### Participant Information Sheet



#### **Date Information Sheet Produced:**

#### 25/6/07

#### **Project Title**

Experience of female adolescence in physical activity.

#### An Invitation

My name is Caroline Dickson and I would like you to take part in my research project. This is to assist me to complete my qualification, Master of Health Science. You may stop at any time during the research which will cause no problems to you or me. The purpose of this information sheet is to allow you to find out what the research project involves and also allows you to decide if you would like to be involved or not. After you have read this information sheet and have your parent's permission, you may either contact me on ph 9219999 ext. 7754 or you may want to ask for more information. Please phone me one day prior to the commencement of the research date.

#### What is the purpose of this research?

The purpose of this study is to question the experience of physical activity as an adolescent.

#### How was I chosen for this invitation?

I am going to interview adolescent girls between the ages of 11 and 16 years of age. Girls are recruited through my personal contacts or through advertising in the local newspaper. This research is entirely voluntary so you may choose not to take part.

#### What will happen in this research?

I need to get all the consent forms signed and then will be organising a convenient place and time to interview you. The interview will be in a quite place which is comfortable for you and will last around sixty minutes. I will use a tape recorder and I may take some notes. I am interested in listening to your stories of how you find exercise. After the interview, my supervisors will help me to look at the information and analysis it. I may need to contact you again to confirm what you have said on the tape was the same as I had written down on the paper. When I have finished the study, I will invite you to have a look at the results if you would like to.

#### What are the discomforts and risks?

I do not feel there will be any major discomfort or risk to you but as most adolescents are conscious of their bodies, some emotional issues may arise. If I have any concerns, you may be referred to the AUT University Health and Counselling, if necessary.

#### How will these discomforts and risks be alleviated?

You may stop the interview at any stage and withdraw without question if you would like to do so. If the interview raises issues or questions for you, I will link you to people who can help you resolve these.

#### What are the benefits?

I hope that this study may contribute to understanding how some adolescent girls identify issues relating to physical activity. At this age, some girls may have problems and I hope, by doing this research in this area it may make a difference.

#### How will my privacy be protected?

Your name and private details will not be made available to anyone except me and my supervisors. Before, during and after the study at no time will other people be able to identify you and we do not use your name on the forms. We will also keep all the information you give us locked away. Even when we report the information, we will make all efforts possible to not let anyone know it was you.

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

Only the time required for the interview which is around 60 minutes and another 30 minutes if we need to check some details with you.

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

One week.

#### How do I agree to participate in this research?

You and your parents or caregiver, will need to fill out separate forms to agree to be included in the research. If you agree to be part of this research, I will give you and your parents or caregiver the forms to fill out.

#### Will I receive feedback on the results of this research?

If you would like, I will give you or your parents and caregiver feedback on the research. I will personally bring it over to you and you can ask me questions then if you would like.

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

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Associate Professor, Liz Smythe, <u>LSMYTHE@aut.ac.nz</u>, ph. 921-9999 extension, 7196.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, *madeline.banda@aut.ac.nz*, 921 9999 ext 8044.

#### Whom do I contact for further information about this research?

#### Researcher Contact Details:

Caroline Dickson, cdickson@aut.ac.nz, 921-9999, x 7754

#### **Project Supervisor Contact Details:**

Provide the name and all relevant contact details. Note that for personal safety reasons, AUTEC does not allow researchers to provide home addresses or phone numbers.

Approved by the Auckland University of Technology Ethics Committee on 6 June 2007, AUTEC Reference number 07/19.

#### Appendix 4 - Assent Form

#### **Assent Form**

For completion by legal minors (people aged under 16 years). This must be accompanied by a Consent Form. When preschoolers are involved, please use the special Children's Information Sheet in the Ethics Knowledge Base.



25/6/07

Project title:	Experience of female adolescence in physical activity		
Project Supervisor:	Associate Professor Liz Smythe/ Dr. Sean Phelps		
Researcher:	Caroline Dickson		
Please read the sentence	es below and let me know if you do not understand anything.		
I have already read the ir all the information.	nformation sheet given to me dated 25 June 2007 and have understood		
I have had a chance to a	sk questions and I feel I understand the answers.		
I feel I understand how that.	ne interview will be taped and how the material gathered will be looked		
I understand that I may s involved in the research.	top this research at any time which will not be a problem to anyone		
I understand that if I do n destroyed.	ot wish to take part all the information I have already provided, will be		
When I sign or write my name below, this indicates that I would like to be part of the research.			
I would also like to receive	e a copy of the report from this research.		
(please tick one): YesO	NoO		
Participant's signature:			
Participant's name:			
Participant Contact Details (if appropriate):			

Date:

Approved by the Auckland University of Technology Ethics Committee on 6 June 2007 AUTEC Reference number 07/19.

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

Appendix 5 – Parent/Guardian Consent Form

## Parent/Guardian Consent Form

For use in conjunction with either an appropriate Assent Form when legal minors (people under 16 years) are participants in the research or a Consent Form when involving participants aged 16-20 years whose age makes them vulnerable as concerns consent.



Project title:		Experience of female adolescence in physical activity	
Project	Supervisor:	Associate Professor Liz Smythe/ Dr. Sean Phelps	
Researcher:		Caroline Dickson	
	I have read and understood the information provided about this research project in the Information Sheet dated 25/6/07.		
	I have had an opportunity to ask questions and to have them answered.		
		the interview will be audio-taped and transcribed.	
	I understand that I may withdraw my child/children and/or myself or any information that we have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.		
0	If my child/children and/or I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.		
	I agree to my child/children taking part in this research.		
0	I wish to receive	a copy of the report from the research (please tick one): YesO NoO	
Child/ch	ildren's name/s :		
Parent/0	Guardian's signat	ure:	
Parent/0	Guardian's name:		
Parent/0	Guardian's Conta	ct Details (if appropriate):	
Date:			

Approved by the Auckland University of Technology Ethics Committee on 6 June 2007, Reference number 07/19.

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

Appendix 6 – Memorandum, AUT Health Counselling & Well-being



To CC

FROM Stella McFarlane

SUBJECT DATE

Dear

#### Please inform your participants:

- They will need to drop into our centres at WB219 or AS104 or phone 921 992 City Campus or 921 9998 North Shore campus to make an appointment
- They will need to let the receptionist know that they are a research participant
- They will need to provide your contact details to confirm this
- They can find out more information about our counsellors and the option on online counselling on our website http://www.aut.ac.nz/students/student\_services/health\_counselling\_and\_well-being

Yours sincerely

Stella McFarlane Manager Health, Counselling and Well-being

From the desk of Stella McFarlane

Health, Counselling and Well-being Tel: 09 921 9999 ext 8193 Private Bag 92006, Auckland 1010 Main Entrance, 55 Wellesley Street, Auckland.

#### *Appendix 7 – Examples of the questions asked*

#### **Examples of the questions asked:**

During the semi-structured interview, I will use open ended clarifying questions to assist the interview process and to determine the meaning of each participant's experience.

For example:

Tell me about...?

How did that make you feel?

Tell me a story about...?

Can you tell me how that makes you want to...?

How did that effect you?

For Maori participants, I will place an emphasis on introducing myself as follows:

Kia ora my name is . . . my mountain is, my river is, my ocean is, my family name is, and explain my nationality.

### **Confidentiality Agreement**



For someone transcribing data, e.g. audio-tapes of interviews. Project title: Girls experience of physical activity Project Supervisor: Associate Professor Liz Smythe/ Dr. Sean Phelps Researcher: Caroline Dickson 0 I understand that all the material I will be asked to transcribe is confidential. 0 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 while the work is in progress. Transcriber's signature: Transcriber's name: ..... Transcriber's Contact Details (if appropriate): Date: Project Supervisor's Contact Details (if appropriate): .....

Approved by the Auckland University of Technology Ethics Committee on 6 June 2007 AUTEC Reference number 07/19.

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