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"Sport @ Dawn"-PYD in Action? An Investigation of the Youth Development Effects of a School-based Multi Sport Initiative on First Year Boys

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By

Tim Mc Mahon

Abstract

The genesis of this study emerges from an interest in exploring the potential of sport as a means of advancement of the individual and by extension society. Lerner (2004) for example highlights the importance of adolescent development when he ascertains that *"the future of civil society in the world rests on the promotion of positive development and a commitment to positive and socially just community contributions by the young"*. A body of empirical evidence based on the broad principals of Positive Youth Development (PYD) has suggested that sport can provide the catalyst for youth development(Hellison, 2000; Fraser Thomas et al, 2005)

Adolescent theory abounds with the benefits of sporting involvement. Bandura(2005) highlights the corollary benefits of those involved in sport staying healthy. Involvement in sport according to Busseri (2007) serves both as a promotive factor for positive development and a product of successful development. However much of the research in the field is of an American origin and therefore a more cultural specific investigation is necessary.

A twenty week early morning multi sports programme consisting of seventy five sessions which facilitated some degree of student choice was delivered to first year students in an all boys secondary school (N=44)

Methodology- Three psycho social indicators namely self-determination, resilience and connectedness were test pre and post intervention. Two academic indicators namely exam scores and absenteeism were tested post intervention. Personal factors associated with physical activity were examined pre intervention also.

Key findings-Those who attended more than 70% of the early morning sessions showed a significantly higher rate of growth in levels of self determination compared with those who attended less than 70% of sessions. This group (N=21) also showed a significant growth in levels of resilience which was not demonstrated by those who achieved attendance of less than 70% and those in the control group. Involvement in a sports club and participation in the school based programme were both found to correlate positively with exam results and absenteeism.

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CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

The genesis of this study emerges from an interest in exploring the potential of sport as a means of the psychosocial advancement of the individual and by extension, society. A body of advancing evidence based on the broad principles of Positive Youth Development (PYD) has suggested that sport can provide the catalyst for youth development (Sandfort et al; 2004, Lerner; 2005, Larson & Walker; 2005, Hartmann; 2008). This had led to this thesis, which will attempt to provide an informed perspective on the effects of a sport intervention, supported by a PYD agenda, on male adolescents in an Irish secondary school. In this study, the focus will be centred on a number of psycho-social variables, namely; self- determination, resilience and connectedness.

The Positive Youth Development (PYD) perspective, from which this study emanates, is one that has gained widespread popularity since the early 1990's (Cantalano, 1998). The term *"plasticity"* (the potential for intra individual change across the life span) devised by Lerner (2005) is central to the understanding of PYD. The plasticity of adolescents, when married with the strengths of youth, fomented in the key contexts of adolescent development – the home, the school, and the community, allows adolescents to flourish (King et al, 2005). The conceptualisation of PYD maybe best summated in what Lerner(2005) calls the "6 C's" of Positive Youth Development, namely-Confidence, Caring, Compassion, Competence, Character and latently Contribution. Central also to this philosophy is the idea of agency, where youths exercise control over their self-development (Bandura, 2006). This study will also take cognisance of the ecological framework of human development that maintains that *"human development and human behaviour are the materialization of person-context interactions"* and that "the study of *"an individual separate from his/her environment does not give a clear picture of human development"* (Brofenbrenner, 1995 in Strachan, 2008, p. 13).

The purpose of this research is to challenge the veracity of some of the claims made for sport within the ecology of an Irish all boys secondary school. Claims for sport include psycho social enhancement (Deci and Ryan, 2000; Gilligan, 2000 in Snape and Miller, 2008) academic achievement (Hartmann, 2008; Larson and Walker, 2005) and physical well-being (O'Brien, 2008; OECD, 2001). Given the nature of the intervention, the examination of sport as a means of promoting positive psychological, psycho social and physical benefits is imperative. Bandura (2005) highlights the corollary benefits of those involved in sport staying healthy. Involvement in sport, according to Busseri (2007) serves both as a promotive factor for positive development and is a product of successful development. Specifically, Busseri asserts that increases in breadth predicted higher levels of successful development. Silliman (2007) highlights the benefits of sport as a means of enhancing connectedness and intimacy which *"balances and enriches the mature self"(p.6).*

A recent Canadian study (Fraser-Thomas, Côté, & Deakin, 2007) in which an applied sport-programming model of positive youth development is critiqued, served as a valuable starting point to inform the direction of this intervention- Sport@Dawn. This study highlighted *"the vital role of sport organizations in designing programs that develop healthier, more psychosocially competent people, rather than simply skilled individuals"*. Sport@Dawn largely mirrors the above sports-programming model with the emphasis on psycho social assessment also. The intervention designed for operation in the context of this study was called "Sport @ Dawn" (Appendix A). This consisted of a twenty week multi discipline intervention taking place prior to school (8.20am to 8.55am) with a limited choice as to which sport students would participate in. The programme consisted of four five week modules offering a choice of sports/activities from seven activities. The marrying of sport and a PYD agenda would seem to offer the intervention deployed in the fieldwork of this study enormous research potential.

The contextual environment of the study i.e. a secondary school, offers a unique opportunity to generate a new perspective, given the dearth of similar research in an Irish setting. As previously mentioned the positive correlation between extracurricular

sporting involvement and a wide variety of academic, social and psycho-social benefits is widely accepted today and is perhaps best summated by Hartmann's (2008) succinct belief that *"kids who play sports, on average, tend to perform better in school than kids who don't" (p.3).* Specifically, given the academic focus of schools, the relationship between scholastic achievement and high school sports participation in the US is a *"fact, well established"* (Miller et al. 2005, in Hartmann, 2008, p.8). Hence this research will examine a range of both academic and psycho social indicators to explore whether or not they are associated with a number of sporting indicators.

1.2 RATIONALE FOR THE STUDY

The study is set against a backdrop of a dynamic educational environment in which there is a growing expectation on schools to contribute to the development of healthy active citizens (O'Brien, 2008; OECD, 2001). Specifically the White Paper on Education (Department of Education, 1995) identified promotion of the personal, social and health education of students as `a major concern of each school' and proposed the concept of the health-promoting school as the framework within which these health and well-being issues are to be addressed by school. This is reflected in the greater emphasis on CSPE (Civic Social Personal Education) and SPHE (Social Physical Health Education) in the second level curriculum. Government policy has also been influenced by the ESRI report that stresses that school sport is a key predictor of a physically active adulthood (Fahey et al, 2004).

Health and sporting organisations have been allocated dedicated budgets in recent times in Ireland in an effort to increase levels of physical activity (Office of the Minister for Children, 2007). This thesis is informed by a variety of international theoretical thinkers who assert that one's level of physical activity is a by product of psycho-social as well as physical competencies (Bandura, 2006; Fraser Thomas et al, 2005; Constantine et al, 1999; Hartmann, 2004). Hence empowering people to live physically active lives requires more than simply enabling them to acquire a range of physical skills, they must also be facilitated in developing a positive mindset towards physical activity. The

potential extent of the effects on these psycho-social competencies is further exacerbated by the context of our intervention i.e. year one in secondary school, a time of enormous change in a young person's life. While there is a dearth of research in an Irish setting, recent research on PYD or youth well being by the NCCA does acknowledge the scope of schools to enhance youth well being (O'Brien, 2008).

This study is being carried out to gain an insight into certain psycho-social effects of a sporting intervention on a group of young adolescents in a school context. Research outcomes will then be distilled in order to inform aspects of the delivery of extracurricular sport in Irish schools e.g. programming, leadership and community links.

This study can also be seen as complementary to the Health Promoting School philosophy that Irish schools have adopted in recent years. A positive youth developmental orientation in schools would be promotive of the goals of this health promoting philosophy.

1.3   AIMS AND OBJECTIVES OF THE STUDY

Aim

The purpose of this research is to critically analyse the rationale for using sport as a means of promoting positive youth development.

The objectives of this study are:

Objectives

1. To explore the effect of participation in a school based sports programme on the psycho-social assets of resilience, self-determination and connectedness among year one boys

2. To explore the social factors that influence participation in physical activity and sport. These factors include; place of domicile, familial factors and peer relationships.

3. To investigate the relationship between academic performance and participation and involvement in physical activity and sport.

4. To identify critical aspects of interventions that will enable policy makers to make more informed decisions with regard to youth sport policy development.

1.4 LIMITATIONS AND DELIMITATIONS

Delimitations

- The programme was available to first year students aged 12-14.
- As Tralee CBS is a boys only school, the intervention was only available to boys and hence all research cases are male.
- Only three psycho-social variables, namely self-determination, resilience and connectedness were measured
- All sport sessions were offered in the morning before school started

Limitations

- The results of the questionnaires were dependent on the honesty of the response of the participants to the questionnaires
- The success of the programme were dependent on the willingness of the participants to sustain involvement in the programme
- The scope of the intervention was determined by available resources in the school (sports hall, voluntary coaches)

1.5 FORMAT OF THESIS

Chapter two of the thesis will comprise of a review of national and international literature pertaining to the subject matter. First, the historical framework of youth development will be examined to give an overview of the evolution of thought in the

area. Secondly, a variety of youth development initiatives will be examined. Special attention will be given to those initiatives that are similar to the "Sport@Dawn" intervention, i.e. sporting interventions in a school context.   Subsequent to this examination, this thesis will attempt to elicit from these initiatives what preconditions or contextual factors contribute to the resultant developmental outcomes of the initiatives studied.

Chapter three will present a detailed account of the methodology used. The chapter will include a descriptive account of the research procedures, a justification of how the field research was conducted and how the data collected was analysed.

The fourth chapter will report on the findings of the research. This chapter will present both qualitative and quantitative data with information presented in both graphical and tabular form. Descriptive and inferential statistics will be presented to illustrate the findings of the research.

In the concluding chapters, chapter 5 and 6, the findings will be summarised and conclusions will be drawn from the research. This will aim to elicit from the research some guidelines for the delivery of an intervention of this nature, for the various interest groups associated with it; students, schools and parents. Finally, some recommendations will be made to complete the thesis that will inform practice and policy in the subject area and articulate the argument for the provision of a PYD agenda in a school sport context.

1.6 CONCLUDING COMMENTS

Chapter one has introduced the context of the study, specifically the concept of Positive Youth Development (PYD) in an adolescent school context. The aims and objectives of

the study were also outlined, along with the rationale behind the study. Chapter two will now concentrate on the pertinent literature relating to the subject area.

CHAPTER 2 REVIEW OF LITERATURE

2.1   INTRODUCTION

Given the context of this study it is important that the theory and history of youth development is firstly examined. This literature review will shed light on how youth development has evolved from its nineteenth century origins, to the emerging Positive Youth Development (PYD) agenda, on which this intervention is based. An analysis of how theory has evolved will also allow a greater understanding of the variety of perspectives, goals and complexities involved in the broad field of study that is youth development. While the intervention in this research is sports based, it is founded on the principles of Positive Youth Development (PYD) that are outlined in section 2.4.2. The research will therefore explore PYD in a school sport context. Finally, this section will examine PYD in the context of the Health Promoting School philosophy, which is a significant policy of the Health Service Executive (HSE) and the Department of Health.

2.2   HISTORICAL PERSPECTIVE OF YOUTH DEVELOPMENT

Although the evolvement of PYD as we know it today is generally associated with adolescent theoretical thinking of the late 1980's and 1990's, Larson (2002) highlights that in the US in the late nineteenth century, social reformers developed goals based around the goals of positive psychology. Community youth programmes such as scouts, Y's and youth clubs were created to prepare young people to be psychologically vibrant adults who contribute to the well being of society (Larson, 2002). This positive perspective on developing the assets of young people, (assets being the skills, attitudes, and physical well-being necessary to assume a productive role in society (Dukakis, 2009)) remained largely dormant for another century as the *"deficit"* model, which concentrated solely on youth problems (Greenberg, 2003), dominated the youth development landscape.

Lerner, (2005) reports that since the founding of adolescent scientific development in Hall, (1904) the predominant conceptual framework has been one of *"storm and stress,"*

or of an ontogenetic time of normative developmental disturbance. Lerner (2005) goes on to summate that for about *"the first 85 years of the scientific study of adolescent development, the field was framed almost exclusively by a deficit perspective" (p.85)*. Larson (2002) suggests that the popular social scientists of the modernist era; Freud, Marx and Skinner viewed human behaviour as determined either by external societal forces or internal mechanistic processes. Specifically "*Learning Theory*" or "*Behaviourism*" prevailed as the dominant model of human development, where learning was directed by a knowledgeable authority (Larson & Walker, 2005).

As early as the 1960's, research began to appear that showed that Hall's idea, that adolescence is a period of universal storm and stress, was not in fact universally true (Lerner, 2005). The evolvement of adolescent theoretical thinking was informed by a wide spectrum of ideas ranging from Piaget's formal operations Bandura's social cognitive theory and Marcia's ego identity (Piaget, 1972 in Lerner 2005; Bandura, 1964 in Lerner, 2005; Marcia, 1980 in Lerner, 2005)**.** Larson (2002) identifies the *"organismic"* theories popular in the 60's and 70's whereby organisms are designed to creatively adapt to their environment, adding that humans were particularly good at this. These ideas helped to popularize and legitimate adolescent development as an important area of scholarship within developmental science and helped the field to mature (Lerner, 2005). While much of the early momentum for the study of adolescence came from the field of psychology, there is a move towards a more multi-disciplinary approach involving biological, sociological and psychological aspects hence the emergence of a developmental science approach.

It wasn't until the final two decades of the twentieth century that adolescent theory began to move from a deficit perspective towards a more child centred approach, upon which the developmental assets (Benson, 2003) of the adolescent were emphasised. The changing theoretical perspective is exemplified by a number of influential writers over this period. Contrary to the prevailing attitude of the docile adolescent, in 1983 Polkinghorne in Larson (2005) highlighted the agentic nature of adolescents and their wilful nature. Perhaps the most ground breaking theoretical advancement, given it's

evolutionary claim, was made by Csikszentmihalyi (1993) in which he claimed that humans have a built-in system to experience enjoyment in taking on complexity and challenge. He argued that this motivational system was selected by evolution specifically to support learning and development. This has profound implications for the design of learning contexts, including sports coaching.

The concept of adolescent motivation also gained greater prominence in the past two decades, again indicating a more developmental approach to adolescence. Citing the work of Piaget (1972), Larson and Walker (2005) highlight that you don't need to make young people learn, they are highly motivated to do it. This pronouncement marks a seismic shift in the approach to youth development when one considers the former prevailing deficit model. Ryan & Deci (2000) note that adolescent development is energised when they are intrinsically motivated by challenging tasks, asserting that adolescents learn more when they are intrinsically motivated, or when they have internalized a learning goal.

Another facet of the evolvement of adolescent theoretical developmental theory is the influential role of the environment on adolescents. Larson (2000) claims that a dialectical relationship exists between the environment and the developing person. Vygotsky's (1978) *"Collaborative Learning"* model is also noteworthy. Vygotsky argued that the focus of adolescent development should not be on the individual but on the interactions with others i.e. it is a collaborative process. This notion of development being an interactive process is further promoted in Brofenbrenner's social ecology model (Strachan, 2008).

2.3   THE MODERN ADOLESCENT ENVIRONMENT

Many contemporary theorists have also emphasised the complexity and difficulties inherent in modern society and the associated problems with proposed youth

development programs. Greenberg et al. (2003) assert that there are variable influential societal factors, including; increased economic and social pressures on families; weakening of community institutions that nurture children's social, emotional and moral development; and easier access by children to media that encourage health damaging behaviour. Bandura (2006) highlights that youth live in a *"multimedia electronic generation"* characterised by *"disembodied communication"* where adolescents control their self presentation and shape their personal identities (p.2). Adolescents are filling empty periods of the day text messaging and on chat sites in this virtual new world. Elder (1994) in Bandura (2006) emphasises the unique context that today's young people find themselves in, where they are

> *"players in an electronic era of rapid social and technological change that is transforming how people communicate, educate, work, relate to each other, and conduct their business and daily affairs" (p.2).*

Despite an overall finding that Irish people seem to be one of the happiest nations (European Quality of Life Surveys, 2006), a UNICEF (2007) study of child well being highlights the challenges that are facing those involved in youth development citing a study which reported

> *"despite unprecedented economic growth in Ireland and the fact that many young people today have access to greater economic capital than their parents did, Ireland ranks very poorly with respect to adolescent material well-being, being positioned nineteenth out of twenty-one wealthy countries" (p.64).*

Aligned to this Baker et al. (2004) describe systemic processes within schooling in Ireland that consistently disadvantage individuals and social groups; these are: streaming and ability grouping, and the narrowly focused academic curriculum in most Irish second-level schools. Dunne (2003) in O'Brien (2008) highlights that the figures for youth consumption of alcohol in Ireland are worrying compared with other European countries. Furthermore, concerns over low levels of physical activity and increasing

levels of obesity in Irish children and teenagers have entered the public domain in recent years (O'Brien, 2008).

2.4 POSITIVE YOUTH DEVELOPMENT-AN EMERGING THEORY

It is generally recognised that from the 1990's practitioners, policy makers and prevention scientists adopted a broader focus for addressing youth issues (Pittman, et al., 1993 in Cantalano, 1998). Today as Lerner (2005) identifies, youth development has become much more deeply and broadly multidisciplinary (and, in some sub-areas, actually interdisciplinary or, in other words, disciplinarily integrative). Lerner (2005) goes on to argue that the plasticity-diversity linkage within developmental systems theory and methods provided the basis for the formulation of what he calls the PYD perspective. PYD therefore is contextualised in the fluctuating world of youth following a developmental agenda. Under the PYD banner, as noted in Section 2.2, youths become producers of their own development (Larson, 2002).

2.4.1 The process of Positive Youth Development

Trying to encapsulate the meaning of Positive Youth Development is difficult, as the concept is *"nebulous as it occurs privately in the thoughts and feelings of youth",* (p.131)*, (Larson & Walker 2005). It is acknowledged that all human development, including youth development is a complex interactive process. The nurture-nature dichotomy has been recognized as an oversimplification (Lerner, 2005). Consequently an acceptance of what Bandura (2006) calls *"triadic reciprocal causation behaviour" (p.6),* whereby (i) socio-structural determinants, (ii) environmental determinants e.g. goals, anxiety etc. and (iii) personal determinants are treated as co-factors within a unified causal structure, serves to indicate the complexity of the subject matter. In the context of defining what PYD is, Bandura's Social Cognitive Theory (Bandura, 1964) is informative. In this conceptualization, rather than construing adolescence as a time of turmoil and discontinuity, the theory emphasizes personal growth through mastery and other enabling experiences as the more normative developmental process. This asset based

perspective necessitates what Lerner (2005) calls a *"developmental science inquiry (p.26)"*. This inquiry sees adolescents conceptualized from a strength-based perspective and thereby approached with the expectation that

> *"positive changes can be promoted across all instances of this diversity as a consequence of health-supportive alignments between people and settings"* (Benson, et al., 1997 in Lerner, 2005, p.26).

PYD therefore offers an exciting avenue for developmental scientists to explore. Lerner (2005) highlights that interest in this field has arisen as scientists investigate developmental systems or dynamic models of human behaviour and development to increase understanding of the plasticity of human development. Furthermore Strachan (2008) emphasises the importance of relations between individuals and their real world ecological settings as the basis of variation in the course of human development and that this is attracting growing research attention. This developmental science emphasis has resulted in more collaborative contributions of researchers focused on the second decade of life (e.g. Benson, et al., 2004; Keyes, 2006; Lerner, 2004), practitioners in the field of youth development (e.g., Lerner, 2005; Fraser Thomas et al., 2005; Strachan, 2008; Baily et al., 2009) and policy makers concerned with improving the life chances of diverse youth and their families (via Lerner, 2005; e.g., Cummings, 2003; Gore, 2003).

Lerner (2005) highlights that the interest in PYD can be delineated into three broad areas. Firstly, there has been an increased focus on developmental systems ideas as a frame for research and application; secondly, an interest in application that involves interactions and occasionally collaborations involving researchers and practitioners in the field of youth development; and thirdly, an interest in the ideas associated with the PYD perspective, both for advancing theory and research within the scholarly community and for enhancing policies and programs for youth within the practitioner community.

2.4.2 The Product of Positive Youth Development

Although an all-encompassing definition of what PYD is has yet to be agreed amongst theorists, Cantalano (1998, p.9) summated that positive youth development programs are approaches that seek to achieve one or more of the following objectives:

1. Promotes bonding
2. Fosters resilience
3. Promotes social competence
4. Promotes emotional competence
5. Promotes cognitive competence
6. Promotes behavioural competence
7. Promotes moral competence
8. Fosters self-determination
9. Fosters spirituality
10. Fosters self-efficacy
11. Fosters clear and positive identity
12. Fosters belief in the future
13. Provides recognition for positive behaviour
14. Provides opportunities for prosocial involvement
15. Fosters prosocial norms.

Specifically in relation to adolescents, the Search Institute (2006) provided a framework for promoting positive youth development. The 40 Development Assets were framed by external and internal assets, amongst which areas such as support, empowerment, constructive use of time and positive identity, were further delineated into developmental assets *"that help young people grow up healthy, caring, and responsible"(see Appendix B).*

As a method of conceptualising PYD Lerner (2005, p.32) drew up what he called the 6 C's of PYD Hypothesis. These are outlined as

1. Competence

Concerns enhancing participants' social, academic, cognitive, and vocational competencies. Social competence refers to interpersonal skills such as communication, assertiveness, refusal and resistance and conflict-resolution skills.

2. Confidence

Relates to improving adolescents' self-esteem, self-concept, self-efficacy, identity and belief in the future.

3. Connection

Involves building and strengthening adolescents' relationships with other people and institutions, such as school and self.

4. Character

Program goals of increasing self-control, decreasing engagement in health-compromising (problem) behaviours, developing respect for cultural or societal rules and standards and a sense of right and wrong (morality) describe character-building goals.

5. Caring

Implies goals of improving youths' empathy and identification with others.

6. Contribution

When a young person manifests the Cs across time (when the youth is thriving), he or she will be on a life trajectory towards an *"idealized adulthood".*

These character traits were linked to the positive outcomes of youth development programs reported by Roth and Brooks-Gunn (2003). In addition, these "Cs" are prominent terms used by practitioners, adolescents involved in youth development programs, and the parents of these adolescents in describing the characteristics of a "thriving youth" (King, et al., 2005).

Lerner (2005) examines the theoretical foundations of the PYD perspective. He highlights optimism, the application of developmental science and the promotion of positive human development as being central to an understanding of what PYD entails. He further identifies that

> *"the potential for and instantiations of plasticity legitimate an optimistic and proactive search for characteristics of individuals and of their ecologies that, together, can be arrayed to promote positive human development across life"*
> *(p.19).*

This legitimises interventions such as *"Sport@Dawn"* whereby, through the application of developmental science in planned attempts (i.e., interventions) to enhance (e.g., through social policies or community-based programs) the character of humans' developmental trajectories, the promotion for positive human development may be achieved by aligning the strengths (operationalized as the potentials for positive change) of individuals and contexts.

PYD therefore emphasises what Brandtstädter (2006) describes as the power inherent in each person to be an active agent in his or her own successful and positive development. This concept of agency fits comfortably with Csikzentmihalyi's (1993) concept of *"flow"* (where the total immersion in the task leads to optimal experience) and what Larson & Walker (2005) describe as adolescent's natural disposition to *"learn and grow".* Sandford et al.'s (2006) aspirations for what PYD should entail are more ambitious, in that they encourage all participants in PYD contexts i.e. participants, practitioners, and policy makers, to think beyond involvement in sport or physical activities and to reconceptualise the entire experience as a means of allowing young people to acquire and accumulate social capital. Social capital is defined as feelings of trust and safety, pro activity in a social context, tolerance and diversity, and work connection (Onyx and Bullen, 2000).

Lerner (2005) adds that

> *"Because the developmental perspective seeks to accentuate the positives of youth development, it is not surprising that the theory abounds with virtues of a PYD approach"* (p.47).

Rather than assuming that adolescence is a time of inevitable difficulties, the perspective highlights that cognitive abilities are enhanced in early adolescence, as individuals become faster and more efficient at processing information-at least in settings in which they feel comfortable in performing cognitive tasks (Kuhn, 2006 in Lerner, 2005). However, the accentuation of this potential is only possible

" if it recognised that young people are embedded in unique social, cultural, and physical ecologies that impact individual motivation and engagement and provide different opportunities and resources for youth" (Lerner 2005; p.49).

He adds that it is the process of reciprocal relations between contextual opportunities/constraints and individual characteristics that drives behaviour and development.

Busseri et al.'s (2006) longitudinal study of breadth and intensity of youth involvement are shown to be consistent with the emphasis that has been placed on youth activity as a context promotive of healthy adolescent development. The results of this study contribute to the extant body of evidence by showing that youth involvement predicts future developmental success. The main finding in the above study is that breadth of involvement, independent of intensity, may play a unique positive role in promoting healthy adolescent development (Busseri, 2006). In a sporting context this notion of breadth of experience strongly echoes Fraser Thomas et al.'s (2005) concept of sampling. Sampling allows children and those in early adolescence to acquire a broad range of competencies that can later empower them to make meaningful choices with respect to their physical activity pursuits in either a recreational or performance context.

Busseri et al. (2006) highlight that adolescents exposed to a PYD environment benefit from a more positive psychological functioning including, higher self-esteem and a sense of self-directedness and empowerment. Bandura (2006) stresses the value of the creation of *"personal capabilities* that are *an influential personal resource in negotiating their lives through the life cycle" (p.1)*. Lerner and colleagues (e.g. in Lerner, 2005, Lerner, Almerigi, Theokas, & Lerner, 2005; Theokas et al., 2005) have proposed that prosocial youth involvement represents an important product of positive youth development. Larson (2005) emphasises the development of initiative in a PYD context. By exposing adolescents to a set of challenging tasks, they develop a more elaborate view of time, recognition of other peoples' intentions and emotions that results in more initiative from participants.

Although specific findings on PYD and academic achievement are scarce, Vick &Packard (2008) in their study of Hispanic youth in the US, stress that is important for Hispanic teens to have confidence in their abilities to achieve, to believe that education will lead to their future success, and to have salient academic hopes for the future. This they argue is more likely when a spirit of Positive Youth Development is fostered in a school context. There is however a body of research that highlights the relationship between a range of developmental assets that optimise educational outcomes for young people.

2.5   YOUTH SPORT AND YOUTH DEVELOPMENT

2.5.1 Youth Sport in Ireland

Given the context of the current study it is important that a brief overview of sport in Ireland is given. Participation rates in sport are relatively high by international standards, with almost nine out of ten young people (aged 12 to 18) playing at least one sport, either competitively or recreationally (De Roiste & Dinneen, 2005). Slightly more boys (91%) than girls (86%) play sport (aged 12 to 18). This high level of participation is in part attributed to the support Irish youths get with regard to sport, particularly in the early teenage years (Woods, 2010). However only 12% of post-primary children meet the Department of Health and Children health goal of > 60 minutes of MVPA (Moderate to vigorous intensity physical activity) daily (De Roiste and Dinneen, 2005) and a teenage study reported that a total of 65% of participants were not involved in moderate or vigorous physical activity for > 4 days for at least 60 minutes per day (National Taskforce on Obesity, 2005).

Regarding sport in schools, Woods, et al.,(2010) report that post primary pupils receive on average 69 minutes of physical education weekly. This is low by international

comparison. Hence there would appear to be a significant role for both extra-curricular and community sport in providing for youth participation (Fahey et al, 2004).

Parental support, and to a lesser extent familial support for sport participation, is high. This is borne out by other research, which has highlighted the importance of the family and the father in particular, for involvement in leisure (De Róiste & Dinneen, 2005). Sporting participation in Ireland is however very team oriented, with the numbers participating in individual sports significantly lower. The ratio of team to individual sport participation is almost exactly 2:1 (De Róiste & Dinneen 2005). De Róiste & Dinneen (2005) discovered that *'not knowing how to join'* was cited by youths in Ireland as one of the main reasons for not joining in a range of popular activities. However there is evidence of a huge decline in sports and physical activity participation from adolescence to adulthood among the Irish population found by other studies (Lunn et al., 2007, Halbert & McPhail, 2005, in Woods et al. 2010).

Similar to Bandura's *"triadic reciprocal causation"* mentioned earlier (Bandura, 2006, p.6) it is suggested that *"adherence to physical activity cannot be easily predicted and is a complex, multi variant issue"*, involving interpersonal and structural barriers (De Róiste & Dinneen, 2005). An example of a barrier to prolonged involvement in sport for young people may be explained by the reversal of patterns of participation between Irish youth and Irish adults. While team sports dominate youth sport participation, individual sports dominate adult provision. It may be assumed that many fail in the transition between team and individual activities because of interpersonal and structural barriers e.g. lack of knowledge of opportunity, lack of skills required to participate or lack of support networks to integrate into a new group.

This would seem to be consistent with The Office of the Minister of Children (2007) finding that 59% of young people believed that there was very little leisure provision for teenagers in their locality. Specific to secondary schools MacPhail and Halbert (2005) and Deenihan (2005), in Woods et al., (2010) report that the shortage of time was a

larger barrier to provision of quality physical education at the post-primary level than inadequate facilities, equipment, qualified teachers, or student interest. Woods et al., (2010) in their recommendations for improvements in school sports provision, advocate the removal of the age inequality that currently exists in the provision of physical education to senior pupils in post-primary schools. The fall in senior cycle access to physical education corresponds with the beginning of the decline in participation as depicted in Lunn's (2009*) "sports hill"*.

Fraser Thomas et al. (2005) assert that the importance of physical activity as a means of fostering positive youth development has gained considerable attention among researchers. However, given the school context of our study, it is rather alarming that despite the new syllabus recommendations of two hours of PE per week for each second-level student (Department of Education and Science, 2004) recent research has found that students are receiving less PE per week than is recommended: the average time found was 77 minutes of PE per student per week, just over half the recommended time, and the lowest in the European Union (Office of the Minister of Children, 2007).

2.5.2 Factors that facilitate involvement in Youth Sport

It is imperative -given the context of the programme- that cognisance is taken of the factors that promote inclusion in youth sport. Donnelly & Coakley (2002, p.9) delineate the main factors that facilitate social inclusion in youth recreation as follows:

- *Accessibility*-access to recreational opportunities
- *Agency* -participants are able to determine (within guidelines of safety, and appropriate to their level of development) "the forms, circumstances, and meanings of their participation"
- *Competence* -has powerful effects on self-esteem and confidence
- *Continuity* -there is some evidence that continuity and consistency of provision are likely to result in a greater impact

- *Integration*-programmes targeted to specific populations (e.g., low income) are less likely to have social inclusion effects than those which bring together children and youth from different backgrounds
- *Leadership* -It seems that almost any type of programme seems to work with the right people running them. So, in addition to knowing what works, it is necessary to know how to find, or educate, the 'right' people
- *Motivation*-programmes that start with paternalistic and controlling motives should ideally shift to a more inclusive orientation.

Many theorists have emphasised the pivotal role that parents play in the sporting lives of youths (O'Brien, 2008; Baily 2009; Fraser Thomas & Cote 2006, Le Menestral & Perkins, 2007). Baily (2009) specifically emphasises that financial, emotional and practical support from parents are key aspect of any participant development model. Fraser Thomas & Cote (2006) highlight that positive parental influence has been associated with greater attraction to sport and physical activity and higher levels of sport involvement. Zeijl et al. (2000) in Baily (2009) highlight that in Western society the family unit governs children's leisure time and socioeconomic status, now also governs participation, opportunity and expectations of what their leisure experience should be. This finding is also consistent in an Irish context where young people whose parental occupation is professional or managerial are more likely to report familial encouragement than those whose parents are unskilled or on welfare (Office of the Minister for Children, 2007).

The positively influential role of parents is exemplified by Le Menestral and Perkins (2007) who report greater level of self esteem and enjoyment of young tennis players when supported by parents. However interest has increased in what De Knop et al. (1998) in Baily (2009) describe as *the parent who yells from the sidelines, and often shouts louder than the coaches" (p. 77)*. Baily (2009) emphasises that unrealistic expectations of coaches and parents are critical and can cause drop out and negative experiences of sport. Cote et al. (2007) report that numerous studies have found that children who perceive more positive interactions, support, and encouragement, and less pressure from parents, experience more sport enjoyment, show more preference for challenge, and display more intrinsic motivation than other children.

According to Schulman (2007) the PYD literature contends that positive relationships with peers are also a critical element of healthy development of young people. Schilling (2007) reports that youth participants in successful programs experience enhanced relationships with adults and peers. These relationships allow the facilitation of learning of a variety of sport skills where youths are able to meet and interact with a variety of different people (Cote et al. 2008). Skill acquisition may be the principal goal of many sporting activities but as Mahoney et al. (2006) identifies, the primary motivations for participation in organized activities are intrinsic e.g., excitement and enjoyment, to build competencies, and to affiliate with peers and activity leaders. Hellison (2006) emphasises the affiliate needs of young people and their value on being able to imitate, lead and follow others so they can be connected to *'the group'*. Poinsett (1996) in Petitpas (2005) postulates that sports may provide individuals with a place where they can develop their skills and sense of initiative, but more importantly provides them a status that satisfies their need to have a defined place within a group that is highly valued by their peers.

Facilitation of involvement in sport therefore involves a myriad of factors associated with familial support, positive peer interactions and a sense of mastery. Cognisance of these factors from all stakeholders is vital to success of any sporting endeavour.

2.5.3 Characteristics of Sport that promote Positive Youth Development

The nature of this study, i.e. a sporting intervention, necessitates asking the question posed by Haywood (1995) *"is sport justified instrumentally as a means to some end, or is it justified intrinsically as an end in itself?"(p.1)* The justification of sport is examined below but it is established that the potential effects of sport are all-encompassing in that they are potentially effective physically, through improved fitness; socially, through enhanced networks; cognitively, through improved connectedness and learning; and emotionally, through enhanced self-determination and resilience (Peterson and Gunn, 1984).

To assess the justification of sport it is imperative that a balanced view of the implications of sporting involvement is taken. In their study of recreation policy in Ireland the Office of the Minster for Children (2007) claim that leisure and recreational activities facilitate a number of developmental processes in adolescents. These include; the development of identity, self-concept and self-knowledge, the development of initiative, the development of emotional competencies, the formation of new connections with peers and knowledge of peers, the development of social skills, learning to work with others, leadership skills and the acquirement of social capital. Sandford et al., (2006) add to this exhaustive list of developmental outcomes, emphasising improvements in moral sense, communication skills, decision making skills, resiliency, empathy, a sense of community, problem solving and improved educational achievement. This potential development is further highlighted by Fraser Thomas et al., (2005) who assert that sport provides *"an arena for the development of social skills such as cooperation, assertion, responsibility, empathy, and self-control"(p.7)*. More specific to sporting involvement, research indicates that sport experiences foster citizenship, social success, positive peer relationships, and leadership skills (Fraser Thomas et al., 2005).

Given the context of adolescent development and the potential problems inherent at this phase of a young person's development, Csikszentmihalyi (1975) gives credence to the beneficial effects of sporting involvement that offer young people opportunities to experience challenge, fun and enjoyment, while increasing their self-esteem and decreasing their stress. Indeed Silliman et al. (2007) in their US study of youth development ascertain that sport provides the opportunity for *"early learning that is experiential and engaging and sets the stage for rewarding habits, accumulation of knowledge, and confident application of skills"(p.8)*.

The overwhelming evidence supporting sport as a means of youth development is however balanced by some negative influences of involvement in sport. Fraser Thomas et al. (2005) highlight the negative emotional and psychological outcomes of youth sport, specifying particularly the effects of athletic burnout. Contrary to the general

purpose of sports programmes Hellison (1993) claims that sport and physical activity programs do not always promote positive development and sometimes support unfavorable characteristics. The importance of the context of sport is also highlighted by Fraser Thomas et al. (2005) in that contextual shortcomings such as poor program design and negative adult influences can hinder, rather than enhance, positive youth development.

The context of this study is one of a sporting intervention. Haywood (1995) classifies interventions into three categories; (i) direct provision e.g. of a community facility in an area of special need; (ii) special initiatives-designation of *"community recreation"* on a city wide basis; and (iii) comprehensive policies-a community approach to all aspects of public recreation provision. Cognisance must also be taken by providers of sporting interventions of what Fraser Thomas et al. (2005) call the *"three stages of development i.e. the sampling years (age 6–12), the specializing years (age 13–15), and the investment years (age 16 plus)"* (p.3). Marrying these perspectives together it would seem that the *"Sport@Dawn"* programme would be a special initiative, available to adolescents at the critical juncture, where sport sampling may change to sport specialisation. This concept of specialisation according to Fraser Thomas et al. (2005) is important, because if specialization occurs at a developmentally inappropriate age, benefits such as improved skills are outweighed by *"physical, psychological, and social disadvantages" (p.4)*.

Fraser Thomas et al. (2005) emphasise that program design (e.g. early diversification versus specialization) and adult influence (parents and coaches) are contributing factors as to whether programmes result in positive or negative outcomes and experiences. Furthermore he asserts that the best liked coaches were those who demonstrated *"more technical instructional, reinforcement, and mistake contingent reinforcement behaviours"(p.4).*

2.6   DESIGNING INTERVENTIONS THAT PROMOTE POSITIVE YOUTH DEVELOPMENT

Before moving on to a discussion of sporting interventions (specifically sporting interventions in a school setting) an evaluation of the context, best practice and development in general adolescent interventional theory is necessary. This section of the literature review will reflect on lessons learned from similar interventions that have taken place and how these can inform a programme such as "Sport@Dawn". Parker in Hellison et al., (2000, p.18) summates that successful youth programs

- focus on youth
- focus on learning before teaching
- focus on empowerment, not control
- focus on circumstances of greater magnitude than the content of the program
- focus on development

Justifications of interventions that promote adolescent development are varied. From the perspective of Positive Youth Development, Carruthers et al. (2000) report that research suggests that having a great deal of discretionary time that is largely unstructured, unsupervised and unproductive can undermine positive youth development. Bandura (2005) emphasises that socio-structural practices should impose constraints but also provide resources and opportunities for personal development and functioning. Environmental conditions would seem to be central to the productivity of any intervention. In his delineation of ecological assets, which index the presence, quantity, and accessibility of human, material, and social resources in the environment of adolescents, Lerner (2005, p.42) highlights the physical and institutional resources present in the social environment. From an intervention perspective it is worth noting that *"these assets index opportunities for learning, recreation, and engagement with individuals and the physical world around oneself and, as well, for providing routines and structure for youth".* The Search institute's comprehensive list of 40 developmental assets for adolescents is informative in this respect also (see Appendix B)

2.6.1 Aims, Objectives and Characteristics of Youth Interventions

Although the aims and objectives of youth interventions are many and varied, Lerner (2005, p.31) hypothesized that there is a set of *"Big Three"* features of optimal youth development programs, i.e.,

- positive and sustained (for at least one year) adult-youth relationships (via Lerner, 2004, Rhodes, 2002)
- skill building activities;
- opportunities to use these skills by participating in, and leading, community-based activities.

However Lerner (2005) emphasises that the attainment of youth intervention targets are difficult due to youth development programs not only having a competitive window for hitting the target (of reaching youth to promote PYD and to diminish risk/problem behaviours) but, as well, the target is a moving one i.e. youth development is a short process where significant changes happen over relatively short time frames. Moreover he adds the target is different and moves across time differently for girls than for boys. However difficult the attainment of whatever the goals are, many theorists are agreed that the need to engender a sense of community and belonging among individuals has been identified by a number of authors as perhaps the most significant element in any programme involving disaffected youth (Kinder et al., 1995; Wilson & White, 2001; Wilson et al., 2001; in Sandford et al., 2006)

One of the most interesting early manifestations of PYD in a sporting context is the Personal and Social Responsibility Model (PSRM) (Hellison & Walsh, 2005; p.2). The model, while initially developed in the context of Physical Education, has now been extended into the sports coaching context. It has been broken down into five basic goals

- self-control and respect for the rights and feelings of others
- trying one's best and teamwork
- self-direction
- caring for and helping others; and

- applying these goals outside the gym (i.e. school, neighbourhood, home).

Hellison's PSRM model emanated in the US due to the "surge in social pathology" in the 1980s (Hellison, 1993). The model is youth centred and allows categorisation of levels of self responsibility.

*Level O: Irresponsibility; [*describes students who]… are unmotivated and undisciplined. Their behaviour includes discrediting or making fun of other students . . . as well as interrupting, intimidating, manipulating, and verbally or physically abusing other students and perhaps the physical education teacher or coach.

Level I: Self-Control; [describes students who]…may not participate in the day's activity or show much mastery or improvement, but they are able to control their behaviour enough so that they don't interfere with other students' right to lean or the teacher's right to teach.

Level II: Involvement; [describes students who]… not only show self-control, but are involved in the subject matter.

Level III: Self-Direction; [describes students who]... learn to take more responsibility for their choices and for linking these choices to their own identities they are able to work without direct supervision, eventually taking responsibility for their intentions and actions.

Level IV: Caring; [describes students who]... are motivated to extend their sense of responsibility by cooperating, giving support, showing concern, and helping. (Hellison, 1993).

Hellison's (1993) model effectiveness is dependent on a myriad of contextual factors. However its application, particularly in disadvantaged settings (from which it evolved) is encouraging. He reports that youth development is more evident through the retention of youths in educational settings who subscribed to these programs i.e. drop-out rates were lower than for non-attenders, and that although causation was not established *"existence of youth development principles and retention beyond the typical dropout age*

is encouraging" (p.10). The aim of these programs is to develop relationships between the participants, teach life skills through a physical medium, provide individual and group reflection opportunities, and help them make smart choices for themselves. This model involves teacher talk, modelling, reinforcement, student sharing- strategies and reflection time (Hellison & DeBusk, 1989).

Another aspect of the PSRM model is a peer leadership or cross age teaching dimension, whereby older programme participants are empowered to take a leadership role with younger programme participants. Hammond-Dietrich & Walsh (2006) highlight that this model provides urban youth leaders with an avenue to improve teaching skills, become familiar with a university context, gain new friendships, and become confident leaders. They highlight a PSRM programme involving eight 11 to 15 year old boys who taught various physical activity skills to a group of 40 fourth graders (9 or 10 year olds) for eight sessions in a university sponsored programme. The leaders in this programme took their roles seriously, enjoyed their time as leaders, experienced personal growth, and advanced their leadership skills. This dynamic provides an educational and developmental vehicle for students to offer a service to younger students, while learning leadership skills and creating friendships (Hammond-Dietrich & Walsh 2006). It is worth noting that the PSRM development pre-dated much of the current theoretical advancements in the area of Positive Youth Development.

2.6.2 Characteristics of Successful Interventions

Carruthers & Busser (2000, p.3) when analysing the youth development literature notes that various authors have identified the features important to successful primary service sector programmes, in general, and to after-school or youth programmes, specifically. Drawing from a variety of sources she highlights that youth services with the potential for significant positive developmental impact have the following characteristics

1. Caring adults characterize successful youth programs (in Carruthers & Busser 2000; Scott, Witt, & Foss, 1996)

2. Clear rule structures and boundaries that reinforce positive behaviours have also been identified (in Carruthers & Busser, 2000; Search Institute, 1998)

3. The essential support and encouragement of youth needs to be balanced with clear and consistent expectations of appropriate, responsible behaviour (in Carruthers & Busser, 2000; Whalen & Wynn, 1995)

4. Successful programmes provide youth with ample opportunity for choice and decision-making (in Carruthers & Busser, 2000; Scott, Witt, & Foss, 1996)

5. Choice promotes autonomy and self-determination (via Carruthers, 2000; Whalen & Wynn, 1995), and allows youth to try out activities and roles and to broaden self-concept (in Carruthers & Busser, 2000; Nash & Fraser, 1998)

6. Programmes should evolve over time and reflect the developmental competencies and desires of youth (in Carruthers & Busser, 2000; Heath & McLaughlin, 1991; Nash & Fraser, 1998)

7. After-school programmes are most likely to foster positive development when they are fun (in Carruthers & Busser, 2000; Nash & Fraser, 1998). Youth voluntarily participate in programmes that are enjoyable (Whalen & Wynn, 1995).

At a more general level Fraser Thomas et al. (2005) highlight that programmes that integrate family, school, and community, create optimal environments for positive youth development, as this integration creates opportunities for meaningful communication between different settings in youths' lives. Work by Csikszenmahaiyi (1993) on what he terms *"Flow"* is informative also with respect to what works with young people. He posits that organised activities stand out as situations that result in high levels of motivation, challenge and attention. Larson (2000) however stresses that there is a dearth of knowledge as to what actually goes on in youth programmes and that the *"theories of change"* that would inform research are largely absent.

The National Research Centre and Institute of Medicine (NRCIM) (2002, p.22) in Fraser-Thomas et al., (2007) outline eight features of settings that are most likely to foster positive developmental assets in adolescents-

1. **Physical and psychological safety**

Physical and psychological safety in youth sport settings refers to the existence of safe and healthy facilities and practices that encourage secure and respectful peer interactions. Therefore it is important that peer interactions are respectful in sport in order to build confidence in youth and allow them to enjoy their participation in sport.

2. **Appropriate structure**

This feature suggests the existence of clear and consistent expectations regarding rules and boundaries. Thus one could contend that providing activities that are properly structured has the potential to develop positive, well adjusted, and optimistic youth.

3. **Supportive relationships**

The third setting feature relates to strong support, positive communication, and connectedness. A coach can influence a child's perceived competence, enjoyment, and motivation and play a role in a child's psychological, social, and physical growth. Training coaches about basic principles of positive youth development is likely to result into better youth sport programs and sporting environments that promote supportive relationships.

4. **Opportunities to belong**

The fourth setting feature highlights the importance of meaningful inclusion, social engagement, and cultural competence in youth sport programs. Feeling a sense of belonging (i.e. being part of a team, developing friendships) is important in maintaining a child's motivation and interest in sport. Healthy relationships can be encouraged by coaches who build a sense of team unity and cohesion.

5. **Positive social norms**

This feature relates to the development of values and morals rather than antisocial and reckless behaviours. Although a growing body of literature highlights some of the potential negative social norms associated with youth sport participation (e.g. violence, aggression, poor sportspersonship, and low morality reasoning), youth sport programs have the potential to develop positive values such as fair play, sportspersonship, cooperation, assertion, responsibility, empathy, and self-control.

6. Support for efficacy and mattering

The sixth setting feature focuses on the importance of empowering youth and supporting their autonomy as they work to build their community. Research in sport emphasizes the need for coaches to develop autonomous athletes; giving youth the opportunity to choose their level of involvement in sport or contribution within a sport will empower them and also increase their intrinsic motivation for sport.

7. Opportunities for skill building

The seventh setting feature emphasizes the importance of learning experiences. As previously outlined, sampling a variety of different sports through early diversification provides this opportunity, as youth have the chance to learn a variety of sport skills and are able to meet and interact with a variety of different people (i.e. peers, coaches). Furthermore, deliberate play and deliberate practice activities afford children and adolescents the opportunity to grow and develop their motor skills in appropriate settings.

8. Integration of family, school, and community efforts

This feature promotes the integration of the young person's environments to increase communication and lessen conflicts and dissonance. In youth sport, parents play a key role in athletes' development of other supportive relationships, such as coach athlete interactions. Further, the structure and environment of a community appear to play a role in youth's persistence and progression in sport, given research suggesting that smaller cities tend to produce more professional athletes.

The above descriptions are general in nature and do not contradict Lerner's (2005) assertion that in future research and applications pertinent to adolescence, scholars and practitioners must extend their conception of this period to focus on changing relations between the individual characteristics of a youth and his or her complex and distinct ecology.

2.7 POSTIVE YOUTH DEVELOPMENT IN THE SCHOOL SETTING

Given that time spent in school represents a significant portion of a young person's life the environmental effects of school life are significant. The majority of time spent in school is spent participating in school related endeavours. However the HSE recognises that schools can be a health promoting setting (Woods et al., 2010). This concept of the 'health promoting school', is founded on a socio-environmental approach to health promotion, recognises the significance of the school as a setting for promoting health and wellbeing, in terms of policies, and links with health services, and partnerships between the school, the family and community (WHO 1996a, 1996b, 1999) in Stewart et al. (2005).

Noteworthy also is the concept of cultural capital identified by Walsh & Apperley (2008, p.6) *as "the sum total of durable knowledge and practices as well as discursive and material resources acquired by individuals as they develop across their life trajectories".* The concept is further delineated into embodied, objectified and institutional capital

(a) *Embodied capital-* student is trained in a set of knowledge and practices e.g. fitness, competitiveness, achievement focus.

(b) *Objectified capital-* where students leave schools, universities and other institutions with particular kinds of portfolios or visible objectified signs of embodied capita*l e.g. skills base, physique.*

(c) *Institutional capital* -particular academic qualification schools and other institutions grant to students.

Sporting prowess is often a valued aspect of schools, whereby the cultural capital of the school is enhanced by the success of its teams. Often school sport is used as a marketing tool for the school, as sport is valued in wider society.

2.7.1 Schools as a setting for positive youth development

In order to position PYD in a school context, it is necessary to briefly assess the evolvement of schools. Originally educational systems were designed to teach low-level skills in agricultural societies (Larson, 2000). However when industrialization replaced agriculture as the major economic enterprise, the educational system was adapted for the needs of heavy industry and manufacturing. Increasing complexities in technologies, social systems, and the international economy presented different realities demanding new types of competencies (Bandura, 2005). Aligned to this educational evolvement, sport provision in schools developed also with what Sandford (2004, p.7) describes as the *'cult of athleticism'* which was seen as the means by which *"positive virtues could be instilled in pupils"*. The principle of sport as a tool for social development became entrenched as something of an established *'truth'* (Sandford, 2004). Accentuating the importance of sport in a school context, the relationship between high school sports participation and scholastic achievement is, in the words of one such research team (Miller et al. 2005 in Hartmann, 2008), a *"fact, well established"*.

As Ravitch (2000, p. 467) in Greenberg (2003) highlights

> *"......the comprehensive mission for schools is to educate students to be knowledgeable, responsible, socially skilled, healthy, caring, and contributing citizens and that the overarching goal of schools in the 21st century is to concentrate on their fundamental mission of the teaching and learning of all children."*

He adds that educators, parents, students, and the public support a broader educational agenda that also involves producing

> *"...students who are culturally literate, intellectually reflective, and committed to lifelong learning. High-quality education should teach young people to interact in socially skilled and respectful ways and to practice positive, safe, and healthy behaviours" (p. 1).*

The social dimensions of sport have attracted growing attention over the past decade in the context of a new interest in *'social capital'*. The concept of social capital refers to the

social networks, norms, values and understandings that facilitate co-operation within or among groups (OECD, 2001). Regarding sport in schools in this context, Sandford et al (2004) assert that what is required is a reconceptualization of the entire experience of physical activity as a means of allowing young people to acquire and accumulate social capital. Kennedy (1997) further postulates that

> *"....a nation's well-being, as well as its ability to compete, is conditioned by a single pervasive cultural characteristic—the level of social capital inherent in the society (p.6)...".*

According to O'Brien (2008) schools are seen as institutions that are keepers of order and continuity. Lynch et al (2007) in O'Brien (2008) suggest that schooling is a context where some individuals and groups of children experience inequalities of care, through methods of streaming and categorising children, overemphasis on academic assessment, and a lack of recognition for multiple intelligences. Baker et al, (2004) describe systemic processes within Irish schooling that consistently disadvantage individuals and social groups; these are:

- streaming and ability grouping
- the narrowly focused academic curriculum in most Irish second-level schools
- the disciplinary procedures and surveillances of students
- the power inequalities inherent in our society between adult and adolescent
- timetabling and organisational practices that place burdens on students and their families.

It is evident therefore that structural barriers to the promotion of PYD in a school setting exist. However, given that PYD has evolved from places in which circumstances are far more challenging for young people (Hellison, 1993) these barriers shouldn't be non-negotiable in an average Irish school. Also, the HSE emphasis on the creation of a *"Health Promoting School"* culture is consistent with the PYD philosophy, therefore the climate in which schools are evolving are theoretically conducive to PYD.

2.7.2 School Sport as a tool to promote positive youth development

An assessment of the potential of Positive Youth Development through school sport in an Irish setting must take cognisance of a variety of factors.

The Department of Education and Skills (DES) recommends that every post-primary pupil should have 2 hours of physical education per week; yet post primary students in Ireland receive on average only 77 minutes per week physical education (Woods et al., 2010). However, 73% of post primary students participate in extra-curricular sport at least one day a week (Woods et al., 2010). Hence there is considerable scope for promoting PYD, once the conditions outlined in Section 2.6.2 are features of the extracurricular ecology.

Barber (2002) cites evidence that participating in school and community-based activities is associated with both short-and long-term indicators of positive development. More specific to sport, Greenberg (2003) adds that getting school children into sport is especially vital as regular participation can reduce obesity, improve fitness levels and by improving concentration and self-esteem, can help attendance, behaviour and attainment. Furthering the argument in favour of extracurricular sport, Hartmann (2008) found that when it comes to educational attainment, interscholastic athletics compare favourably to other, more stereotypically *"intellectual"* extracurricular activities such as band, debate, music, and the arts that facilitate learning and achievement.

Bandura (2005) highlights the role of efficacy in schools. He emphasises that there are three main pathways through which efficacy beliefs play a key role in cognitive development and accomplishment (a) students' beliefs in their efficacy to regulate their learning activities and to master academic subjects, (b) teachers' beliefs in their personal efficacy to motivate and promote learning in their students, and (c) the faculties' collective sense of efficacy that their schools can accomplish significant academic progress. The effect of a higher sense of self efficacy or what Zimmerman & Bandura (1994) in Bandura (2005) describe as a *"firm belief in one's self-management efficacy" (p.9)* provides the staying power. The stronger the student's perceived efficacy to manage their own learning, the higher their aspirations and accomplishments.

Hartmann's (2008) overview of scholarly research, knowledge and understanding of the relationship between interscholastic high school sports participation and educational achievement in the United States is informative. The kernel of this study is perhaps best summated by the succinct statement that *"kids who play sports, on average, tend to perform better in school than kids who don't" (p.3)* with students who participate in high school sports tending, on average or in general, to perform better academically than their non-athletic peers*.* Hartmann (2008) cites research that time and again demonstrated a strong and positive correlation between high school sports participation and academic achievement. Although Larson & Walker (2005) rather simplistically assert that this is due to students that are involved in extra-curricular activities being more focused and motivated, cognisance must be taken of the ancillary contributory factors e.g. parental support, financial support, ability to buy equipment etc that promotes extra-curricular involvement (see Section 2.5.2).

From a socio economic perspective, economists have found that sports participation is associated with higher post-school wages and income and sociologists have begun to explore the role that sports participation plays in community involvement and the cultivation of the increasingly prevalent concept of "social capital" (Hartmann, 2008). Social capital is defined by the National Economic and Social Forum (2003) in De Roiste & Dinneen (2005) as

> *'important social processes and relationships — informal social support networks, friendship, neighbourhood generosity, interpersonal trust and volunteering activity — but also aspects of local and community development, public-private voluntary partnerships and civic spirit (p.13)'.*

According to Kennedy (1997) in Sandford (2004) the growing importance of social capital stems from growing anxieties about larger social (and economic) corrosion and the diminishing of the collective social and economic capital that might derive from disengaged (or antagonistic) social practice and because individuals are experiencing increased isolation from community, family and intimate relations under a global social order (O'Brien, 2008). Consequentially sociologists have begun to explore the role that sports participation plays in the cultivation of social capital (Hartmann, 2005).

Importantly this study is contextualised in a school environment where a health promoting agenda is encouraged (see Section 1.2). Stewart and Patterson (2005) outline that health promoting schools afford the opportunity for the development of social capital but it is dependent on *"community engagement, social networks, trust and a supportive environment" (p. 1).* Interestingly, given that resilience and connectedness are two of the psycho social constructs measured in this study *"The Resilient Children and Communities"* project in Australia is based on the notion that the Health Promoting School (HPS) approach promotes connectedness and school environments rich in social capital. Furthermore, this approach seeks to demonstrate that the HPS approach may provide a model of practice for engaging communities which, in turn, acts as a protective factor for health and wellbeing. This research summates that schools adopting the HPS approach are likely to create environments rich in social capital (Stewart and Patterson, 2005).

The Office of the Minister of Children (2007) reports that

> *"Ireland is rated as average, or above average, in European comparisons on most indicators of social capital. The report concludes that sport and recreation play a very important role in relation to social capital, particularly in regard to the dominant role of sport in volunteering and organisational membership (p. 13).*

Significantly the Office of the Minister of Children (2007) reports that there are over 40,000 adult leaders involved in the youth work sector and a significant commitment by teachers to young people's recreational opportunities after school hours. Although the above reports claims further that

> *"Participation in clubs and groups can enhance an individual's 'social capital' and their socio-economic development, social skills and relationships"*

De Roiste & Dinneen's (2005) claim that there is relatively low involvement by Irish adolescents in clubs and groups is therefore concerning.

In terms of social capital development, Sandford (2004) claims that all interest groups in youth development i.e. participants, practitioners, and policy makers, must think beyond involvement in sport or physical activities, and reconceptualise the entire experience as a means of allowing young people to acquire and accumulate social capital. He adds that the selected activities need to be viewed as a means of acquiring and accumulating social capital that will transcend the specific programme context and serve young people in a very real and practical way in other facets of their lives (Sandford, 2004).

Fraser Thomas et al. (2005) add that school performance reflects vocational productivity. Specifically Barber (2002) further asserts that participation in extracurricular activities may promote the development of assets such as social, physical, and intellectual skills, meaningful roles and empowerment, positive identity, constructive peer networks and clear expectations and boundaries.

From a preventative perspective, The Office of the Minister of Children (2007) found that participation in extracurricular activities in schools has been found to reduce school drop-out, particularly among those at risk of early school-leaving. Similar evidence emanates from the US (Hartmann, 2008) with evidence of the avoidance of negative trajectories such as dropout or delinquency. Hartmann (2008) notes that recent psychological and social-psychological research confirms a relationship between extra-curricular participation and both mental health and self-esteem.

2.7.3 PYD through Sport in Schools-Prerequisites for Success

As Greenberg (2003), outlines that there is a solid and growing empirical base indicating that well-designed, well-implemented school-based prevention and youth development programmes, can positively influence a diverse array of social, health, and academic outcomes. This success comes in different guises, with youth involvement being related to academic orientation measured by, school retention, school achievement, and higher

academic goals (Fraser Thomas, et al., 2005). The *"Theory of flow"* (Csikszenmahaiyi, 1975, 1990) where intrinsic motivation is related to challenge, is informative from a developmental perspective. The creation of conditions conducive to *"flow"* stimulates enjoyment in the task, thereby enhancing and accelerating learning and development.

Barber (2005) stresses that for schools to be successful they must provide a developmental forum for initiative and engagement in challenging tasks and allow participants to express their talents, passion, and creativity. This can be linked to the depth of opportunities for adolescents in schools where the *total number of clubs and activities* predicted greater attachment to school, higher 11th-grade (16 or 17 years old) GPA (average of all of a student's grades for all semesters and courses), increased likelihood of college attendance, lower rates of getting drunk in 12th grade (17 or 18 years old), and less frequent use of marijuana in 12th grade (Barber, 2005). With regard to socio moral development, participation in sport and physical activity can be effective only if the focus is clearly on teaching life-skills through them (Greenberg, 2005).

Much research has focused on the contextual factors impinging on schools in their provision of extra-curricular activities. Larson & Walker (2005) emphasise the necessity to cultivate an emotionally safe setting that provide youth with security in their environment. They add that adolescence is a time of greater autonomy and there exists a need for greater supports outside the family, with adults playing a key role in creating *"a psychologically safe environment that facilitates youth to engage in positive development".* Cantalano (1998) stresses that through combining the resources of the family, school and community, lies the ingredients to success. Furthermore Hartmann (2008) contends that success is dependent largely on the adult's and policy maker's understanding of what it is about sports participation that is positive and beneficial in the first place.

MacAloon (2006) opines that school sports, rather than being inherently and automatically a positive educational force, is really *"an empty form,"* and a tool whose

social meaning and use and impact is dependent on the ways in which it is employed. It is through a careful examination of for whom, where, and when sport is used, athletic and school administrators can design programs that target their community in the most beneficial way possible (Hartmann, 2008). Hartmann (2008) furthers that there should be a two-pronged effort. One side of the equation would be to educate school administrators and teachers on the potential value of sports participation for educational outcomes. The other aspect—and the one that sports advocates and practitioners have far more ability and responsibility to deal with—is to educate and train high school coaches and others involved with interscholastic sports on the nature of the relationship and how to facilitate it. The *"institutional context"* of a school is all important. The way in which this context can be affected ranges from school quality, to the composition of the student body, all the way to neighbourhood or geographical characteristics or the importance of sports in a school culture or a coach's attitude about school and education more generally (Ryan and Segal 2006).

Hartmann (2008) notes that the key point about school or institutional context is the environment within which sporting activities are pursued, and more specifically the question of how or to what extent there is a fit or match between athletic activities and broader academic or educational goals and outcomes. He notes further that an understanding of the complexities and variations of sport's educational impact is crucial if sports programming and policy is able to take full advantage of the educational potential of sport (and avoid the potential pitfalls and shortcomings). Greenberg (2003) asserts that we have the science to foster children's social, emotional, and academic learning, even as we improve our research base and that the next generation of the science and practice of school-based prevention will require researchers, educators, and policymakers to work together to design evidence-based, coordinated youth development programming and accountability and support systems to ensure their effective implementation.

In summary while we have identified with certainty the features of PYD environments, we need to explore more thoroughly how to operationalize these to make PYD a reality for all in a range of school contexts; the class room and extracurricular settings included.

2.8 PSYCHO-SOCIAL DEVELOPMENT OF YOUTH

A stated objective of this thesis is to *"measure aspects of the psycho-social profile and sports participation of the adolescents in the intervention"*. Therefore it is necessary to choose particular psycho-social variables that are recurring themes within relevant psycho social adolescent development and youth sport theories. Having analysed the literature the following psycho-social variables have been chosen for analysis:

- Connectedness
- Resilience
- Self-determination

It is important to emphasise that these three variables are but three of many. They have been chosen because of their popularity amongst researchers in the field. Cantalano's (1998) summation of what positive youth development programs seek to enhance include the fostering of self-determination and resilience*.

Peterson & Gunn (1984) also cite resilience and self-determination as potential outcomes of well designed youth sport programmes, while Martinek & Hellison (1997) see sport as a means of fostering resilience in disadvantaged youth. Regarding connectedness, Fraser Thomas et al., (2005) highlight that development of connectedness with parents, peers, and other adults, a sense of a social place, an ability to navigate in diverse contexts and an attachment to prosocial or conventional institutions, are pivotal assets in facilitating youth social development. Integral to the development of sport is the concept of social capital. This is defined as

'important social processes and relationships — informal social support networks, friendship, neighbourhood generosity, interpersonal trust and volunteering activity — but also aspects of local and community development, public-private voluntary partnerships and civic spirit' (Office of the Minister for Children, 2007, p.24)*.*

The Office of the Minister for Children(2007) indicate that Ireland is rated as average, or above average, in European comparisons on most indicators of social capital. They cite a report in 2003 by the National Economic and Social Forum (NESF) which concludes that sport and recreation play a very important role in relation to social capital in Ireland, particularly in regard to the dominant role of sport in volunteering and organisational membership (see Section 2.7.2).

Primarily however the three variables hold particular relevance to sport, can be enhanced in a school setting and are particularly applicable to the transitional nature of first year in a new school and the life-stage of participants.

2.8.1 Connectedness

Adolescent connectedness theory explains adolescent's need for belongingness and relatedness (Karcher, 2003). Importantly, adolescent's level of "connectedness" to family, school, friends, and self has been found to contribute to academic performance but also predict violence and substance use (Karcher, 2003). Furthermore, evidence from Australia has suggested that those involved in sporting activity in schools are found to display more healthy behaviours and measures of connectedness (Harrison & Narayan, 2003).

Increased recognition of the concept of connectedness emanates from the changing nature of society's expectations of schools, where schools have enshrined the basic tenets of the World Health Organisation's' approach to health and wellness (O'Brien, 2008). This includes definitions of wellness that go beyond physical well-being, and also

encompass psychological, social and emotional well-being of young people (O'Brien, 2008).

Bandura(2005) discusses the potential difficulty of this life stage period where young adolescents sense some loss of personal control, become less confident in themselves, are more sensitive to social evaluation and suffer some decline in self-motivation. These youth experiences are particularly relevant given the context of the intervention programme i.e. *"Sport@Dawn"*. During this time of *"new social structural arrangements" (p.11)* adolescents have to re-establish their sense of efficacy, social connectedness and status within an enlarged heterogeneous network of new peers and with multiple teachers in rotating class sessions (Bandura, 2005). Silliman, (2007) adds that from adolescence into adulthood, connectedness or intimacy with co-workers, friends, and family, *"balances and enriches the mature self".*

If we are to make the generic assertion therefore that enhancing connectedness is a worthy goal for those involved with adolescents; the question therefore is -how can this be done? The work of Grossman (2005) is this regard is very informative. Firstly she assets that connectedness systematically differs according to program characteristics. But it is not as straightforward as varying the adult youth ratio. Intentionality and what happens in the program are also quite important factors. Grossman particularly emphasises the role of the adult in enhancing the level of connectedness. She cites the works of McClanahan, 1998; Herrera et al., 2000; Herrera, et al., 2002; who emphasise the practices that promote the development of positive adult-youth relationships, provide the adults and youth with time to informally socialize and emphasises that the adults treated the participants with respect. Listening to the youth's ideas was an important element of respect. This simple act was often profoundly appreciated by youth. Grossman (2005) further emphasises this concept of listening and feeling respected when she states that

"…..trying to incorporate the desires of youth into the activity and letting youth work cooperatively convey to them a sense of caring by the provider and thus encourage a greater sense of connection with the adults" (p.11)……

This also reflects Parkers (2000) principle of empowerment as well as Donnelly and Coakley's (2002) principle of agency. The hiring and training of adults involved with youth projects is further emphasised by Grossman (2005). She asserts that the most obvious step programs can take to promote connectedness is to hire staff that have similar interests as the youth and are comfortable informally interacting with them. She emphasises the role of training on interpersonal skills and group management, which can improve youth connectedness. She claims that some adults instinctively know to interact with youth in such a way as to make the youth feel respected and supported in their endeavours. However, many adults (especially younger ones) need training and guidance.

2.8.2 Self-determination

According to Ryan & Deci (2000) self-determination is the quality of human functioning that involves the experience of choice i.e. the experience of an internal locus of causality. Cicchetti & Toth (1996) emphasise the need to match an adolescent's need for autonomy and self-determination and the opportunities for such autonomy and self-determination in the school environment. In relation to sport, research in an exercise context has emphasised the utility of self determined forms of motivation in the prediction of exercise behaviour (Hagger & Chatzisarantis, 2005).

Ryan & Deci (2000) *"Self-Determination Theory (SDT)"* provides a comprehensive analysis of the concept. SDT represents a broad framework for the study of human motivation and personality. It focuses on how social and cultural factors facilitate or undermine people's sense of volition and initiative, in addition to their well-being and the quality of their performance. Conditions supporting the individual's experience of

- *autonomy*

- *competence*

- *relatedness*

are argued to foster the most volitional and high quality forms of motivation and engagement for activities, resulting in enhanced performance, persistence, and creativity. An environment in which autonomy, competence and relatedness are encouraged facilitates the development of the self determined adolescent (Ryan & Deci, 2000). Baily (2009) furthers that *"self-determination appears to be the characteristic of choice if one is to focus effort on an individual's development" (p.70).*

The examination of self-determination as a promotive factor in the lives of adolescents has gained popularity in the literature (Carruthers, 2000; Keyes, 2000; Deci & Ryan, 2000). Keyes (2006) highlights that the prevalence of conduct problems (arrested, skipped school, alcohol use, cigarette smoking, and marijuana use) decreased while measures of psychosocial functioning including self-determination, increased. In their study of 1,234 youth aged 12–18, self-determination is highest among flourishing youth.

With regard to physical activity, equipping young people with appropriate developmental skills (including self-determination and perceived and actual motor competence) will give young people the capacity and competencies to choose to be physically active (Deci & Ryan, 2000). Furthermore Baily (2009) cites Deci & Ryan (1991) who assert that

> *"....individuals with high levels of self-determination have stronger perceptions of control over their behaviour that are positively associated with prolonged engagement in physical activity" (p.66).*

Self-determination is seen as an important '*mediator'* of critical moments, enabling the individual to make the most of episodes, positive or negative, and progress towards a well-motivated and internally rewarding adult exercise habit (Deci & Ryan, 2000). Ryan

& Deci (2000) cite Ericsson et al. (1993) who highlight that as the athlete moves into the specialisation years, he or she is both physically and psychologically involved in his or her activity to a far greater extent. The focus is on technical mastery, technique and sport-specific skill development. During this stage a high level of dedication is needed and self-determination, hard work and discipline are characteristics of success. Even more crucially, high levels of self-determination can effectively 'wash away' road-blocking influences of low perceived competence, enabling individuals to pursue lifelong physical activity as they wish (Deci & Ryan, 2000).

2.8.3 Resilience

Masten, Best & Garmezy (1990) in Pianta & Walsh (1998) defined resilience as the *"process of, capacity for, or outcome of successful adaption despite challenging circumstances"(p.1)*. Luthar (2003) in Snape & Miller (2008) explains that two conditions are critical; exposure to significant adversity or threat and achievement of positive adaptation, despite that adversity or threat. Specifically, Pianta & Walsh (1998) report that resilience promotion in schools is a by-product of the process of interactions of the systems- involving the child in the school, peer, community and family environment. Emphasising the relationship between resilience and sport, Henley et al. (2007) cite the use of psychosocial sports and play programs that provide important opportunities for trained sports workers to help enhance children's resilience, facilitating emotional and social stabilization and the acquisition of new skills and abilities.

Constantine et al. (1999) add that the three resilience traits (internal assets) are

- social competence,
- autonomy and sense of self, and
- sense of meaning and purpose

Constantine et al (1999) assert that the attitudes towards the concept of resilience have changed. Where classic resilience research focused on the development of competence, confidence and caring in the face of risk and adversity, resilience research is growing and

expanding in new arenas beyond this traditional psychopathology perspective. They add that an emergent research direction is the examination of the construct of resilience as a dynamic developmental process (Contantine et al., 1999).

Theoretical evidence suggests that resilience factors, also referred to as protective factors or developmental assets, can predict change in adolescents' health-related behaviours over time. (e.g. Jessor, et al., 1995 in Constantine et al., 1999). Certainly the greatest change in an adolescent's young life comes with the environmental and social changes that occur when attending a new school. On the question of whether resilience can be fostered and what conditions are conducive to its development, Keyes (2006) emphasises the role of *"family support and modelling"* which diminished risk behaviours and increased resilience, even for youth growing up in high-risk neighbourhoods. Fraser Thomas and Cote (2006) highlight also that youth high in developmental assets demonstrate more resilience in difficult situations.

Keyes (2006) analysis of the "*flourishing adolescent*" and what youth are most likely to be flourishing and what factors (intrapersonal, familial, educational, and community) explain how youth come to flourish over time, could provide new insights for promoting positive development and resilience in youth during their transition into adulthood. With regard to collective resilience, Bandura (2005) highlights that perceived collective efficacy raises people's vision of what they wish to achieve, enhances motivational commitment to their endeavours, strengthens resilience to adversity, and enhances group accomplishments.

Gilligan (2000) in Snape & Miller (2008) focused on school and spare time activities as important contexts for increasing resilience, one example being during a period of transition and change. Positive school experiences are not only valuable academically, but also socially and developmentally. Specifically, given the transitional context of our study, Snape & Miller (2008) highlight that (i) the internal attributes of the child, (ii) a cohesive and supportive family and (iii) an external support network in the form of

school, peers and community, all have a part to play in successful transition. However, they add that there is evidence that schools are frequently less concerned with social and personal concerns of children at transition, than they are with easing organisational or administrative procedures (Snape & Miller, 2008). This British research echoes some of the concerns aired by O'Brien (2008) in the Irish context.

2.9   CONCLUSION

The literature review provided a comprehensive overview of the context in which the *"Sport@Dawn"* Positive Youth Development (PYD) intervention has taken place. Firstly it assessed the historical evolvement of youth development and the more recent emergence of a PYD agenda. PYD is framed in this historical context as a relatively new concept emanating from a more "organismic" perspective, where environment and the adolescent are central to development. The next section, section 2.3 "The Modern Adolescent Environment" positions the study in the fluctuating era of the "*electronic generation"*, where Irish adolescents-despite high economic capital-rank lowly in terms of well being, are stifled by an archaic academic curriculum and report low levels of physical activity. The following section, "PYD an emerging theory" conceptualises PYD and delineates its practical meaning deriving from a variety of sources.

The section "Youth Sport and Youth Development" assesses firstly Youth Sport in Ireland where sporting participation is high but insufficient at school level. The factors that facilitate involvement and more specifically the characteristics of sport that promote PYD are discussed here. Section 2.6, "Designing interventions that promote PYD" discussed the nature of successful PYD focused interventions, emphasising the work of Don Hellison and the National Research Council of Medicines (US) features of settings that foster PYD. The continuation of a PYD philosophy to the goals of a health promoting school was also articulated.

Section 2.7 "Positive Youth Development in the School Setting" explored firstly the historical context of sport in schools, asserting that despite the low levels of physical activity in Irish

schools, the school environment provides the ideal opportunity for the development of a Positive Youth Developmental agenda. The final section in the literature review concentrates on the specific psycho social variables of connectedness, self-determination and resilience that are seen as key developmental assets in adolescence.

The following chapter will outline in detail the research methods and processes used to address the aim and objectives of the study. It will also briefly outline the data analysis techniques undertaken to analyse and interpret the survey and focus group results.

3   METHODOLOGY

3.1   INTRODUCTION

Having examined in detail the literature pertaining to the subject matter of interest, this chapter concentrates on the methodology that has been used in order to achieve the objectives outlined in chapter one i.e. to provide a rationale for the research methods used, through a balanced discussion on the pros and cons of each method.

This was a quasi-experimental study which compared outcomes for those attending programme activities in "Sport @ Dawn" with outcomes for a similar group of individuals who weren't involved in "Sport @ Dawn". It is important to note that a quasi-experimental study can inform discussions of cause and effect, but, unlike true experiments, they cannot definitively establish this link (Anderson Moore, 2008). Highlighting when it is necessary to use a quasi-experimental study, Anderson Moore (2008, p.8) suggest its use when;

(i)   Random assignments are non-feasible.

Those involved in the programme were given a choice as whether they wanted to participate in the "*Sport @ Dawn"* programme or not. Therefore the sample of those constituting the "participant" group in the experiment was not random.

(ii)   A program is still under development

Because the "Sport@Dawn" programme had only been initiated, the operation of the programme was being altered occasionally to allow it to run more effectively e.g. for the final five week block the activity choice was reduced due to a reduction in the numbers regularly attending.

(iii)   It is impossible to avoid "*contamination"* of the control group.

The control group would also have been affected by the "Sport@Dawn" programme in that they could witness the sessions and weren't able to avail

of the free recreational time allocated to "Sport@Dawn" participants as they shared the same school environment/ecology.

A triangulation of research methods was used. Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Methodological triangulation *(Bryman, 2001)*, which refers to the use of more than one method for gathering data was used, in that pre and post intervention surveys were gathered, as well as a focus group being used to explore the effects of sustained participation (70% + attendance). Olsen (2004) adds that there should not be a contradiction between these two modes of analysis but rather *"it should be possible to bring them together to shed light on a chosen topic"* (p. 3).

3.2   AIM AND OBJECTIVES OF THE RESEARCH

Table 3.1 below reiterates the objectives of the research (what is to be explored) and also outlines the approach being taken to address each objective (how it is to be explored)

Objectives	Method/Data sources
1. Explore the effect of participation in a school based sports programme on the psycho-social assets of resilience, self-determination and connectedness among year one boys.	Questionnaire (Sections 2,3,4)/Focus Group
2. Explore the social factors that influence participation in physical activity and sport.	Questionnaire (Section 1).
3. Explore the relationship between academic attainment and participation in physical activity and sport.	Attendance and academic records compiled by the CBS "The Green" School for the purpose of tracking and reporting student progress.
4. Identify critical aspects of interventions to enable policy makers to make more informed decisions with regard to youth sport policy	Analysis and synthesis of data generated by survey with reference to literature reviewed.

Table 3.1 Alignment of objectives and methodologies

3.3   RESEARCH PROCESS

Figure 3.1 below presents the stages of the research process in chronological order. The stages are colour coded to reflect primary and secondary research processes.

Review of Academic Literature

Pre intervention questionnaire of demographics, physical activity levels and influences and psycho-social variables completed by all first year students N=103   • Demographic Questionnaire   • Questions pertaining to physical activity habits   • Resilience Questionnaire (Neill & Dias, 2001)   • Connectedness Questionnaire (Hemmingway 2006)   • Self-determination Questionnaire (Ryan & Deci,2000)

Pre Intervention Coach Education   • Programme Coaches are familiarised with the features of positive development settings (NRCIM, 2002)

Intervention   • Students participate in "Sport @ Dawn" four days a week for twenty weeks

Post Intervention Questionnaire   • Students repeat questionnaire following intervention   • Statistical comparative analysis

Focus Group   • Eight "Sport @ Dawn" interviewed on their reflections of the programme

Exam Results and attendance   • End of year exam results and attendance

Primary Sources   ██████   Secondary Sources   ██████
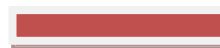
Figure 3.1 Data Collection Procedure

The research took place at the CBS, an all-boys secondary school in Tralee, Co. Kerry. It concentrated exclusively on first year boys (aged 12 to 14) by allowing them to participate in a multi-disciplinary sports program *"Sport@Dawn"*. The programme was designed to ease the transition from primary school for first year students entering into a new educational regime. The researcher, as coordinator of the programme, had the task of designing an intervention that would represent best practice in the delivery of a developmental sports programme and find a means of measuring the impact of the intervention on those participating, in order to inform any future intervention.

The programme consisted of a twenty week programme where students participated in four sports of their choice (Appendix A). Each sport was allocated a five week module with two modules before Christmas 2009 and two modules in 2010 (January-March). The sessions took place from 8.20am to 8.55am Monday to Thursday of each week. The programme was run as part of the extracurricular first year programme and each coach was given training on the philosophy of youth development through sport. They were required to complete a reflective worksheet based on the NRCIM (2002) via Fraser-Thomas, Cote & Deakin, (2005) eight features of settings that are most likely to foster positive developmental assets, to encourage them to tailor their sessions to reflect the philosophy of PYD.

The research aimed to test the effect of the programme on those who participated. A variety of methods and data sources were used in order to ascertain the magnitude of these effects namely;

- pre and post intervention questionnaires
- focus group
- School attendance records
- academic records/end of year exam results

3.3.1 Ethical Considerations

Because this study concerned young adolescents strict ethical guidelines were adhered to, where the purpose of the research was outlined and participants were free to withdraw at any time. Ethical clearance was received from the post graduate sub-committee at IT Tralee. An information pack on the programme was distributed to all parents (See Appendices C, and D). A letter of consent to be signed by parents to allow their child participate in the research was included. The young person's assent was also sought and received. Each coach who helped with the programmes was required to have Garda clearance. Finally, the questionnaires which were completed were recognisable by ID numbers i.e. no names were used. Such considerations have now become imperative given that the civil, political, economic, social and cultural rights of children and youth are embodied in the United Nations Convention on the Rights of the Child (UNCRC) (Sanci et al., 2004). They add that

> *"a purely protective framework in international law has given way to one that acknowledges the right of young people, in accordance with their age and maturity, to make their own decisions on matters affecting their lives" (p.1).*

3.3.2 Pilot study

Stressing the importance of the pilot study Lancaster et al. (2004) emphasise that a well-conducted pilot study gives

> *"..a clear list of aims and objectives within a formal framework, will encourage methodological rigour and ensure that the work is scientifically valid and publishable"(p.1).*

In order to assess how practical the completion of the survey would be, the surveys were first given to a girl's school (Presentation Secondary School, Tralee) as a pilot. The pilot study highlighted some questions that the girls found difficult and others that they found too personal. These questions were altered based on the feedback received.

The pilot study allowed the researcher to explain the questions students had problems with in more detail, as well as improving the timing of the questionnaire session. A

number of questions in the personal information section were altered e.g. the questions on the occupation of parents were deleted. However no alterations could be made to the psycho-social questions, as it would alter the overall validity of the instruments; the pilot process alerted the researcher to certain questions that would need to be explained in more detail prior to the subjects completing the survey.

3.3.3 Review of the Literature

The review of the literature was undertaken at the beginning of the research process and was continuously updated and revised throughout. The review was intended to examine the theoretical issues pertaining to the subject matter and inform the design of the questionnaire. It allowed a reflection of the pertinent theoretical issues in Ireland and how these compare internationally. The review also indicated which psycho-social variables were most prominent in the literature and scales which would examine these variables were sought. Finally, the reviewed literature was integrated throughout the study in a supportive capacity to place the projections and findings of the research in context (Veal, 1992).

To a large extent the literature associated with the subject matter has emanated primarily from the United States and Canada (Bandura, 2008; Cantalano, 1998; Hellison, 1997, 2003, 2007; Barber, 2005; Larsson & Walker, 2005). However the review does reflect some research in an Irish context (De Roiste & Dinneen, 2005; Delaney & Fahey et al., 2005; Dept. Health & Children, 2007) regarding youth sport. However there is a dearth of research in the area of positive youth development in Ireland in general and specifically in the area of youth sport/extracurricular sport and positive youth development.

3.4   QUANTITATIVE METHODS AND DATA SOURCES

The quantitative method used was

- a survey divided into four sections gathering (i) demographic information, information on levels of involvement in sport and physical activity and information concerning psycho social variables of (ii)connectedness, (iii)resilience and (iv) self-determination. The psycho-social surveys used have been validated for adolescents and were therefore deemed appropriate to be used in the context of this intervention.

3.4.1 Survey

The questionnaire was administered prior to the programme (Sept 2009) and immediately after (April 2010). Students were allowed 45 minutes to complete the questionnaire which corresponded to one class period. Sullivan (2001) highlights the key advantages of using questionnaires; firstly, they can be used to gather data inexpensively and quickly, secondly, they can provide more accurate answers than interviews, as participants respond more honestly to questions when they are not face to face with an interviewee. Finally, questionnaires eliminate the problem of interviewer bias as no interviewer is present to influence the answer to questions in a particular direction. Sullivan (2001) however also highlights some disadvantages with questionnaires. He states that low response rates will be the result of questionnaires where there are insufficient literacy skills among certain respondents. Low response rates also result from poorly designed questionnaires. Also he states that there is no opportunity to probe for more information or evaluate the nonverbal behaviour of the respondent.

The purpose of the questionnaires was to elicit some comparative data on those who participated in the programme and those who didn't.

3.4.1.1 Design of the Questionnaire

The questionnaire is divided into four sections (see Appendix E). Section one concerns personal information with parts two, three and four using scales that measure three distinct psycho-social variables namely, self-determination, connectedness and resilience, as the literature review highlighted these variables as relevant to adolescent development through physical activity (Martinek et al*., 2006;* Larson, 2000; Fraser Thomas et al. *,2005*). There is an exhaustive list of variables that could have been chosen but for the purposes of confining the data and avoiding diminishing returns on questionnaire completion, it was necessary to delimit research to these three variables.

- Personal Information

Section one of the questionnaire concerns the personal information of the respondent. The first five questions investigate demographic information e.g. family status, age, occupational status of parents etc. The remaining ten questions concern the physical activity profile of the respondent e.g. what sport they do, how often, level of activity of parents etc. and these were self reported. This section of the questionnaire was designed by the researcher, and was informed by the ESRI report on "School Children and Sport in Ireland" (Fahey et al, 2005).

- Self-determination

Ryan & Deci's (2000) Self-Determination Scale (SDS) was designed to assess individual differences in the extent to which people tend to function in a self-determined way. It is considered a relatively enduring aspect of people's personalities which reflects (a) being more aware of their feelings and their sense of self, and (b) feeling a sense of choice with respect to their behaviour.

The SDS is a short, 10-item scale, with two 5-item subscales. The first subscale is awareness of oneself, and the second is perceived choice in one's actions. The subscales can either be used separately or they can be combined into an overall SDS score. (Ryan

& Deci, 2000). The questions are alternated between positively and negatively scored variables i.e. a five scores highest for self-determination in question 1 while it scores lowest in question 2. The reliability score for the Self-determination Scale was reported as alpha=.82 (Ryan & Deci, 2000).

- Resilience

Section 3 of the questionnaire measures resilience using Neill & Dias (2001) resilience test. They define resilience as *"the ability to cope with, and respond successfully to, various life stressors"*. This scale measures components of resilience in different domains of young peoples' lives, ranging from planning and thinking ahead, to levels of independence. The test has validity for 12 to 18 year olds.

The questionnaire is scored by agreement or disagreement with a statement. A score of one indicates agreement (highest level of resilience) and a score of seven indicating disagreement (lowest level of resilience). A total resilience score is then collated. The lower one 's score the higher one's level of resilience. Neil&Dias (2001) resilience scale has a reported reliability score of alpha= .91

- Connectedness

According to Hemmingway (2006) adolescent connectedness explains adolescent need for belongingness and relatedness. For the purposes of analysing scales of connectedness, the Hemmingway (2006) adolescent connectedness test was used. This test reflects differing aspects of connectedness, namely connectedness to family, school, friends, reading, religion, and self (identity, self-esteem, and temperament/coping ability). Added to this neighbourhood/community and ethnicity/culture are also identified as important worlds of connection.

The connectedness questionnaire seeks a response to fifty seven questions *"How true about you is each sentence"* on a scale of 1 to 5, ranging from *"Not at All-1"* to *"Very*

True-5" with the latter response reflecting higher levels of connectedness. The design of the questionnaire is such that ten of the questions are negatively marked i.e. a score of one indicates higher levels of connectedness. An overall connectedness score is achieved by adding all scores. Subscales are also summed for connectedness to peers, school, neighbourhood and family, self now and in the future.

With regard to reliability of the questionnaire the following alpha scores were found (Hemmingway, 2006)

- Connectedness to school, alpha=.86
- Connectedness to family, alpha=.85
- Connectedness to self(present and future), alpha=.83
- Connectedness to peer, alpha=.71

3.4.1.2 Administration of the Questionnaire

When circulating the questionnaire certain procedures were adhered to, to minimise threats to the reliability of the data. The surveys were given to all the students in the same weeks. Students were instructed to be as honest and accurate as possible with their answers in the hope of avoiding subject bias, whereby the respondent tries to give what is perceived to be the *"correct"* answer. The researcher personally administered the questionnaire to all students in the week prior to the commencement of the intervention programme (Sept 21st to 25th 2009). The school's timetable consists of forty five minute periods and in general this was sufficient time for the completion of the questionnaire (although minor allowances were made for candidates who had difficulty in completing in the allocated time).

The second batch of questionnaires was completed in the week following the completion of the programme (Apr 12th to 16th 2010). In general due to their familiarity with the questions having completed the survey before, students found it much easier to complete the survey on the second occasion.

3.4.1.3 Questionnaire Sample

The method of sampling used was that of non probability sampling in the form of convenience sampling. A convenience sample is a sample where the participants are selected, in part or in whole, at the convenience of the researcher. The difficulty with this type of sampling is that you may or may not represent the population well, and it will often be hard to know how well you've done so. It is important to note that this lack of concrete representation affects the weight of any conclusions and recommendations made from this study (Sullivan, 2001). The researcher made no attempt to ensure that this sample was an accurate representation of some larger group or population and the sample consisted of 44 students in the intervention group and 58 in the control group. Students who participated in the programme did so of their own volition and the intervention group and control group were subsequently formed.

The research was conducted in the context of the school providing a programme aimed at easing the transition from primary to secondary school. The aim of the research was to measure the impact of the intervention. Therefore there is logic to the selection method in this context.

3.4.2 Secondary Sources

- Attendance

A detailed record of attendance at school was kept throughout the programme of both participants and non participants. This allowed comparative statistics to be gathered.

- End of year test scores

The end of year academic test scores for all participants were recorded. Scores are given on an average overall score basis. This allowed comparative statistics between participants and non participants to be collated, as well as statistics comparing psycho-social scores and academic performance.

3.5 QUALITATIVE RESEARCH METHODS

3.5.1 Literature Review

Given the variety of objectives of the research outlined above, a number of methods were used in order to gather sufficient information to inform these objectives and make recommendations. A literature review was needed to assess the rationale for using sport as a means of promoting development, to explore the psycho-social variables of resilience, self-determination and connectedness and to determine the social factors that potentially influence participation in sport. Furthermore, the literature review guided the research to use scales to measure the psycho-social variables, identified a lack of Irish research surrounding the subject matter and guided the design of the "Sport @ Dawn" programme.

3.5.2 Focus Groups

Focus groups are an exploratory research method used as a means of gathering in-depth qualitative information such as the attitudes and opinions of interviewees. Focus group interviews were developed by Morton et al. in the 1940's to generate data for analysis from group interaction. Group forces and dynamics become an integral part of the procedure, with participants engaged in discussion with each other rather than directing their comments solely to the moderator/facilitator (Sullivan, 2001).

A focus group was carried out with a random sample of participants from the intervention group in order to derive greater depth of information as to the effect of the programme on the students. This was conducted in the school in May 2010, three weeks after completion of the intervention and was facilitated by the researcher. These students were selected at random from those who had completed the programme with greater than 70% attendance. None of the students who attended the focus group had dropped out of the programme. Therefore because the group was only taken from the +70% attendees the resultant responses are only reflective of the opinions of those who

completed the programme. Any inference drawn in the conclusion and recommendations from the focus group must be cognisant of this limitation.

The focus group session took place following the intervention and it comprised of eight students who had successfully completed the programme. The rationale for conducting the focus group following the intervention was to gain

- an understanding (in greater depth than the questionnaire would allow) of the student's feelings about the programme
- a reflection on student's ideas about how the programme might be improved
- a greater understanding of how the programme had an effect on the social dynamic of the student's first year in a new school.

The following themes were explored in the focus group

- general experience of the "Sport @ Dawn" programme
- personal challenge
- personal achievement
- recommendations for changes in the programme
- recommendations for incoming first year students
- effect on school work
- effect on attitude to physical activity
- personal learning

3.6 DATA MANAGEMENT

The two primary data collection instruments used were a number of questionnaires and a focus group. How such data was collected and subsequently analysed will now be documented and the advantages and limitations of each approach considered.

3.6.1 Quantitative Data

Secondary sources of quantitative data, the attendance figures and the academic results were collated. Each student was given a cumulative attendance and a mean academic score across all the exams sat in the end of year tests.

The questionnaires administered were pre coded and on return were inputted into the statistical package SPSS 18 for analysis. Data was analysed using descriptive statistics-to identify trends-and inferential statistics. The inferential statistics were used to test the significance of findings. As is usual in social science research a significance of $p<.05$ was used to judge the merit of findings. Note that this accepts that there is a 5% possibility that results were found by chance.

3.6.2 Qualitative Data

Qualitative data was generated through a focus group which was subsequently transcribed and recorded for content analysis (Appendix F). Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the text (Sullivan, 2001).

Firstly, the interview was transcribed and the answers from the students were grouped as raw data themes. Subsequently, the raw data themes with similar meaning were combined into groups and entitled lower order themes. These lower order themes were then combined to form higher order themes. The number of instances of higher order themes being mentioned was then counted. Finally, the latter were categorised into dimensions, representing the highest level of abstraction, since no further grouping could be formed.

3.7   LIMITATIONS OF RESEARCH METHODOLOGY

The following limitations confined and influenced the research findings.

- The research was not undertaken in a controlled environment given that the programme operated in a unique school environment, which is influenced by the culture, ethos and philosophy of the school.

- Each coach, although instructed as to the nature of the goals of the programme, was given very little instruction/feedback and was given almost complete discretion as to their approach to the sessions.

- The questionnaire administered was quite lengthy and given that it was completed by young people may have resulted in sub optimal answering of questions, particularly in the latter parts of the questionnaire.

- Although the sample of students chosen for the intervention and control group was random, students were firstly given complete personal discretion into whether they participated in *"Sport@Dawn"* or not.

- No academic scores were taken pre intervention and as a result academic results cannot be compared.

- Because convenience sampling was used the sample used cannot be considered to be reflective of the entire population and this must be factored into any subsequent analysis.

- Because the focus group was taken only from the group who attended most often the information discerned from this process is not reflective of the entire 1st year population.

- The researcher is a Maths teacher in the school, and taught three participants in the programme with the resultant more contact time with these students. This may have altered their perception of the programme and therefore their responses to the survey.

- The researcher as teacher may have produced some degree of "interference" in data, particularly in the focus group.

3.8   CONCLUSIONS

This chapter detailed the research objectives and questions and outlined the available research strategies deployed. The methods and data sources deployed were a survey consisting of five parts, school attendance and academic records, and a focus group. This chapter detailed the rationale for choosing these methods and highlights the pilot test that was used. The data collection methods employed and the limitations of the research methodology were also documented.

The following chapter outlines in detail the results of the data analysis.

4   Results

4.1   INTRODUCTION

The purpose of this chapter is to present the results obtained from research that was carried out. Firstly, a profile of the participants of the study is given, analysing specific demographic details. Because of the quasi-experimental nature of the research the data was explored to ascertain if there were any major differences in the profile of the participant group and the control group at the outset of the intervention. Secondly, the factors affecting sporting participation are investigated. Thirdly, the effect of the intervention on the psycho-social variables of self-determination, resilience and connectedness are explored. Fourthly, the relationship between the involvement of the students in sport and how this effects their educational attainments will be examined. Aspects of the intervention will be explored, with respect to its impact on psycho social maturation and academic achievement. The findings of the focus group that took place post intervention will also be presented in this section. The data was tested for normality using the Kolmogorov Smirnov test in order to discern whether parametric or non-parametrical tests should be used (see appendix G). Both descriptive and inferential statistics were used in presentation and analysis of the data. Finally, the structure of the chapter was informed by the study objectives.

4.2   PROFILE OF PARTICIPANTS

The sample group for this study was first year boys in an all boys voluntary secondary school (N=103). The sample was divided into two groups – a control group (N=59) who never registered nor attended any of the "Sport@Dawn" sessions and a group who registered for the programme (N=44). This latter group was then further subdivided into those participants who attended more than 70% of all sessions (N= 21) and a group who participated in less than 70% of all sessions offered (N= 23). Because the participants, by virtue of their level of involvement, are assigned to different groups a degree of self selection bias is added to the research.

As well as exploring the profile of participants-data was tested to see if any of the variables differentiated participants from non-participants. If the outcomes at the year end are deemed to be meaningful, it is necessary to ensure that the groupings shared the same profile at the beginning of the year. Those who participated in the programme were divided into those who attended greater than 70% and those who attended less than 70%. The cut off of 70% was chosen subjectively by the researcher as the minimum attendance rate for deriving maximum benefit from the programme. The researcher observing students made the subjective assessment that 70% represented a reasonably accurate indicator of positive change in students engaged in the programme.

4.2.1 Age

The mean age of the sample group was 13 years with a range from 12 years to 14 years and a standard deviation of .524. A t test revealed that there was no significant relationship between age and participation in the "Sport@Dawn" programme $t(101)=.379$, $p>.05$. The age profile of the two categories of pupils were as follows, participants M=12.98, SD =.457, non-participants M=13.02, SD=.572. Furthermore a t-test using only participant subjects revealed that age was not a factor that influenced retention on the programme. The age profile of those who completed more than 70% of the sessions M=12.95, SD=.510, while the age profile of those who attended less than 70% of the sessions M=13, SD=.417, $t(43)=.116$, P>.05.

4.2.2 Social Profile of Survey Sample

The survey explored a range of social characteristics of the subjects and the data was then explored to see if any of these characteristics influenced participation in the "Sport @ Dawn" programme. The social characteristics were as follows

- Employment status of mother/female guardian
- Employment status of father/male guardian
- Physical activity levels of the mother/female guardian
- Physical activity levels of the father/male guardian
- Whether or not the pupil was a member of a sports club

- Place of domicile (town, village, rural setting)

- Number of parents in the student's household

Tables 4.1, 4.2, 4.3 present the raw data findings in percentage terms.

Social Variable	Participants %	Control%	Difference %
Mother Working(yes)	63.6(n=28/44)	55(n=32/58)	9.4
Father Working(yes)	92.7(n=38/41)	75(n=42/56)	15.2
Club Membership(yes)	88.6(n=39/44)	71.2(n=42/59)	17.4

Table 4.1 Parental employment and sports club membership of participant & control group

Parent	Father %	Mother %
Active	46(n=19/41)	50(n=22/44)
Somewhat Active	42(n=17/41)	43(n=19/44)
Inactive	12(n=5/41)	7(n=3/44)
No father/mother	6	2

Table 4.2 Activity level of parents

Place of Domicile	Participants (%)	Control (%)
Town (yes)	61(n=27/44)	47(n=28/59)
Village (yes)	7(n=3/44)	20(n=12/59)
Rural (yes)	31(n=14/44)	32(n=19/59)

Table 4.3 Place of domicile of participants and control

It is interesting to note in table 4.3 that only 3 students out of 15 domiciled in a village participated in the programme which would suggest that there were transportation difficulties. However this is somewhat negated by the statistic that 14 out of 33 people from a rural setting participated. The under representation of rural participants is perhaps best explained by transportation problems and concerns about length of school day.

In order to ascertain if any of the social factors were associated with participation the data was subjected to inferential tests. Table 4.4 presents the Chi Squared or Fishers Exact test results which explored whether or not there was an association between any of the variables listed above and students opting into the "Sport @ Dawn" program.

the differences in sample size relates to there not being a mother or father

Social Factor	Test	p
Employment status of mother/female guardian	χ^2 (1,N=101) = .740	.423
Employment status of father/male guardian	χ^2 (1,N=97) = 5.121	.03
One or two parent household	Fishers exact test = 1.205	.787
Physical activity levels of mother/female guardian	χ^2 (1,N=101) = 1.363	.506
Physical activity levels of father/male guardian	Fishers exact test (96) = 4.074	.150
Place of domicile	χ^2 (2, N=103) = 4.078	.144
Membership of a sports club	χ^2 (1, N=103) = 4.569	0.033

Table 4.4 Social factors associated with participation in Sport @ Dawn

As can be seen from the table 4.4 above, the social factors that were associated with participation in the programme was the employment status of father X^2 (97)=5.121, p=.03 and whether or not you were a member of a sports club X^2 (103)=1.033. In terms of working fathers 92.7% of those participating in "Sport @ Dawn" had fathers in employment, while only 75% of the control group had fathers in employment.

4.2.3 Social Support Factors

The students were asked how many of their five closest friends were physically active. Half (50%) of those surveyed had all five closest friends physically active. Very few of those surveyed had two or less friends active (n=7). Table 4.5 below presents the findings. A t test was undertaken to see if there was a significant difference between the

number of active friends of participants in "Sport @ Dawn" and the control group. There was no difference between participants (M=4.17, SD=1.08) and non-participants (M=4.09, SD=1.202) t(94)=-.313, P>.05., with respect to the number of their friends who are regularly physically active.

Friends Active	N	Control%	Participants%
No Friend Active	1	0	2.3
1 Friends Active	4	6.8	0
2 Friends Active	3	3.4	2.3
3 Friends Active	14	10.2	18.2
4 Friends Active	26	25.4	25
5 Friends Active	50	49.2	47.7

Table 4.5 How many of five closest friends are active (%)

Subjects were asked to rank the support from parents for physical activity on a four point scale from very supportive to very unsupportive. None of the one hundred and three survey participants indicated that their parents were unsupportive. Fishers exact test p=.759 indicates that there was no difference between participants and non participants with respect to parental support for physical activity.

4.2.4 Physical Activity Levels

The final characteristic of survey participants that was explored was hours of physical activity undertaken per week that results in them breathing heavily or sweating.

	Frequency	Percent
None	5	4.9
Half Hour	1	1.0
One Hour	7	6.8
Two to three hours	14	13.6
Four to six hours	39	37.9
Seven Plus hours	32	31.1
Total	96	91.5

Table 4.6 Number of hours active

Because the data was ordinal a Mann-Whitney U Test was conducted to see if there was a difference between how many hours students were active, based on whether or not they attended the programme. The modal number of hours of physical activity per week for the control group was 4-6 hours (n=23, 29%). The modal number of hours of physical activity participation for those who signed up for "Sport @ Dawn" was 7+ hours per week (n=21, 47.7%). This represents a significant difference, p=.001. A Mann Whitney test revealed a significant difference between "Sport @ Dawn" participants and the control group p<.05 (Table 4.7)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of How many hours active is the same across categories of YesNoAttend.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 4.7 Test of distribution of number of hours active and participation in "Sport @ Dawn"

4.2.5 Psycho social profile of survey sample

The survey participants completed scales to measure the following three psycho social characteristics

- Self -Determination (subscales: Perceived Choice and Awareness of Others), Ryan & Deci (2000)
- Resilience (Neill & Dias, 2001).
- Connectedness (subscales: Family, Neighbours and Friends, Peers, Self-Now and Future, School), Hemmingway (2006).

T tests were conducted to compare participant and non participant's scores across the variety of psycho social variables outlined above.

PS Variable	Participants (M, SD)	Control (M, SD)	t (df)	=p value
Self-determination	36.6, 7.4	37.1, 9.2	.3(101)	>.05
Perceived Choice	18.3, 4.3	17.5, 5.4	-.8(101)	>.05
Awareness of Others	18.3, 4.7	19.6, 5.3	1.3(101)	>.05
Resilience	59.6, 18.2	60.7, 16.2	.3(101)	>.05
Connectedness to Family	46.6,9.7	52.8,8.3	-2.1(101)	<.05
Neighbours & Friends	47.4, 6.9	43.8,9.8	-2.1(101)	<.05
Peers	22.7,4.1	22.1,4.8	.63(101)	>.05
Self Now & Future	48.1,6.1	45.1,8.9	-1.9(101)	>.05
School	45,6.4	42.7, 9.6	-1.4(101)	>.05

Table 4.8 Psycho Social Variable t tests

As can be seen from table 4.8 above, only connectedness to family, T(101),=-2.1,p<.05 , and connectedness to neighbours and friends, T(101), =-2.1p<.05, showed any significant difference between those who did the programme and those who didn't. The control group showed higher connectedness to family (M=52.8, SD=8.3), while participants in the program showed higher connectedness to neighbours and friends (M=47.4, SD=6.9).

To summarise, a comparison of participant and control group students showed differences only in five of the nineteen factors (social, physical activity and psycho social variables)

- Employment status of the father - participant group higher
- Hours of physical activity per week - participant group higher
- Membership of a sports club - participant group higher
- Connection to family - control group higher
- Connection to neighbours and friends - participant group higher

4.3 SOCIAL AND PERSONAL FACTORS THAT INFLUENCE INVOLVEMENT IN SPORT AND PHYSICAL ACTIVITY

Tests were carried out in order to ascertain the effect that certain social and personal factors have on participation in sport and physical activity. Two indicators of involvement in physical activity were explored;

(i)   membership of a sports club

(ii)   number of hours active per week

A Mann Whitney test was used to ascertain whether there was a relationship between activity level and membership of a sports club. Table 4.9 below shows a significant difference between number of hours active between sports club members and non members.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of How many hours active is the same across categories of Are you a meber of a sports club?.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 4.9 Comparison of number of friends active based on membership of a sports club

4.3.1 Sports Club Membership
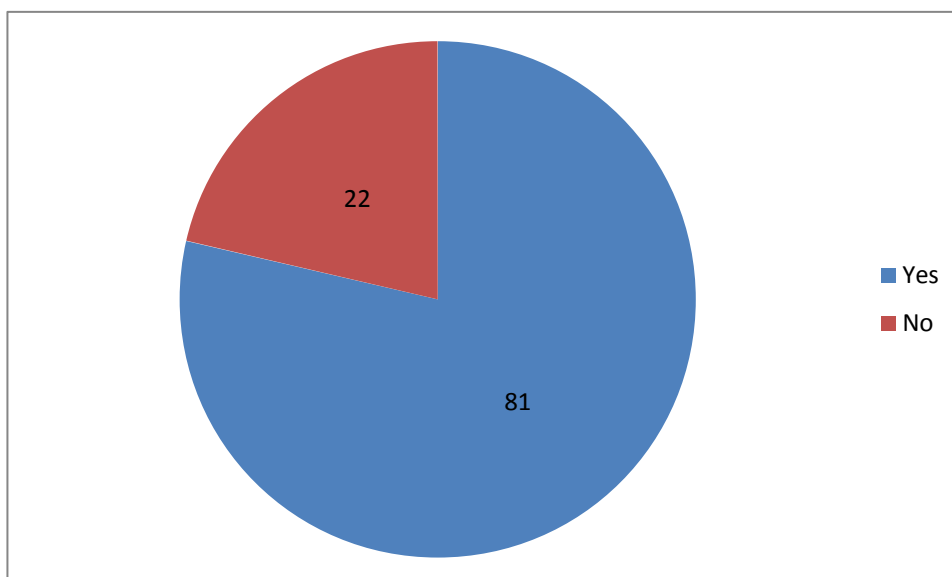
Figure 4.1 Membership of a Sports club

As can be seen from the table above the majority of students are members of sports clubs (81%). Furthermore, of those who opted to participate in "Sport @ Dawn" 88.6% of them are sports club members, while 71.2% of the control group were sports club members. As reported in table 4.4 sports club membership is associated with participation in the intervention, p<.05.

4.3.1.1 Sports club membership and parental factors

Chi squared tests, were undertaken to explore if there was a relationship between membership of sports clubs and parental employment status, how physically active parents were and the support levels of parents. The results are outlined in Table 4.10

Social and Personal Factor	Test	p
Employment status of mother/female guardian	χ^2 (1, N=102) = 5.842	.016
Employment status of father/male guardian	χ^2 (1, N=97) = 13.157	.001
One or two parent household	χ^2 (1, N=102) = 2.164	.141
Physical activity levels of mother/female guardian	χ^2 (2, N=101) = 1.536	.464
Physical activity levels of father/male guardian	Fishers exact test (N 96)= 3.294	.212

Table 4.10 Association between sports club membership and parental factors

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As can be seen from table 4.10 above the social and personal factors associated with in membership of a sports club are the employment status of the mother/female guardian, X^2 (102)=5.842, p=.016 and the father/male guardian, X^2 (97)=14.506, p=.001. It was found that 86.3% (n=69/80) of those whose father was working were members of a sports club. Conversely, 47% (n=8/17) of those whose father was not working were members of a sports club.

4.3.2 Relationship between Psycho Social Profile and Activity Profile

T tests were also carried out to ascertain if any difference exists between the psycho social profile of the survey sample (N=103) based on sports club membership. The results are outlined in Table 4.11 below

t-tests		Member of sports club		t (df)	p
		Yes	No		
Self-determination		37.3	35.5	.877(101)	>.05
	Perceived Choice	18.3	16.1	1.873(101)	>.05
	Awareness of Others	18.9	19.3	-.346(101)	=.064
Resilience		59.6	62.4	-.346(101)	>.05
Connectedness	Family	45.5	40.4	2.382(101)	>.05
	Neighbours & Friends	46.5	41.1	1.921(101)	>.05
	Peers	23.2	19	2.781(101)	=.011
	Self Now & Future	47.4	42.7	1.888(101)	>.05
	School	44.2	41.7	1.132(101)	>.05

Table 4.11 Comparison of psycho social profile based on membership of a sports club

From the table above it can be seen that only one psycho social variable, namely connectedness to peers, shows a significant difference with respect to sports club

membership, T(101),=2.781,p<.05 (M=23.2 for members and N=19 for non members). The other variable edging close to significance is that of awareness of others.

t(101),=-.346, p=.064.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Friends Active is the same across categories of Are you a meber of a sports club?.	Independent-Samples Mann-Whitney U Test	.009	Reject the null hypothesis.

Asymptotic significances are displayed.   The significance level is .05.

**Table 4.12 Comparison of number of friends active based on membership of a sports club**

The data was explored to see if there was any difference between the number of friends active, based on sports club membership. Because the data representation was not normally distributed a Mann-Whitney U Test was conducted to see if there was a relationship between being a member of a sports club and the number of friends active. The mean number of active friends among sports club members was 4.4 friends, while for non-sports club members it was 3.4 friends. This represents a significant difference, p=.009

Correlations were undertaken to explore the relationship between the number of hours active and psycho social characteristics in Table 4.14. Results show significant correlations between physical activity levels, as measured by hours active per week, and connectedness to self now and in the future, connectedness to neighbours and friends, peers, school and resilience. The strongest correlation is connectedness to self now and in the future, r(98)=.46, p<.01. Correlations were categorised as per Campbell (2009)

			How many hours active	Strength of Correlation	
How many hours active	Correlation Coefficient		1.000		
	Sig. (2-tailed)		.		
	N		98		
PreSelfNowFuture	Correlation Coefficient		.458**		
	Sig. (2-tailed)		.000	Moderate	
	N		98		
PreConnnectNeighFriends	Correlation Coefficient		.212*		
	Sig. (2-tailed)		.036	Weak	
	N		98		
PreConnnectPeers	Correlation Coefficient		.210*		
	Sig. (2-tailed)		.038		
	N		98	Weak	
PreConnectednessSchool	Correlation Coefficient		.307**		
	Sig. (2-tailed)		.002	Weak	
	N		98		
PreResilience	Correlation Coefficient		-.285**		
	Sig. (2-tailed)		.004	Weak	
	N		98		

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the level 0.05 level (2-tailed)
Table 4.13 Correlation between Hours active and psychosocial profile

4.4 ACADEMIC PERFORMANCE AND PARTICIPATION IN SPORT AND PHYSICAL ACTIVITY

Given that the programme was carried out in a school setting a number of tests were conducted in order to assess the impact of the programme on two educational outcomes namely, the level of absenteeism and exam scores. The key indicators of participation in sport and physical activity were, membership of a sports club, hours active per week and participation in the "Sport @ Dawn" programme.

The data was analysed to explore if those who were sports club members differed with respect to their educational outcomes from those who were not members of sports clubs. As can be seen in the table 4.14 below the results of the t tests show that sports club members had significantly higher end of year grades (M=64.3%) than those who aren't members of sports clubs (M=51.7%). Furthermore, sports club members had lower absenteeism rates (M=5.7 days) compared with the non members (M=8.8 days).

A t test for mean difference in exam scores based on sports club membership showed t=3.42(100), p=.001, <.05. A t test for the mean difference in absenteeism based on sports club membership showed t=-2.3(101), p=.023, <.05.

t-tests	Membership		t (df)	p
	YES	NO		
Mean difference in exam scores based on sports club membership	64.3	51.7	3.42(100)	.001
Mean difference in absenteeism based on sports club membership	5.7	8.8	-2.3(101)	.023

Table 4.14 Academic outcomes and participation in "Sport@Dawn"

		N	Mean	Std. Deviation	Std. Error
Exam Scores	Control	58	59.3966	16.55394	2.17364
	-70%	23	58.6087	14.91716	3.11044
	+70%	21	70.9048	12.64873	2.76018
	Total	102	61.5882	16.05088	1.58927

Table 4.15 Sport @ Dawn participation and Exam Scores

Table 4.15 above shows the mean score variations in the end of year exams between the three groupings (control group, those who attended less than 70% of the sessions and those who attended more than 70%). An ANOVA showed there to be a significant difference in the mean exam scores between the groups $F_{(2,99)}=4.812$, $p=.010$. A post hoc test showed that the mean exam score of those who attended more than 70% of the sessions was significantly higher than the other two groups (table 4.16).

Dependent Variable (I) 70+	(J) 70+	Mean Difference (I-J)	Std. Error	Sig.
+70%	Control	11.50821[*]	3.94172	.012
	-70%	12.29607[*]	4.67141	.026

Table 4.16 Pairwise comparison of exam scores based on participation level in *"Sport @ Dawn"*

Further analysis of the association between the level of involvement in "Sport @ Dawn" and academic outcomes was undertaken using a Pearson's Correlation. Table 4.17 shows that there was a moderate relationship, which was highly significant.

		Attendance Rate	Exam Scores
Attendance Rate	Pearson Correlation	1	.494[**]
	Sig. (2-tailed)		.001
	N	44	44
Exam Scores	Pearson Correlation	.494[**]	1
	Sig. (2-tailed)	.001	
	N	44	102

Table 4.17 Correlation between attendance rate and exam scores

There was a moderate (verging on high) significant relationship between the number of *"Sport @ Dawn"* sessions attended and the exam score achieved at the end of the year, r=.494, p<.05 (Campbell, 2009)

A linear regression was done to test the hypothesis that the time spent at "Sport @ Dawn" sessions would predict exam scores. The model proved significant at r^2=.244, $F(1,42)$=13.539, p=.001. As the number of sessions increased, exam scores increased. Exam scores=46.731 +.363 correlation.

4.5   THE IMPACT OF "Sport @ Dawn" PARTICIPATION

Data was collected in September 2009 and again in April 2010 with respect to the psycho social profile of all first year students (N=103). As mentioned in section 4.1 survey participants were divided into three categories; control group, those who attended more than 70% and those that attended less than 70% of sessions. Table 4.18 below presents the changes in scores across the three psycho social measures between September 2009 and April 2010. It is important to note that a reduction in the resilience score is seen as growth in resilience as a lower score represents higher resilience. The group showing the highest level of change is highlighted in each instance.

Variable/Group	Control	-70% attendance	+70% attendance	Total Group
Self-determination	+.49	+1.47	+2.95	+1.22
Resilience	-4.22	-.65	-4.76	-4.22
Connectedness – peers	+.49	+1.48	+.1	+.63
Connectedness – neighbours & friends	+.46	-.13	-1.29	-.03
Connectedness – self now and future	+1.03	+.74	-.81	+.59
Connectedness – Family	+.63	+.17	+3.81	+.38
Connectedness – School	+.678	+.82	-.19	+.53

Table 4.18 Change in psycho social scores between April 09 and April 10

Paired t test were carried out in order to measure the change in psycho social scores between September 2009 and April 2010. The data was broken into four groupings (i) all subjects (N=103) (ii) control group (N=58) (iii) 70%+ attendance group (N=21) and (iv) 70%- attendance group (N=23). The only variables showing significant change were resilience and perceived choice. The change in resilience scores were statistically significant for all first year students, p<.05 and for those who attended more than 70% of sessions, perceived choice showed statistically significant change across the year group as well as for the control group. However it is worth noting that at p=.058 the Wilcox paired test indicates that those attending greater than 70% of sessions were close to achieving a statistically significant change in perceived choice levels.

Mean	Std Deviation	Std Error Mean	t	df	Sig(2-tailed)	Group
Pre Resilience Post Resilience	3.53398	16.25219	1.601	102	.030	**All subjects**
PreResilience - PostResilience	4.76190	10.12870	2.210	20	.044	**+ 70% attendance**
PrePercievedChoice - PostPercieved Choice	-1.51724	5.19528	.68217	57	.030	**Control**
Wilcox Test						
PrePercievedChoice - PostPercieved Choice	-1.53922	5.07697	.50270		.001	**All subjects**
PrePercievedChoice - PostPercieved Choice	-1.76190	10.12870	2.21026		.058[+]	**+ 70% attendance**

Table 4.19 Paired t tests measuring change in psycho social variables across groups

Using a repeated measures mixed design ANOVA the data was explored to investigate changes in the psycho social profile of the one hundred and three survey participants across the time span Sept '09 to April '10 and whether or not level of involvement in the "*Sport @ Dawn*" programme influenced levels of change. Table 4.20 below presents the findings of the repeated measures ANOVA. Clearly, the results indicate that within the sample (N=103) there were no significant changes-although at p=.076 resilience is close to being significant as found in the paired t tests. However as there are only two measures (pre and post intervention) the paired t tests results are more valid. The mixed design ANOVA has the additional feature of between-subject analysis. As there were three categories of subjects the between subject scores are a measure of differences in the rate of change across the three groups.

Variable	Between/Within	F	df	P
Self-determination	Within	2.571	2,99	.112
	Between	6.879		
			2,99	.002*
Resilience	Within	3.219	2,100	.076
	Between	1.496	2,100	.229
Peer Connectedness	Within	1.729	2,100	.192
	Between	.9	2,100	.41
Family Connectedness	Within	1.11	2,100	.295
	Between	2.144	2,100	.122
Neighbours & Friends Connectedness	Within	.108	2,100	.743
	Between	2.448	2,100	.092
Connectedness to Self	Within	.149	2,100	.701
		2.83	2,100	.064
	Between			
Connectedness to School	Within	.301	2,100	.579
	Between	2.54	2,100	.084

4.20 ANOVA score s of difference across psycho social variables

As the only factor to show any significant difference (between subjects) was self-determination this now will be looked at in more detail.

Table 4.21 below presents the before and after mean scores for self-determination for the three categories of students. All three groups showed an increase in level of self-determination (control group +.49, -70%, +1.47, +70% +2.95).

Descriptive Statistics

	70+	Mean	Std. Deviation	N
PreSelfDetermination	Control	37.7586	7.87247	58
	-70%	34.0000	8.21307	23
	+70%	39.4762	5.14411	21
	Total	37.2647	7.64811	102
Self-determination1 Total	Control	38.2414	6.98447	58
	-70%	35.4783	8.16238	23
	+70%	42.4286	5.59974	21
	Total	38.4804	7.31976	102

Table 4.21 Changes in levels of self-determination across three categories of subjects

The repeated measures ANOVA table 4.22 below represents the within subjects effects. The results indicate the F value of 2.571 is insignificant at p>.05. Hence irrespective of whether participants were in the control group, -70% or the +70% group there was no significant change in levels of self-determination. This result supports the findings of a paired t test which showed no significant change in levels of self-determination between September and April, t(101)=1.325, p>.05.

Measure:Selfdetermination

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	111.417	1	111.417	2.571	.112
Time * attendance70	Linear	48.040	2	24.020	.554	.576
Error(Time)	Linear	4289.587	99	43.329		

Table 4.22 Within subject effects on self –determination

Measure:Selfdetermination

Transformed Variable:Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	238617.617	1	238617.617	3853.836	.000
attendance70	851.912	2	425.956	6.879	.002
Error	6129.774	99	61.917		

Table 4.23 Between subject effects on self-determination

The between subject effect was also investigated and this showed that there was a significant difference in the change in self-determination levels between the three groups, $F(2,99)=6.879$, $p<.05$. Bonferroni analysis showed that there was a highly significant difference between those who attended greater than 70% of "Sport @ Dawn" sessions and those who attended less than 70% of sessions- Table 4.24 and Figure 4.2

Pairwise Comparisons

Measure:Selfdetermination

(I) 70+	(J) 70+	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
Control	-70%	3.261	1.371	.058	-.078	6.600
	+70%	-2.952	1.417	.119	-6.403	.499
-70%	Control	-3.261	1.371	.058	-6.600	.078
	+70%	-6.213*	1.679	.001	-10.303	-2.123
+70%	Control	2.952	1.417	.119	-.499	6.403
	-70%	6.213*	1.679	.001	2.123	10.303

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.
*. The mean difference is significant at the .05 level.
Table 4.24 Pairwise comparisons of self-determination across the groups
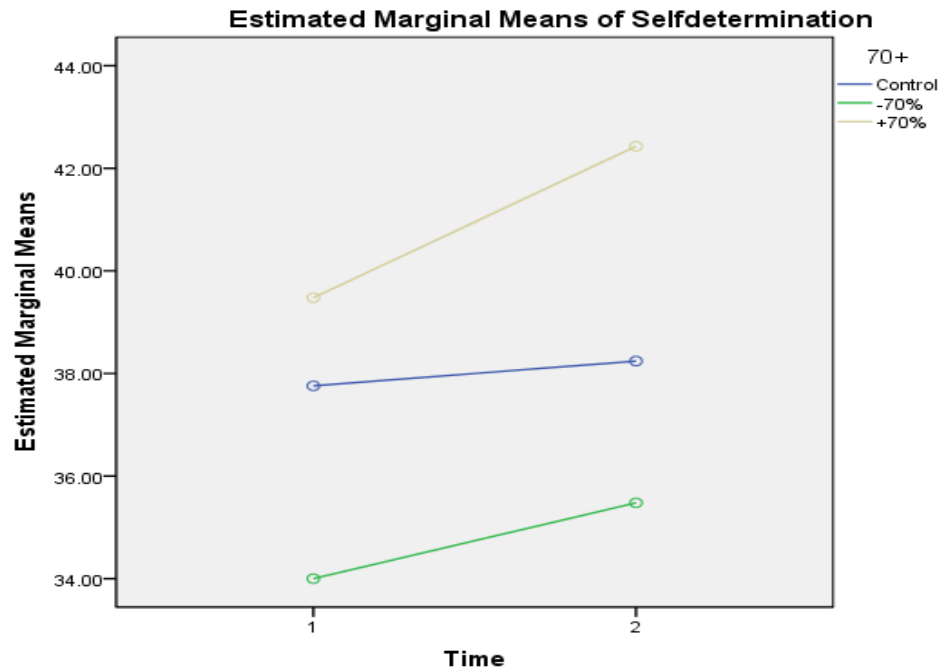
Figure 4.2 Changes in levels of self-determination across the groups

4.5.1   Focus Group

As explained in Section 3.6.2 for the purpose of interpreting information from the participants in a focus group, content analysis was used. This involved content being compiled where a group of eight who had completed the *"Sport @ Dawn"* programme answered ten questions orally. From the transcribed focus group interview (appendix F) thirty three raw data themes emerged. Subsequently, these raw data themes where coded into eleven higher order themes and finally from these higher order themes general dimensions were observed.

Table 4.25 below presents the themes grouped in terms of the general dimensions

DIMENSION
 	
    Higher Order Theme
 	
        Lower Order Theme
	N	*%*

SPORTS RELATEDLEARNING	15	100

(a) **Increase in general skills**
        1 Ability to shoot with left hand in basketball
        2 Run on balls of feet in athletics
        3 Ability to do a proper warm up
	3	37.5

(b) **Application to different sports**
        1 Athletic techniques helping with other sports
        2 Warm up techniques that apply to all sports
        3 Taught how to run properly in athletics
(c) **Increased fitness**
        1 Evidence of fitness in other sports
        2 More physical activity resulting in greater fitness
        3 Complimentary training
	7	50

(d)Learning
 	
    1 New sports and skills
        2 Use of weaker hand
	5	62.5

	3	25

	N	%
PERSONAL DEVELOPMENT	14	100

(a) Attitudinal Changes
     1 Something to do before school
     2 Better punctuality
     3 Greater awareness in class
     4 Better performance in tests
     5 Increased discipline
     6 Better temperament
 	
     7 More alert in class
	11	87.5

PSYCHOSOCIAL CONSEQUENCES	11	75

(a) Enjoyment
   1 Having fun in the programme
   2 Having fun with friends
   (b) Increase determination
   1 Programme makes you more determined
   (c) Increased confidence
   1 More confident playing sport
   2 More confidence from succeeding at things unattainable before
   (d) Friendship
   1 Make friends faster
   2 Teamwork in games enables socialisation
   3 Friendships developed through programme friendships
   4 People formally enemies becoming friends
	2
	
	1
	
	2
	
	6
		25
		
		12.5
		
		25
		
		50

NATURE OF SPORT@DAWN PROGRAMME	6	62.5

(a) Challenge of Programme
   1 Challenging yourself
   (b) Changes to the programme
   1 Start earlier
   2 Coach Moving too fast
   3 Didn't like certain sports
   4 Interruption from people arriving late
   5 Inform teacher of lateness for class
	1
	
	5
		12.5
		
		50

Table 4.25   Content analysis of Focus Group
N=number of answers pertaining to particular dimension
%=percentage of students whose answered particular dimension

The content analysis of the interview responses regarding the reflection of eight students yielded five dimensions, eleven higher order dimensions and thirty three lower order dimensions. Table 4.1 shows the general dimensions and their higher and lower

themes as well as containing the number of associated responses to higher and lower order themes. As the percentages indicate the general dimension most attributed to were the ancillary effects of the programme which were classified into higher order themes of attitudinal changes and learning. Lower order themes of better punctuality, discipline, temperament and alertness were most common here. Also common as lower order themes were the effects that the programme had on other sports that the students were involved in (application to different sports).

4.6   CONCLUSION

Chapter 4 introduced firstly the profile of participants; their ages, social factors, social support factors, physical activity levels and psycho social profile. Secondly, the social and personal factors that influence sporting involvement were analysed. Thirdly, academic performance and sporting participation was analysed and finally the impact of "Sport@Dawn", including a focus group, were researched and findings were presented. Both descriptive and inferential statistics were used. Where statistically significant results were found these were highlighted. These significant results will form the core of the discussion in the next chapter.

Chapter 5   RESULTS AND DISCUSSION OF RESULTS

5.1   INTRODUCTION

Moving on from the statistical and qualitative information garnered in the previous chapter, this chapter will interpret these findings and align them with the information emanating from the literature review. Consequently the findings of this research will be contextualised and this will provide a more substantial basis for discussion and enlighten an Irish PYD research arena which is bereft of evidence comparative to the US and Canada. The discussion is embellished by the focus group analysis which consists of an interview with eight boys who had sustained involvement in the programme.

The principle findings from the statistical analysis will now be reiterated. The summary of findings focuses on the impact of Sport @ Dawn on participants. Regarding those involved in the programme (i.e. those who started the programme in October 09) the following factors were associated with participation, $p<.05$.

- Father's employment status
- Being a sports club member
- Higher Physical activity levels
- Lower family connectedness
- Higher neighbours and friends connectedness

Following statistical analysis the following outcomes were associated with those who attended more than 70% of the sessions. They were found to be statistically significant at a level of $p<.05$

- Increased resilience (differential between before and after the intervention)
- Increased perceived choice (differential between before and after the intervention)
- Higher end of year grades (than other two groups)

- Greater growth in self-determination (compared to -70% attendance group)
- Lower rate of absenteeism (compared with control group)

The focus group conducted was designed to capture the reflections of eight boys who had attended greater than 70% of the sessions. Content analysis of the focus group found the following impacts on the participants.

(i) **Psycho social outcomes** -increased self-determination, increased confidence, friendship (easier to make friends)

(ii) **Sport related learning** -increased skill, transfer of skill to other sports, fitness, learning (new sports, change in attitude to fitness)

(iii) **Personal development**- attitudinal changes (better attitude to school, more variety of interests, more open minded)

However any conclusions drawn must be cognisant that the *"Sport @ Dawn"* programme was instructional rather than competitive and the emphasis was on player development rather than team development i.e. centred on intrapersonal rather than interpersonal challenge.

5.2   SPORT AS A MEANS OF PROMOTING POSITIVE YOUTH DEVELOPMENT

As described in Section 2.4.1 the concept of Positive Youth Development is *"nebulous as it occurs privately in the thoughts and feelings of youth"* (Larson & Walker, 2005; p.131). However youth literature abounds with conceptualisations of what PYD encompasses. For the purposes of this intervention *"Sport"* was the chosen medium used in the exploration of a positive youth development agenda, in this case in an all boys secondary school. Sport has been justified as a means of enhancing the individual; socially, cognitively and emotionally (Peterson and Gunn, 1984); but it is in the marrying of the two concepts - Sport and PYD- specifically in relation to the *"Sport @ Dawn"* intervention, that this research is concerned . The questions therefore are; (i) does sport through the "Sport @ Dawn" intervention provide the means of promoting positive

youth development and (ii) what evidence emanates from these research findings to support this claim?

Perhaps the most notable of the conceptualisations of PYD is Lerner's (2005) 6 C 's of PYD hypothesis. The 6 C's namely- competence, confidence, connection, character, caring and contribution; constitute what Lerner considers positive outcomes of youth development programs. Taking the first four of these in succession (the final two are beyond the scope of this intervention) the evidence accumulated in the research would suggest the *"Sport @ Dawn"* programme has developed attributes of PYD in participants.

Firstly, in relation to competence Lerner (2005) postulates that this concerns enhancing participants' social, cognitive, academic and vocational competencies. Evidence would suggest that sport does facilitate competencies beyond the sport itself (see Section 2.5.3) and evidence emerging from this study would support this claim. During the focus group one student said *"I learned more skills I think at Sport@Dawn. Like you were told to shoot with two hands and kick with both legs (student 1)"* and developing competence "*because the instructor taught us how to shoot with our right and our left hands" (student 1),* as well as speaking of *"I think we learned how to push ourselves when it comes to sports and that gives us confidence, say like when you scored a basket you'd become more confident" (student 8).* Increased competence in exams is associated with those who participated to the greatest extent in the intervention, as well as the increased connectedness to their peers-discussed below-serves to enhance claims of a more competent young man emerging from this intervention. This correlates with Lerner's (2005, p.10) assertion that when students are *"in settings in which they feel comfortable in performing cognitive tasks"* cognitive abilities are enhanced in early adolescence, as individuals become faster and more efficient at processing information (see section 5.5). Critically, the "Sport @ Dawn" sessions provide the opportunity for the coaches to stress to the students that effort will result in increased competence.

In trying to delineate the composition of competence Lerner (2005) asserts that four concepts namely (i) academic confidence (ii) grades (iii) school engagement and (iv) social competence are used to measure competence. The outcomes achieved from *"Sport @ Dawn"* reflect well in these respects. As will be discussed in more detail below significant academic progress (see Section 4.4) was made by the highest attendees in the programme, therefore academic confidence, better grades and lower levels of absenteeism (reflected in the analysis in section 4.4) could be a corollary of attendance at the program. In relation to school engagement, students who participated reported high levels of engagement in school activities, reflected in comments such as *"you'd be more alert to the teachers questions and know what they mean" (student 1)* and *"it just wakes you for first class and you are able to get more done*" (student 5). Furthermore participation in the programme resulted in higher exam scores for >70% participants (see Section 4.4) and those who were members of sports clubs had significantly far less days absent (see Section 4.4). However no increase in connectedness to school was found in the quantitative data. Increases in social competence was reflected strongly in the focus group where one student reported that *"you get to make friends faster cause there are people doing it and you talk to them" (student 1)* and *"it helps you make friends with people who weren't in sport @ dawn as well"* (student 3).

In relation to confidence, the focus group found that one student having experienced the variety of sports on offer when asked about their favourite reported- *"For me it would be the boxing cause I'm after taking it up now. It has made my reflexes way faster" (student 8).* This student also asserted *"I was way more determined to go into competitions because I used to do judo before and I used to be nervous going onto the mat".* This accelerated confidence, accentuated by the increase in self-determination findings in Section 4.5, would seem to emanate largely from being introduced to a variety of new sports and the subsequent tutoring and advice they got from the respective coaches. This sits kindly with Busseri's (2005) finding that breadth of involvement plays a pivotal role in healthy adolescent development and Cote et al.'s (2007) assertions on the recreational years of sport (age 13+).

Lerner (2005) highlights that the enhancing of a young person's confidence manifests itself through adolescents increased self-esteem, self-concept and self-efficacy. Cantalano (1998) furthers that one of the objectives of PYD programmes should be the fostering of self-determination, *so* for the purposes of this research *Self-determination* was specifically the measure used in relation to the broad area of self confidence. The research has shown that boys who attended the sessions most often i.e. greater than 70%, showed greater rate of increases in levels of self-determination (figure 4.2) when compared to the other two groups. This was also found to be statistically significant when the 70%+ group was compared with the 70%- attendance group. Self-determination was therefore a key factor in those maintaining their involvement with the programme. On the contrary, low levels of self-determination were indicative of those who failed to reach the threshold of 70% attendance rate.

Positive identity and self worth are closely linked to self-determination, which manifests itself in increased confidence, according to Lerner (2005). This study has reported significant increases in self-determination attributed to the higher *"Sport @ Dawn"* attendees comparatively (see Section 4.5). However exploration of the causal relationship between increases in self-determination and positive identity and self worth were not explored in this research.

The third C of Lerner's (2005) conceptualisation of PYD is that of connection, the building and strengthening of adolescent's relationships with other people. The Office of the Minister for Children (2007) highlighted that sport provides the opportunity for the formation of new connections with peers and knowledge of peers, the development of social skills and the acquisition of social capital. For the purposes of this research four subsets of connectedness were assessed namely-connectedness to (i) family, (ii) peer, (iii) self now and future, (iv) school and neighbours and friends and these will be discussed in more detail in Section 5.4.

The focus group indicated that the intervention was successful in enhancing the connectedness of those involved in the programme. Statements emanating like *"I can make friends very easy cause before I started Sport@Dawn I'd just talk to the boys from the CBS (primary) but now I'd talk to everyone in the class" (student 3)*, and *"Coaches would put you on a team and you have to co operate with your team mates and it gets everyone working together even if you didn't like that person you'd still have to work with them"* or *"You make new friends cause in my primary school, Holy Family, the two sixth classes would hate each other and I talk to all of them now like" (student 8)* gives a strong impression of how those involved found interaction with others more amenable because of their involvement. This is particularly relevant given the new environment the students were encountering. Allied to this, remarks like *"It's easier to make friends and you get to know people quicker" (student 3)*, *"helps you make friends with people who weren't in "Sport @ dawn" as well."* and *"I would have made friends with X in Sport @ Dawn and then I'd get to know the boys from Holy Family through X then" (student 3)*; illustrate the ancillary benefits of "Sport @ Dawn" involvement. Participants, through friendships developed in the programme, meet others outside it, thus accelerating the integration of students from different primary schools and develop friendships with students from different classes. Lerner (2005) asserts connection as a goal of positive youth development can be measured by connectedness to family, peers, school (see Section 5.4) and community.

Although difficult to measure Lerner's (2005) fourth C -that of character- would seemingly have the potential to be enhanced by sporting involvement. The Minister for Children (2007) highlights that sport facilitates the development of identity and self concept. The evidence would suggest that "Sport @ Dawn" enabled those involved to develop their character positively. The increase in Self-Determination for those adhering to a high standard of attendance in the intervention would reflect this, as would numerous references from the focus group. Students spoke of *"being more determined" (student 5 &8)*, being able to *"get out of bed earlier" (student 7)* and of *"learning to push ourselves" (student 2)*. Given the nature of the programme i.e. preschool, adherence to the program, even simply in terms of attendance, would indicate a character building exercise in itself.

Lerner (2005) outlines that measurement of character should incorporate (i) personal values, (ii) social conscience, (iii) values diversity, (iv) interpersonal values and skills. Certainly any improvements in these constituents of character were more of a by-product of the programme rather than active objectives. The coaches involved were given details on the NRCIM (2002) eight features of settings that are most likely to foster positive developmental assets in adolescents but this training did not emphasise the development of the above values.

Although we have emphasised the positive relationship between PYD and sport in theory, and in reality, with the "Sport @ Dawn" programme, it is imperative that a balanced view of the intervention is taken. Sport is, as McAloon (2006) points out, *"an empty form"* and its' impact is dependent on the way it is employed. Cognisance must be taken of the considerable number of students, 54.5%, who failed to reach the threshold level of 70%. The program itself was designed to the NRCIM (2002) model of features of settings that are most likely to foster positive developmental assets. Given the widespread recognition of the importance of the coach in youth developmental settings (see Section 2.5.3) the coaches involved in "Sport @ Dawn" received very little instruction as to the alternative nature of the programme i.e. non competitive, social in nature. However, although the coaches largely adhered to the principles of the model, the researcher felt that maximum benefit of adherence to these principles would require greater training for both the programme coordinator (researcher) and the coaches themselves. This importance of the coach is reflected in the focus group where students, reported the coach was very good or that the athletics coach was excellent and alternatively that the coach moved too fast.

5.3   THE PSYCHO SOCIAL EFFECTS OF A SCHOOL BASED INTERVENTION

The literature abounds with different psycho social characteristics which can be enhanced through youth sport (Lerner, 2005; Strachan, 2008; Office of the Minister for Children, 2007). For the purposes of this study, three of the more popular variables

emanating from the literature namely; self-determination, resilience and connectedness were chosen for examination. Prior to the intervention students completed specific questionnaires on these three variables. Independent t tests were carried out which showed there was no difference between those who initiated participation in the programme and the control group.

5.3.1 Self-determination

The centrality of self-determination to PYD is best summated by Baily (2009) who claims that it is "*the characteristic of choice*" in an individual's development. The logic being that if a youngster has, what Deci and Ryan (2000) describe as an "*internal locus of causality*", this will have a promotive effect on other facets of their make-up.

All students (N=103) were tested, prior to the intervention. The average score for self-determination for the control group was slightly higher, although the difference wasn't statistically significant. Likewise the difference in means for the subgroups of perceived choice and awareness were also insignificant. It could be argued therefore that the differences found post intervention could be attributed largely to the intervention, although cognisance must be taken of the multitude of other factors impinging on a young person's life in a new school.

When the students were tested post-intervention, all three groups showed an increase in self-determination. The largest increase occurred in those who participated in the programme i.e. +70% attendance (see Table 4.18). Further investigation revealed a statistically significant difference between those who participated in more than 70% of sessions, compared to those who attended less than 70% in terms of the growth rate of self-determination.

As there was no significant difference between the students prior to the intervention the programme has had a greatest effect on the self-determination of the students who

attended most. This could be attributed to the self regulating nature of the programme where students were required to attend early morning, pre-school sessions in a new school. Students spoke of the programme that it *"teaches you discipline in the morning and this will help you in a real match"* (student 6). This sense of increased will power was illustrated also in the focus group where students reported being *"more determined and less likely to give up"(student 5)* and *"more determined in other sports"* (student 5).

The lower increase in self-determination amongst those who completed less than 70% of the sessions may reflect their inability to fully engage and persevere with the programme. This may have implications for programmes of this nature where identification of those with lower levels of self-determination identifies a need for more supports to be put in place to enhance the adherence of these students to the programme. The resultant effects of higher levels of self-determination for the higher attendees manifested itself also for exam scores. This is discussed in more detail in Section 5.4.

5.3.2   Resilience

According to Pianta & Walsh (1998) two conditions are necessary for resilient behaviour, (i) exposure to significant adversity or threat, (ii) achievement of positive adaption despite that adversity or threat. Drawing merit for the inclusion of resilience as one of our psycho social variables to be measured, "Sport @ Dawn", by virtue of its' self regulatory nature, offers (i) the adversity and by completing the programme to a sufficient standard i.e. >70% attendance (ii) the achievement of positive adaption to that adversity or threat.

The t test carried out initially showed no significant difference in resilience between those who did the programme and the control group (although the participants were found to be slightly more resilient, see Table 4.8). Also, there was no significant difference in resilience found regarding whether or not students were members of

sports club (see Table 4.10). The correlation between the number of hours active and resilience was also found to be weak (see Table 4.11)

Regarding the effect of the programme itself it is notable that the biggest increase in resilience occurred amongst those who had participated most i.e. +70%. However this increase in resilience was almost matched by those in the control, making the difference between the groups insignificant. There was however a much lower average score for resilience amongst those who failed to meet the 70% threshold (see Table 4.11). A paired t test showed a statistically significant increase in resilience across all year one boys as a group. Interestingly, within the subgroups of this study only those who attended greater than 70% of sessions showed a statistically significant increase. However when paired t tests were carried out there was found to be a significant increase in levels of resilience in the +70% group only. Again like self-determination, identification of those with low levels of resilience may act as a predictor of poor attendance or drop out in youth interventions. Martinek & Hellison (2007) see physical activity programmes as having potential to develop social competence, autonomy, hope and optimism, once a philosophical commitment to youth development underpins a programme that is centred on small numbers, empowerment and is student centred. Snape & Miller (2008) emphasise resilience as an important attribute to ease the transition into second level school. They link this to secure attachments to adults and peers in the school environment. "Sport @ Dawn" offers this secure non competitive environment with ample opportunity for interaction with peers and adults through shared, small group activities.

5.3.3 Connectedness

For the purposes of this research connectedness was broken down into five categories, namely peers, neighbours and friends, self now and future, family and school. Paired t tests found that there were no statistically significant changes in levels of connectedness across the five subcategories between Sept '09 and April '10 in any of the groups within the first year cohort.

a) Connectedness to peers

This is the degree to which youth feel they fit in with their peers, their sense of belonging in the school in general, and feelings of acceptance. (Karcher, 2003).

A t test carried out between those who did and didn't participate in the programme in September 2009 found no significant difference between the two groups, with regard to connectedness to peers (see Table 4.7). When a t test was carried out between those who were and weren't members of sports clubs a significant difference was found, with members of sports clubs showing significantly more connection with peers (see Table 4.9).

Analysis of data did not show a statistically significant effect on connectedness to peers on any of the three subgroups. All three groups showed only marginal increases, with the greatest increase occurring amongst those who attended less than 70% of sessions (see Table 4.19). The difference between groups was however insignificant (see Table 4.20). The focus group perhaps gives a better insight into the shared experiences and activities carried on at "Sport @ Dawn". One student commented *"It's easier to make friends and you get to know people quicker",* while another stated *"Coaches would put you on a team and you have to co operate with your team mates and it gets everyone working together even if you didn't like that person you'd still have to work with them".*

That boys who belong to sports clubs have significantly higher levels of peer connectedness is also noteworthy. This finding supports the associated results of sports club members regarding relative exam results and absenteeism (see Section 5.5), (Hartmann, 2005; Ryan & Segal, 2006).

b) Connectedness to neighbours and friends

Connectedness to neighbours focuses on the time youths spend in their neighbourhood, the quality of their relationships with other kids in their neighbourhood, and the degree to which they find their neighbourhoods a comfortable, supportive, interesting place to

be. While connectedness to friends asks about how much time youth spend with their friends, how much they trust their friends, and how actively they communicate with friends about personal issues (Karcher, 2003).

The independent t test carried out between those who did and didn't participate in the programme found that there was a significant difference between the two groups, with regard to connectedness to neighbours and friends (see Table 4.8) with participants having the higher level of connectedness.

Regarding the effect of the *"Sport@Dawn"* intervention, those who achieved attendance rates of greater than 70% showed an average fall in connectedness to neighbours and friends, with the control group showing a slight increase (see Table 4.19). However when the differences between the groups were analysed the differences were insignificant (see Table 4.20).

That boys who had a greater sense of connectedness to neighbours and friends were more inclined to take up the programme would seem to be the most important finding regarding this variable. Also that the levels of connectedness to neighbours and friends fell for the +70 attendance group is also noteworthy. This may reflect a growing sense of independence consistent with Bandura's (2005) assertions on adolescent agency.

c)   Connectedness to self- now and future

Connectedness to self-now refers to experiences in current relationships, a sense of continuity in their behaviour across people and places, and a self-awareness of skills, talents, and unique interests that make them interesting and liked by others. Connectedness to self-future is oriented toward the future rather than toward the present. It is based on the positive qualities of the youth that are perceived by others and on the actions of the youth that they make to secure a positive future (Karcher, 2003).

The t test carried out between those who did and didn't participate in the programme found no significant difference between the two groups, with regard to connectedness to self now and in the future (see Table 4.8).

Regarding the effect of the Sport @ Dawn programme, those who achieved attendance rates of greater 70% showed an average fall in connectedness to self with the control group showing a slight increase (see Table 4.18). However when the differences between the groups were analysed, the changes were statistically insignificant (see Table 4.19).

Overall little can be discerned from the research regarding connectedness to self-now and in the future in contrast the findings on self-determination, resilience and connectedness to peers, neighbours and friends. This perhaps may be attributed to the transitional period, a period of flux in a young person's life, in which the research took place.

d)   Connectedness to family

This analyses the dimensions of involvement in and caring for their families and how well they get along with their parents, and their degree of caring for their parents. Connectedness to family also involves youth's involvement with and caring for their siblings (Karcher, 2003).

The t test carried out between those who did and didn't participate in the programme found a significant difference between the two groups, with regard to connectedness to family. Those in the control group scored significantly higher at the start of the school year than those who participated (see Table 4.7).

The post intervention survey showed an increase on average in connectedness to family for all groups, with those attending more than 70% of sessions showing the highest increase. However the difference was found to be non significant (see Table 4.19).

Section 2.5.2 outlines the importance of familiar support for sporting participation and cognisance must be taken of the significantly higher connectedness to family that the non "Sport @ Dawn" attendees had prior to the intervention. Less familial connectedness was a factor therefore in participation in the programme. This finding would appear to contradict the evidence that familial connectedness leads to greater involvement in sport. Perhaps a degree of independence from family is an incentive for engagement in extracurricular activities? However, while there is much research related to participation in sport and parental support specifically, there is a dearth of research evidence pertinent to area of familial connectedness and extra-curricular participation in the literature.

e)   Connectedness to school

This relates to how hard youth work at school, how much they enjoy school, and how successful they feel at school. It focuses on the importance youth place in school (i.e., how much they care for school) and the degree to which youth become actively involved in being successful in school (Karcher, 2003).

The independent t test carried out between those who did and didn't participate in the programme found no significant difference between the groups at the start of the school year, with regard to connectedness to school. Those in the participant group scored slightly higher than those in the control group (see Table 4.7).

The effects of the "Sport @ Dawn" programme were negative on those who attended with the higher attendees showing a fall in connection to school and the lower attendees showing only a marginal increase. The control group also showed a fractional

increase (see Table 4.18). However the differences between the three groups were found to be insignificant (see Table 4.19).

Although extracurricular sport is highlighted in the literature as an important mediator of connectedness to school, (Eccles, 1999; Sandford et al., 2004; Grossman, 2005) "Sport @ Dawn" surprisingly and somewhat disappointingly had little or no effect on this important psycho social variable. The Centres for Disease Control and Prevention(US) (2009) having examined school connectedness suggest six strategies that would promote school connectedness, they are

1. Create decision-making processes that facilitate student, family, and community engagement; academic achievement; and staff empowerment.

2. Provide education and opportunities to enable families to be actively involved in their children's academic and school life.

3. Provide students with the academic, emotional, and social skills necessary to be actively engaged in school.

4. Use effective classroom management and teaching methods to foster a positive learning environment. The goal of a mastery culture would enable this environment to blossom.

5. Provide professional development and support for teachers and other school staff to enable them to meet the diverse cognitive, emotional, and social needs of children and adolescents.

6. Create trusting and caring relationships that promote open communication among administrators, teachers, staff, students, families, and communities.

Reviewing the above points in relation to the operation of "Sport @ Dawn" it is evident that while many of the above strategies were applied, there is a need to apply them on a whole-school basis. In relation to *"Sport @ Dawn"* if would be evident that if greater

school connectedness was an explicit goal, greater emphasis would have to be placed on more involvement from the wider interest groups i.e. family and community.

5.4 INVESTIGATION OF SOCIAL FACTORS INFLUENCING SPORTING PARTICPATION AND PHYSICAL ACTIVITY

5.4.1 Employment Status of Parents

Lunn (2009) emphasises that the economic resources of parents are critical to sporting involvement of adolescents. Fishers and chi squared tests were undertaken in order to ascertain whether mother's and father's employment status respectively had an influence on whether students participated in the "Sport @ Dawn" programme. Only the father's status was found to be significant (see section 4.3.2). Students were also tested in order to ascertain whether there was a relationship between sport club membership and parental employment status. The results were found to be significant for both parents.

The findings regarding employment status of parents indicates that affordability may be a factor in sporting membership for the students in the survey. Crucially however for *"Sport @ Dawn"* where the entry fee was nominal (€10) employment status was only a factor for the father. It may be necessary there to adjust the price to account for a fathers employment circumstances. It may also be possible that those from unemployed household were n't keen on the programme as a result of a lack of morning momentum. This suggests that the "Sport @ Dawn" club is more egalitarian and accessible to families from lower socio economic background (assuming employment is indicative of socio economic status). The significance of the mother's employment status and sports club membership would reflect a more general trend of women's involvement in sport and the consequential involvement of these women's children in sport (Donnelly & Coakley, 2002).

5.4.2 Physical Activity levels of parents

A chi squared and Fisher's exact tests were undertaken in order to ascertain whether the physical activity levels of the mother and father respectively had an influence on whether students participated in the "Sport @ Dawn" programme. Both were found to be insignificant. Likewise the physical activity levels of both parents were found to be an insignificant factor in relation to sports club membership (see Table 4.10).

These results show that there is little relationship between the sporting activity of the students surveyed and their perception of their parent's involvement in sport. Students therefore seem to have allowed their parent's attitude to sport to have little influence on their own choice. However, given the students' relatively young age the effect of *"role modelling"* may not become a factor until later in their lives. (Fraser Thomas et al., 2005; Le Menestral & Perkins, 2007; Baily, 2009)(see section 2.5.2).

5.4.3 Place of domicile

Following De Roiste & Dinneen's (2005) findings that the participation in certain sports was dependent on the proximity of sporting venue, a chi squared test were undertaken in order to ascertain whether place of domicile had an influence on whether students participated in the "Sport @ Dawn" programme or their membership of a sports club. The results showed that place of domicile wasn't a significant factor in relation to participation in "Sport @ Dawn"(see Table 4.4).

Given the early morning pre-school start of the "Sport @ Dawn" programme it was envisaged that those living outside the town would find attendance infeasible. However despite the infeasibility of those using public transport, many parents reported anecdotally that in fact it was easier to drop students to school earlier, thereby avoiding early morning traffic.

5.4.4 Membership of a sports club

It is worth noting that 11.4% of boys in *"Sport @ Dawn"* were not sports club members. Hence the programme may represent an important opportunity for collective physical activity for this small but significant minority. It could be deduced that a school based programme such as "Sport @ Dawn" that has as it's focus sampling (Fraser Thomas & Cote, 2006) and learning is an attractive option for boys outside the traditional community based sports clubs which tends to have a focus on preparing athletes for competitive sporting pursuits. This may be due to affordability or the diverse recreational nature of the programme.

5.4.5   Number of friends Active

Recent Irish students have emphasised the importance of peer influence and extracurricular participation (Fahey, 2004; De Roiste & Dinneen, 2005, Woods, 2010). An independent t test was undertaken in order to ascertain whether the number of friends active had an influence on whether students participated in the "Sport @ Dawn" programme (see Section 4.2.3). The result was found to be insignificant. The data was tested in order to ascertain whether there was a relationship between sports club membership and how many of their five closest friends were physically active. The results were found to be significant with sports club members having more friends who physically active (see Table 4.9).

The results indicating that participation was independent of the number of friends active and would suggest that participation on the programme was a decision made independently by the student i.e. it wasn't influence by their five closest friends. Predictably there was a relationship between the number of friends active and sports club membership in that those that are members of sports clubs are likely to have friends who are physically active.

5.4.6   Level of parental support for physical activity

As elucidated in Section 2.5.2 parental involvement and support plays a significant role in the physical activity habits of young people (Le Menestral & Perkins, 2007; Baily, 2009; Cote et al, 2007). Therefore a Fisher's Exact test was undertaken in order to investigate whether the perceived level of parental support for physical activity had an influence on whether students participated in the "Sport @ Dawn" programme. It was found to be insignificant (see Section 4.3.1.1). The data was tested to examine whether there was a relationship between sports club membership and level of parental support for physical activity. The results were found to be insignificant in this instance also.

The perceived lack of parental support for physical activity concurs with the above insignificance of parent's involvement in physical activity. The lack of significance between level of parental support for physical activity and sports club membership warrants further investigation given that it would be parents who would provide the financial and social support for involvement in sport for kids at this age (Bailey, 2010). These finding contradict research conducted elsewhere and may perhaps be attributed to a lack of understanding from the survey participants of the interpretation of "support from parents for physical activity". The answers received were subjective rather than objective and this may affect the validity of any associated research findings.

5.4.7   Hours of physical activity undertaken

A Mann Whitney test was undertaken in order to ascertain whether the hours of physical activity undertaken had an influence on whether students participated in the *"Sport @ Dawn"* programme was found to be significant (see section 4.2.4). This finding suggests that students who considered themselves more active were more likely to participate in the programme. This may have implications for the marketing of the programme in future years whereby the programme could be made more attractive to physically inactive students.

The above examination highlights some important social factors that impinge upon a young person's involvement in sport. However it is worth noting that many of these may not be in the locus of control of the young person and this will have a strong determinant role in their level of involvement e.g. economic wealth will affect sports club membership. As O'Brien (2008) outlines for individuals living in poverty the functionings may focus around feeding, health and shelter; however in more developed economic situations, the functionings will be more diverse. Given than more than 15% of young people live in poverty (O'Brien, 2008) sporting participation may not be prioritised in many households and this may affect participation and retention in the programme. However, given that students had contributed €90 already in school fees, "Sport@Dawn" required only a nominal entry fee of €10 therefore engagement in the programme was priced to encourage inclusivity and not to be cost prohibitive.

5.5   AN ASSESSMENT OF THE ACADEMIC IMPLICATIONS OF SPORTING PARTICIPATION

Given the statement already alluded to in Section 2.7.3 by Hartmann (2008) in the US, that *"kids in schools who play sport, on average, tend to perform better than kids who don't"* the findings from this study in an all boys Irish secondary provide an interesting opportunity to test this hypothesis in an Irish context. Specifically the questions answered in this section relate to the end of first year exam results and levels of absenteeism in the first year in secondary school.

Secondly, it was found following a t test that sports club membership was a factor in relation to exam results with those involved in sports clubs having significantly higher exam scores than their non sports club member counterparts (see Table 4.15). This result would seem to vindicate Hartmann (2008)'s statement above in this context. This finding once again equates involvement in sport and higher academic achievement.

A t test was undertaken to assess the relationship between sports club membership and the level of absenteeism (see Table 4.15). Again this was found to be significant, with the non sports club members absent from school on significantly more days than their sporting member counterparts. This result correlated with the previous results regarding exam results and those who are members of sports clubs.

Speculating as to a rationale why those involved in sports club achieve higher grades and have lower levels of absenteeism, it is suggested that those involved in sport would be more committed to their endeavours academically and also have more discipline in carrying out their academic work and developed better time management skills (Sandford, 2006). Interestingly, greater discipline, greater determination and increased alertness in class were mentioned as consequences of programme involvement in the focus group. Similarly Trudeau and Sheppard (2008) found that physical activity can be added to the school curriculum, in this case, by taking time from other subjects without risk of hindering student academic achievement.

Perhaps most significantly an ANOVA was carried out to compare the mean exam scores between the control group, less than 70% attendees and more than 70% attendees at *"Sport @ Dawn"* (see Table 4.24). The post hoc results showed that those attending "Sport @ Dawn" scored significantly higher than their counterparts in the other two subgroups (control group and - 70% attendance) with regard to exam results. This finding is given further credence when the focus group findings are added where students reported that "*We had science first class Monday morning and if we had a test you'd be wide awake for the test and do better*", and "*You'd be more alert to the teacher's questions and know what they mean*" and finding that "*it just wakes you for first class and you are able to get more done*".

This finding embellishes the credentials of the programme as it shows that those who have fully utilised the programme have derived academic benefits, as well as the ancillary social and personal benefits. Furthermore a Pearson's Correlation test was

carried out with regard to exam results and attendance rates at "Sport @ Dawn", with the result that there was a significant medium to strong correlation according to (Campbell, 2009). However, as a caveat, there may be a degree of self selection bias in that those strong academically may be more likely to take up the programme. However the absence of pre intervention scores prevents us from ascertaining this.

5.6   IMPLICATIONS OF RESEARCH FOR YOUTH SPORT POLICY DEVELOPMENT

- **Increased competence and confidence**

Positive Youth Developmental theory cites the development of increased competence and confidence as primary goals of youth development programmes (Lerner, 2005). "Sport @ Dawn" enhances these characteristics in the youth involved, by providing an environment in which they can flourish. The context of the programme, i.e. first year in secondary school, positions the programme at a critical juncture of a young person's life and enhances the justification of the programme. Competence and confidence is also enhanced by the climate of "mastery", in a "sampling" rather than an ego motivational climate where a co-operative rather than a competitive culture prevails (Cote et al. 2008).

- **Developing self-determination**

Self-determination as a psycho social variable is universally valued by youth developmental theorists (Deci and Ryan, 2000; Baily, 2009). Evidence from this research has indicated that those who involved themselves to the greatest extent in the programme ie >70% attendance had higher rates of growth in their level of levels of self-determination. Development of self-determination is a laudable claim for this programme given the highly influential positive corollary benefits of high levels of self-determination in young people (see Section 2.8.2). This finding could have wider implications for the wider school sport ecology where the development of self-determination is prioritised with the resultant effects on coaching techniques. Central

the successful adoption of this approach would early identification youth those with lower levels of self-determination, and the provision of supports to help them.

- **Developing Resilience**

Given the widespread concern regarding the diminishing levels of well-being among adolescents the development of resilience in a young person is paramount (Martinek & Hellison, 1997; Keyes, 2000). This programme has found that this resilience can be fostered by adhering to the program i.e. adhering to an attendance rate greater than 70%. Certainly when paired with the outcome for self-determination, adherence to the "Sport @ Dawn" programme provides a vehicle for early adolescents to develop these traits vital to their development. As a consequence measures could be introduced to increase adherence to the programme and those who opt out could sit an exit interview in order to explore reasons for their wish to leave the programme and simultaneously facilitate developments that would entice them to stay with the programme.

- **Connectedness to peers**

Those involved in the programme reported enhanced levels of connectedness to peers. Hence the programme ticks a key box in relation to the well being of the adolescent. The programme itself is designed to maximise the contact time between students in a fun environment, crucially however in an inter-class format. This allows students to develop new friendships early in new school with a wide spectrum of students from other schools and classes.

- **Coach training**

As the program is more focused on socialisation and non competitive participation, coaches need to be instructed on this alternative philosophy of coaching. However most of the coaches are unfamiliar with the principles of PYD and time would have to be allocated prior to and during any intervention to maximise potential benefits. The process of coaching needs to be tailored to promote positive youth development,

whereby the focus shifts from what the coach is doing, to the endeavour of the young people (Parker in Hellison & Cutforth, 2000).

- **Employment status of mother significant**

The finding that the employment status of the mother is significant in relation to sports club membership reflects perhaps the changing nature of the role of the mother in relation to physical activity choices. Women have become increasingly physically active in recent decades (Lunn, 2009). They increasingly see the merit in physical activity and encourage their children to join sports clubs. It also indicates that women are maintaining their role of key decision maker in relation to financial resources in a household and consequently their children's choices.

- **Those involved in sport do better academically with regard to exam results and absenteeism**

The claims for students' involvement in sport is cemented in this research where students who are members of sports clubs do better academically and miss less days at school. Given that these are two universal objectives for school management it would be vital for any school intent on achieving these goals to encourage student's involvement with sport. However given that traditionally school sports have been competitive and representational, this would require a major rethinking of the format of programming of school sports and a broadening of the pathway of school sport to include a more recreationally centred approach.

The merit of the "Sport @ Dawn" intervention is enhanced greatly, given the academic context, that those who attend >70% of sessions performed better than their <70%, and control group counterparts in final year exams. This finding may be seen as a culmination of a more confident, competent, self determined, resilient student emerging from the programme to achieve academically at the end of the year.

If policy makers are serious about the well being of young people in Irish schools they would be well advised to consider supporting interventions-sporting or otherwise, that deploy PYD principles. Young people spend a significant amount of their time in the

school environment, a place where they are encountering peers and non-family adults. Schools are focused on learning- they set expectations for their students. All of these characteristics of schools echo a significant number of the 40 Assets (see Appendix B). The potential of schools to promote PYD is immense- however without an understanding of the necessary conditions and a will to break with some institutional traditions, organisationally as well as sporting, this potential will go largely unexploited.

5.7   Conclusions

This chapter has analysed the research findings from the study and discussed the implications of these findings against the context of pertinent PYD literature. The final chapter following will take these findings and make some recommendations for their practical application.

Chapter 6 CONCLUSION AND RECOMMENDATIONS

6.1   INTRODUCTION

The "Sport @ Dawn" programme emerged against the backdrop of the growing acceptance amongst theorists and practitioners of the conditions that need to be satisfied in order for Positive Youth Development (PYD) to be facilitated. These conditions are exemplified in the Search Institute's 40 Development Assets (see appendix B). Sport is recognised as an ideal vehicle for promoting the principles of PYD, with the school environment seen as a vital mediator of the adolescents' development and well being (O'Brien, 2008). It was through the marrying of these three agents of the adolescent ecology that the concept of "Sport @ Dawn" was conceived and implemented from September 2009 through to April 2010 (see figure 6.1). Initially the programme was designed to be innovative and attractive to a wide spectrum of students, allowing an alternative pathway to school sport, which has traditionally been a competitive pathway. This approach was geared therefore to capitalise on the holistic nature of sport i.e. engaging an individuals' physical, cognitive, social and emotional domains.

The transition from primary to secondary school marks a key phase in a young person's life. The "Sport @ Dawn" project emanated from a desire to ease this transition, through shared social recreation and choice. It subsequently blossomed into a medium through which the student could develop positively and emerge from it better prepared to engage with the trials and tribulations of adolescence. The data analysis which was conducted post intervention has provided evidence that Csikszentmihalyi's (1975) findings that young people will benefit from sporting involvement that offers them fun and enjoyment in a challenging environment, can be applied to a secondary school setting in an Irish context.

Primarily this project marks a distinctly different trajectory from other projects in Irish secondary school, in that it was;

- pre-school/early morning

- it is non competitive and social in nature

- it was continuous throughout the year four mornings a week for twenty weeks

- it was multi-sport with opportunities for choice within the programme menu.

This programme was designed to encourage engagement from the students in sporting sessions that would enable them to integrate socially into the culture of the school, thereby easing their transition from primary school. Evidence, particularly from the focus group, illustrated how effective this socialisation process proved to be in integrating students from different primary schools and students from different classes within the school itself.

The objectives of the research are outlined in the table below and a brief summary of the study findings are also presented

Objectives	Research outcomes
1. Explore the effect of participation in a school based sports programme on the psycho-social assets of resilience, self-determination and connectedness among year one boys.	The quantitative data revealed that the committed participants in the "Sport@Dawn" programme displayed a higher rate of growth in levels of self determination than the control group or those who completed less than 70% of sessions. While the quantitative analysis did not show any statistically significant difference between the three categories of the first year cohort, paired t tests showed that committed participants showed a statistically significant growth in resilience levels, not shown by the other two categories of students.
2. Explore the social factors that influence participation in physical activity and sport.	Employment status of the father and mother, and connectedness to peers were shown to be associated with both sport club membership. While employment status of the father was associated with participation in the "Sport@Dawn" programme. Finally there was a correlation between number of friends active and activity levels of the young people.
3. Explore the relationship between academic attainment and participation in physical activity and sport.	Comparative analysis showed a strong relationship between sports club membership, participation in "Sport@Dawn" and number of hours active and academic achievement as measured by end of year grades and level of absenteeism.
4. Identify critical aspects of interventions to enable policy makers to make more informed decisions with regard to youth sport policy	The findings of the study highlight the importance of making programmes such as "Sport@Dawn" universally available and ensuring institutional support. It also highlighted the necessity for additional support to be offered to some categories of students who are susceptible to participation/adherence challenges.

Table 6.1 Objectives and Research Outcomes
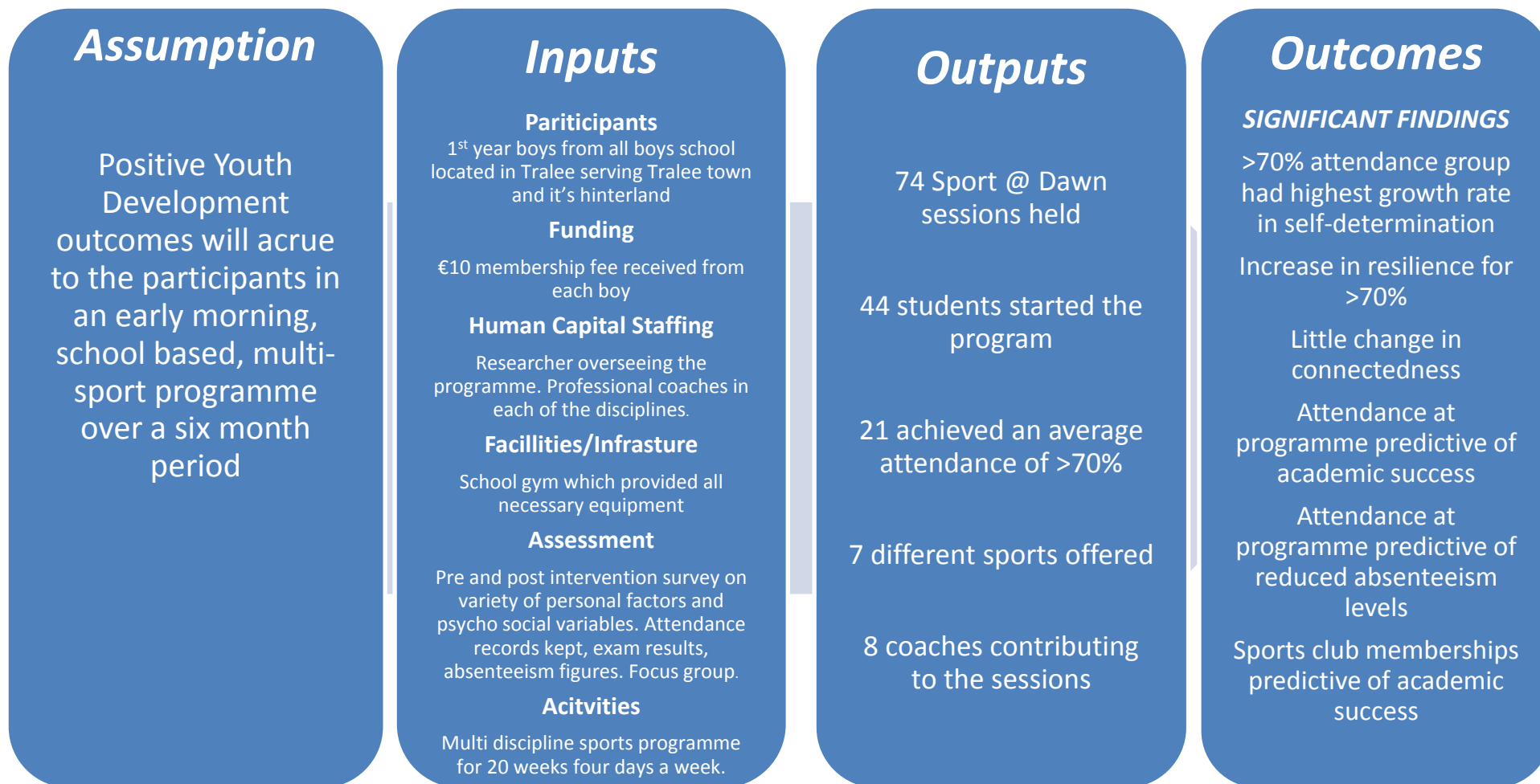
Figure 6.1 "Sport @ Dawn" Program Logic Design Model

The figure above represents the composition of the "Sport @ Dawn" model run over 20 weeks, September 09 to April 10 and it's outcomes.

6.2   CONCLUSION

It is necessary to note initially that because non probability sampling was used, a caveat must be included as to the generalizability of the findings and therefore the conclusions. However, the findings regarding the increases in two of the key adolescent psycho social variables for those who participated in the programme to the greatest extent, vindicates the promotion of a sporting intervention such as "Sport @ Dawn" in a school context. These psycho social variables were examined because the literature review emphasised their importance in this context. Although the rate of increase in self-determination wasn't significant overall, critically the increase for the >70% attendees was significantly greater than the -70% group and the 70%+ group showed a significant increase in perceived choice, a subordinate of self-determination, over the six months of the programme. Given Baily's (2009) assertion that self-determination is "*the characteristic of choice*" in the development of the individual, empirical evidence that *"Sport @ Dawn"* can enhance this highly valued asset is highly laudable. Similarly the evidence suggests that >70% attendance at "Sport @ Dawn" contributed to an increase in resilience. This development of resilience is highly commendable also, particularly given that it occurs at what Keyes (2006) describes at the time of greatest change in an adolescent's life.

Secondly, this research has provided further evidence of the positive relationship between sport and academics. Hartmann's (2008) succinct statement that *"kids who play sport do better"* in high school is holding up too in an Irish school context, with both members of sports club and the high attendees from "Sport @ Dawn" doing comparatively better than their respective counterparts who aren't members of sports club and who didn't participate or attend greater than 70% of sessions in "Sport @ Dawn". With academic results still culturally the most critical indicator of school success in Ireland, it is imperative that this empirical message is given greater credence and not the *"lip service"* it is normally attributed.

Thirdly, what of connectedness? Surprisingly the quantitative results of this research failed to suggest any notable increases in connectedness on the five fronts examined. Despite many strong references to the connection to peers and school emanating from the focus group, the questionnaire results were notable only by the absence of any significant findings. Certainly development of the various forms of connectedness are central to the PYD agenda but questions as to why this intervention failed to show any quantitative impact in this regard are beyond the scope of this research. One issue worthy of further exploration is the use of the specific instrument used in this study. There are a range of other instruments that may be more culturally sensitive.

Fourthly, the role of the coach in any sporting interaction with young people is pivotal. The role of the coach in *"Sport @ Dawn"* is perhaps even more important given the developmental agenda of the programme. However this is precisely where it was felt the coaching aspect of the program was insufficient. Despite the coaches being briefed about the NRCIM's (2002), in (Fraser Thomas, 2005; Perkins & Noam, 2007) model of eight features that foster positive developmental assets in adolescents, none of the coaches were specifically trained in youth development. This is certainly an aspect of the programme that would benefit from time and investment, but central to this would have to be more on-going training and discourse on approaches to coaching.

6.3 RECOMMENDATIONS

The success of the "Sport @ Dawn" model merits more research being carried out in order to ascertain its potential effectiveness in other contexts e.g. rural schools, mixed schools, disadvantaged schools, girl's schools. Taking Lerner's (2005) point that youth development is subject to *"systematic variation"* it would be wrong to be prescriptive about its application in another context. However it would be wrong also, given the plethora of positive results, not to encourage the adoption of *"Sport @ Dawn"* similar type programmes

in schools in Ireland. Appendix H proposes a revised version of the *"Sport @ Dawn"* model, incorporating some of the findings of this research and using them to strengthen the model's application.

<u>"Sport @ Dawn" –PYD in action model (Appendix H)</u>

1. School management support

It is imperative that senior management in a school give projects such as this full support. Punctuality of students following their morning sessions is potentially a problem and flexibility is required from management. Generally senior management would have little difficulty with any project that is cost neutral. However, given that it is unlikely that teachers in other schools would voluntarily manage such a program, it may require supervisory hours being built into the school timetable.

2. Coaches trained in youth development

To maximise the developmental benefits of the programme coaches should be trained in positive youth development. This training should be ongoing and encourage the development of a more reflective culture within the programme amongst the coaches and participants (Fraser Thomas & Cote, 2006; Perkins, 2007).

3. Adequate Gym Facilities

Coaches must have sufficient equipment available to them to allow them to maximise their coaching potential (Lerner, 2005). In the "*Sport @ Dawn"* programme, all the sessions were carried out in the gym and heating of the gym for early morning sessions was of paramount importance.

4. Choice of Activities

Giving students choice in the programme is key to the sampling nature of the programme (see Appendix A). It is advisory also to allow students to move between modules in the programme. Some students will invariably get disenchanted with a particular sport and therefore may quit the programme if this choice is unavailable. The role of the coach is key in this respect and liaising between coaches who are running parallel sessions is advisable.

5. Non Competitive

Central to the *"Sport @ Dawn"* philosophy is non-competitiveness. This distinguishes it from the majority of school sports endeavours which are usually geared towards some competitive involvement. Social integration of the student is the primary goal of the programme. The concept of intrapersonal learning is important in this respect with the focus on personal learning and the development of a mastery climate.

6. Focus on attendance

As the programme is social in nature attendance is the key medium to enable the socialisation process to take place. Facilitators/teachers should keep records of attendance and intervene early when students are failing to attend. Communication between the facilitator and coaches is vital in maintaining attendance levels. It is suggested that those whose attendance has fallen should be given some personal support and those who do opt out should carry out an *"exit interview"* (see section 5.6).

7. Teacher support

All staff should be aware of the programme and what boys are attending. This awareness will enhance the perceived importance of the programme to the attendees and encourage adherance. Program co-ordinators should liaise with other teachers regarding punctuality and potential drop outs from the programme. This would serve to enhance the perceived importance of the programme in the culture of the school.

8. Accessibility for all

No distinction should be made between students regarding ability, fitness, size etc. The coaching sessions must adhere to this philosophy also. This research concentrated on first year students only but this delimitation was only necessary because of the numbers involved (Donnelly & Coakley, 2002). Also, the cost of joining the programme should not be prohibitive.

9. Continuous feedback

Program co-ordinators should encourage continuous feedback between coaches, students, teachers and parents. Co-ordinators should also be aware of the general welfare of the attendees at the programme. A timetabled class for *"Sport @ Dawn"* participants would be ideal for this purpose.

Larson & Walker (2005) have highlighted that conceptualising PYD is a difficult task, given the nebulous nature of the concept, which occurs in the private thoughts and feelings of youth. However this research has elucidated these thoughts and feelings to answer the title question with affirmation that yes, through the medium of sport in *"Sport @ Dawn",* PYD can be enacted.

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Appendix

Appendix A Sport@Dawn Brochure

APPLICATION FORM

SPORT@DAWN PROGRAMME

	Option A	Option B
SESSION 1 Sept 28th-Nov 6th	Personal Training, ITT Sports and Leisure Students	Gaelic Football with Micheal Quirke (Football)/John Griffin (Hurling) GAA Development Officers
SESSION 2 Nov 9th- Dec 11th	Kickboxing, Mike Allen Martial Arts Coach	Athletics with Arthur Fitzgerald, Level 2 Athletics Coach
SESSION 3 Dec 14th-Feb 5th	Rigby with Ray Gadson, IRFU Regional Development Coach	Tae Kwon Do/Boxing with Mike O'Brien, Martial Arts Coach
SESSION 4 Feb 8th-Mar 19th	Basketball with Vinny Murphy, St. Brendans Basketball Club Coach	Personal Training, ITT Sports and Leisure Students

Please Tick Box: OPTION A: ☐ **OPTION B:** ☐

JOIN IRELAND'S FIRST MULTI DISCIPLINE PRE-SCHOOL SPORTS CLUB

SPORT@DAWN CLUB

GAELIC FOOTBALL
Micheal Quirke-(Football)/John Griffin-(Hurling)
GAA Development Officers

BASKETBALL
Vinny Murphy
St. Brendan's Basketball Club Coach

RUGBY
Ray Gadson-IRFU Regional Development Officer

PERSONAL TRAINING
ITT Sport and Leisure Degree Students

MARTIAL ARTS
Mike Allen/Mike O'Brien
Martial Arts Instructors

ATHLETICS
Arthur Fitzgerald
Athletics Coach

EVERY SCHOOL MORNING 8.20 - 8.55
SPORT@DAWN CLUB
Ireland's First multi discipline Pre-School Sports Club

EVERY SCHOOL MORNING 8.20 - 8.55
SPORT@DAWN CLUB
Ireland's First multi discipline Pre-School Sports Club

CBS *"The Green"* is embarking on an ambitious venture with the country's first multi discipline pre-school sports club. The club will be geared exclusively to first years for the 2009-10 school year.

NATURE OF PROGRAMME

The programme will consist of six week modules in the following sports

- **GAELIC FOOTBALL**
- **MARTIAL ARTS**
- **ATHLETICS**
- **BASKETBALL**
- **PHYSICAL FITNESS**
- **RUGBY**

COACHING

GAELIC FOOTBALL-
Micheal Quirke (Football)/John Griffin (Hurling),GAA Development Officers

MARTIAL ARTS-
Mike Allen/Mike O'Brien, Martial Arts Instructors

RUGBY-
Ray Gadson, IRFU Regional Development Coach

BASKETBALL-
Vinny Murphy, St. Brendan's Basketball Club Coach

PHYSICAL FITNESS-
ITT 4th Year Sports and Leisure Students

ATHLETICS-
Arthur Fitzgerald, Level 2 Athletics Coach

TIME

Sessions will run from 8.20 to 8.55 each morning. Attendance records will be kept and punctuality is expected.

DURATION

The programme will run from September 28th to March 19th five morning's a week.

AIM OF PROGRAMME

Recent research has highlighted the link between structured activities and the successful maturation of adolescents both socially and academically. This programme is designed to enforce these claims. We aim to give our students an opportunity to participate in a wide variety of sports, with the best sporting instructors in their fields, all in a controlled, fun, learning environment.

This programme is being run in conjunction with research being carried out by the Health and Leisure Department of the IT Tralee. It is important to note that students will carry out a variety of tests during the course of the programme which will be used for research purposes and all findings will be confidential (no individuals will be identifiable, see accompanying letter. Parents and participants will be informed of all research results.

Who can participate?
The club is designed for first years. Only those who can fulfil the attendance commitments should apply. A maximum of 40 members will be admitted in order to maximise the club's potential.

CBS *"The Green"* is committed to providing the best education for your son. We welcome and encourage your participation.

Yours in Sport
Tim McMahon
PROGRAMME CO-ORDINATOR

FEE
A nominal fee of €20 must be paid by each students.
This fee enables light and heat, administration costs etc to be covered.

Appendix B

40 Developmental Assets® for Adolescents (ages 12-18)

Search Institute® has identified the following building blocks of healthy development—known as Developmental Assets®—that help young people grow up healthy, caring, and responsible.

HEALTHY COMMUNITIES • HEALTHY YOUTH®

External Assets

Support
1. **Family support**—Family life provides high levels of love and support.
2. **Positive family communication**—Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents.
3. **Other adult relationships**—Young person receives support from three or more nonparent adults.
4. **Caring neighborhood**—Young person experiences caring neighbors.
5. **Caring school climate**—School provides a caring, encouraging environment.
6. **Parent involvement in schooling**—Parent(s) are actively involved in helping young person succeed in school.

Empowerment
7. **Community values youth**—Young person perceives that adults in the community value youth.
8. **Youth as resources**—Young people are given useful roles in the community.
9. **Service to others**—Young person serves in the community one hour or more per week.
10. **Safety**—Young person feels safe at home, school, and in the neighborhood.

Boundaries & Expectations
11. **Family boundaries**—Family has clear rules and consequences and monitors the young person's whereabouts.
12. **School Boundaries**—School provides clear rules and consequences.
13. **Neighborhood boundaries**—Neighbors take responsibility for monitoring young people's behavior.
14. **Adult role models**—Parent(s) and other adults model positive, responsible behavior.
15. **Positive peer influence**—Young person's best friends model responsible behavior.
16. **High expectations**—Both parent(s) and teachers encourage the young person to do well.

Constructive Use of Time
17. **Creative activities**—Young person spends three or more hours per week in lessons or practice in music, theater, or other arts.
18. **Youth programs**—Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community.
19. **Religious community**—Young person spends one or more hours per week in activities in a religious institution.
20. **Time at home**—Young person is out with friends "with nothing special to do" two or fewer nights per week.

Internal Assets

Commitment to Learning
21. **Achievement Motivation**—Young person is motivated to do well in school.
22. **School Engagement**—Young person is actively engaged in learning.
23. **Homework**—Young person reports doing at least one hour of homework every school day.
24. **Bonding to school**—Young person cares about her or his school.
25. **Reading for Pleasure**—Young person reads for pleasure three or more hours per week.

Positive Values
26. **Caring**—Young person places high value on helping other people.
27. **Equality and social justice**—Young person places high value on promoting equality and reducing hunger and poverty.
28. **Integrity**—Young person acts on convictions and stands up for her or his beliefs.
29. **Honesty**—Young person "tells the truth even when it is not easy."
30. **Responsibility**—Young person accepts and takes personal responsibility.
31. **Restraint**—Young person believes it is important not to be sexually active or to use alcohol or other drugs.

Social Competencies
32. **Planning and decision making**—Young person knows how to plan ahead and make choices.
33. **Interpersonal Competence**—Young person has empathy, sensitivity, and friendship skills.
34. **Cultural Competence**—Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds.
35. **Resistance skills**—Young person can resist negative peer pressure and dangerous situations.
36. **Peaceful conflict resolution**—Young person seeks to resolve conflict nonviolently.

Positive Identity
37. **Personal power**—Young person feels he or she has control over "things that happen to me."
38. **Self-esteem**—Young person reports having a high self-esteem.
39. **Sense of purpose**—Young person reports that "my life has a purpose."
40. **Positive view of personal future**—Young person is optimistic about her or his personal future.

Appendix C   Sport @ Dawn Information Letter

Information Letter

A study examining the effects of a sports based programme on youth development is being undertaken at IT Tralee. The purpose of this study is examine how a program which adheres to the principals of best practice for positive youth development can affect a range of psychosocial aspects of young people.

Requirements of Study Participants

Participants are to be 1st year students in secondary school. They are to complete four surveys-once at the end of September and again in early March. There willl be two groups. One will participate in the *"Sport@Dawn"* initiative (see brochure) and the other group will not. The survey will take 30-40 to complete each time. A small number of participants in the research will be involved in a short interview on their experience of school life (30 mins). There are no known risks associated with participation in this study.

Research

The *"Sport@Dawn"* programme is been run in conjunction with the Health and Leisure Department of Institute of Technology Tralee. The nature of the study will be intervention based ie students will be tested prior and after the programme. Those who do not participate in the programme will form the control group. Specifically the areas of leadership, self-determination, connectedness and resilience will be tested.

Confidentiality

Parents can be assured that all data will be strictly confidential and the identity of participants will never be revealed. Boys may withdraw from the programme at any time.

Fee

A nominal fee of €20 will be charged to cover the administration costs of the programme.

If you have any queries regarding the programme please contact

Michael Hall   Una Moynihan   Tim McMahon

Head of Science Dept of Health & Leisure   Programme Co-ordinator

IT Tralee   IT Tralee   Tralee CBS

I _____ the parent of _____ have read the accompanying information and understand the purpose of the study. I may contact the researchers named above regarding the programme if I have any concerns. I understand that my son's participation is voluntary and he may withdraw at any time.

Please tick to indicate the level of your son's involvement

☐   Full participant-*"Sport@Dawn"* Programme

☐   Control Group- Survey and interview only

Signed _____   Date_____

Appendix D   Principal's Supporting Letter

Dear Parent,

As principal of the school I am delighted that I am in a position to invite your son to participate in our new venture-*"Sport at Dawn"*.

CBS "The Green" has a proud tradition of sporting involvement. The emphasis on sport is one of the cornerstones of our curriculum. The *"Sport at Dawn"* initiative marks a new phase in our sporting history as it aims to give our students a level of sporting opportunity unparalleled in any other secondary school.

Students who complete the course will be awarded certification at the end of the school year. Although we aim to improve our students proficiency in each of the disciplines the principal criteria for certification will be puntualility and attendance.

This venture offers an exciting beginning for the Green and your son. We welcome and encourage your participation.

Yours in Sport

_____

Anthony O'Keefee

School Principal

Appendix E   Questionnaires

Personal Information Survey

Please read questions carefully and complete ALL questions honestly. All information given will be confidential and your identity will never be revealed.

Student ID   _____

1   What is your age?   _____

2   What adults live in your house?

Family Status: Please check the line that best describes the adults living in your home right now.

_____ Mother and Father

_____ Mother only

_____ Father only

_____ Mother and Stepfather

_____ Father and Stepmother

_____ Other Relatives

_____ Foster Home

_____ Other (please specify): _____

3   Is your mother/female guardian in paid employment?

YES ☐   NO ☐   I have no mother ☐

4   Is your father/male guardian in paid employment?

YES ☐   NO ☐   I have no father   ☐

5. Do you live in a *(please tick √ one)*

town   ☐

village   ☐

rural setting   ☐

6a   Are your parents physically active?

How physically active do you consider your father/male guardian to be (please tick one)

☐   Active

☐   Somewhat Active

☐   Inactive

☐   No father/male gaurdian

6b   How physically active do you consider your mother/female guardian to be (please tick one)

☐   Active

☐   Somewhat Active

☐   Inactive

☐   No father/male gaurdian

7   *Are you a member of any sports club at present?*

Yes ☐   No ☐

(b)If yes please indicate with a tick (√) the sports club that you are a member of

Sport	√	Sport	√
Athletics		Rugby	
Basketball		Tennis	
Boxing		Soccer	
Badminton		Rowing	
Hurling		Outdoor Pursuits	
Handball			
Gaelic football			
Martial arts			
Rugby			
Swimming		Other	

Details of other _____

8   How much do your parent(s) or guardian(s) support you in being physically active?
(e.g., driving you to team games, buying you sporting equipment, etc.)

☐   Very supportive

☐   Supportive

☐   Unsupportive

☐   Very unsupportive

9   Hours per week undertaking sport/physical activity which results in you breathing heavily or sweating?

☐

None

☐

½ hour

☐

1 hour

☐

2-3 hours

☐

4-6 hours

7+ hours   ☐

10   Your five closest friends are those with whom you spend most time with.

How many of them engage in physical activity
(please tick **✔** one)

☐**1**   ☐**2**   ☐**3**   ☐**4**   ☐**5**

Survey 1 Self-determination (Ryan & Deci, 2000)

ID_____

Instructions: Please read the pairs of statements, one pair at a time, and think about which statement within the pair seems more true to you at this point in your life. Indicate the degree to which statement A feels true, relative to the degree that Statement B feels true, on the 5-point scale shown after each pair of statements. If statement A feels completely true and statement B feels completely untrue, the appropriate response would be 1. If the two statements are equally true, the appropriate response would be a 3. If only statement B feels true And so on.

1.   A. I always feel like I choose the things I do.

        B. I sometimes feel that it's not really me choosing the things I do.

Only A feels true   1   2   3   4   5   **Only B feels true**

2.   A. My emotions sometimes seem strange to me.

        B. My emotions always seem to belong to me.

Only A feels true   1   2   3   4   5   **Only B feels true**

3.   A. I choose to do what I have to do.

        B. I do what I have to, but I don't feel like it is really my choice.

Only A feels true   1   2   3   4   5   **Only B feels true**

4.   A. I feel that I am rarely myself.

           B. I feel like I am always completely myself.

Only A feels true   1   2   3   4   5   **Only B feels true**

5.   A. I do what I do because it interests me.

           B. I do what I do because I have to.

Only A feels true   1   2   3   4   5   **Only B feels true**

6.   A. When I accomplish something, I often feel it wasn't really me who did it.

           B. When I accomplish something, I always feel it's me who did it.

Only A feels true   1   2   3   4   5   **Only B feels true**

7.   A. I am free to do whatever I decide to do.

           B. What I do is often not what I'd choose to do.

Only A feels true   1   2   3   4   5   **Only B feels true**

8.   A. My body sometimes feels like a stranger to me.

           B. My body always feels like me.

Only A feels true   1   2   3   4   5   **Only B feels true**

9.   A. I feel pretty free to do whatever I choose to.

           B. I often do things that I don't choose to do.

Only A feels true   1   2   3   4   5   **Only B feels true**

10.   A. Sometimes I look into the mirror and see a stranger.

           B. When I look into the mirror I see myself.

Only A feels true   1   2   3   4   5   **Only B feels true**

Survey 2   Resilience (Neill & Dias, 2001)   ID_____

Circle the answer that shows how much you agree or disagree with each statement below.

	Agree Disagree						
1. When I make plans I follow through with them.	1	2	3	4	5	6	7
2. I usually manage one way or another.	1	2	3	4	5	6	7
3. I am able to depend on myself more than anyone else.	1	2	3	4	5	6	7
4. Keeping interested in things is important to me.	1	2	3	4	5	6	7
5. I can be on my own if I have to.	1	2	3	4	5	6	7
6. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7
7. I usually take things in my stride.	1	2	3	4	5	6	7
8. I am friends with myself.	1	2	3	4	5	6	7
9. I feel that I can handle many things at a time.	1	2	3	4	5	6	7
10. I am determined.	1	2	3	4	5	6	7
11. I seldom wonder what the point of it all is.	1	2	3	4	5	6	7
12. I take things one day at a time.	1	2	3	4	5	6	7
13. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7

	Agree						Disagree
14. I have self-discipline.	1	2	3	4	5	6	7
15. I keep interested in things.	1	2	3	4	5	6	7
16. I can usually find something to laugh about.	1	2	3	4	5	6	7
17. My belief in myself gets me through hard times.	1	2	3	4	5	6	7
18. In an emergency, I'm somebody people generally can rely on.	1	2	3	4	5	6	7
19. I can usually look at a situation in a number of ways.	1	2	3	4	5	6	7
20. Sometimes I make myself do things whether I want to or not.	1	2	3	4	5	6	7
21. My life has meaning	1	2	3	4	5	6	7
22. I do not dwell on things that I can't do anything about.	1	2	3	4	5	6	7
23. When I am in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7
24. I have enough energy to do what I have to do.	1	2	3	4	5	6	7
25. It's okay if there are people who don't like me.	1	2	3	4	5	6	7

Survey 3 Connectedness (Karcher, 2005)

ID_____

Please use this survey to tell us about yourself. Read each statement. CIRCLE the number that best describes how true that statement is for you or how much you agree with it. If a statement is unclear to you, ask for an explanation. If it still unclear, put a " ?"

"**How TRUE about you** is each sentence?"

	Not at all	Not really	Sort of true	True	Very true
(1) I like hanging out around where I live (like my neighborhood).	1	2	3	4	5
(2) Spending time with friends is not so important to me.	1	2	3	4	5
(3) I can name 5 things that my friends like about me.	1	2	3	4	5
(4) My family has fun together.	1	2	3	4	5
(5) I have a lot of fun with my brother(s) or sister(s). (leave blank if you have none.)	1	2	3	4	5
(6) I work hard at school.	1	2	3	4	5
(7) My classmates often bother me.	1	2	3	4	5
(8) I care what my teachers think of me.	1	2	3	4	5
(9) I will have a good future.	1	2	3	4	5
(10) I enjoy spending time by myself reading.	1	2	3	4	5
(11) I spend a lot of time with kids around where I live.	1	2	3	4	5

	Not at all	Not really	Sort of true	True	Very true
(12) I have friends I'm really close to and trust completely.	1	2	3	4	5
(13) There is not much that is unique or special about me.	1	2	3	4	5
(14) It is important that my parents trust me.	1	2	3	4	5
(15) I feel close to my brother(s) or sister(s). (leave blank if you have none.)	1	2	3	4	5
(16) I enjoy being at school.	1	2	3	4	5
(17) I like pretty much all of the other kids in my grade.	1	2	3	4	5
(18) I do not get along with some of my teachers.	1	2	3	4	5
(19) Doing well in school will help me in the future.	1	2	3	4	5
(20) I like to read.	1	2	3	4	5
(21) I get along with the kids in my neighborhood.	1	2	3	4	5
(22) Spending time with my friends is a big part of my life.	1	2	3	4	5
(23) I can name 3 things that other kids like about me.	1	2	3	4	5
(24) I enjoy spending time with my parents.	1	2	3	4	5
(25) I enjoy spending time with my brothers/sisters. 1 2 3 4 5 (leave blank if you have none.)	1	2	3	4	5
(26) I get bored in school a lot.	1	2	3	4	5

	Not at all	Not really	Sort of true	True	Very true
(27) I like working with my classmates.	1	2	3	4	5
(28) I want to be respected by my teachers.	1	2	3	4	5
(29) I do things outside of school to prepare for my future.	1	2	3	4	5
(30) I never read books in my free time.	1	2	3	4	5
(31) I often spend time playing or doing things in my neighborhood.	1	2	3	4	5
(32) My friends and I talk openly with each other about personal things.	1	2	3	4	5
(33) I really like who I am.	1	2	3	4	5
(34) My parents and I disagree about many things.	1	2	3	4	5
(35) I try to spend time with my brothers/sisters when I can.	1	2	3	4	5
(36) I do well in school.	1	2	3	4	5
(37) I get along well with the other students in my classes.	1	2	3	4	5
(38) I try to get along with my teachers.	1	2	3	4	5
(39) I do lots of things in school to prepare for my future.	1	2	3	4	5
(40) I often read when I have free time.	1	2	3	4	5
(41) I hang out a lot with kids in my neighborhood.	1	2	3	4	5

	Not at all	Not really	Sort of true	True	Very true
(42) I spend as much time as I can with my friends.	1	2	3	4	5
(43) I have special hobbies, skills, or talents.	1	2	3	4	5
(44) My parents and I get along well.	1	2	3	4	5
(45) I try to avoid being around my brother/sister(s).	1	2	3	4	5
(46) I feel good about myself when I am at school.	1	2	3	4	5
(47) I am liked by my classmates.	1	2	3	4	5
(48) I always try hard to earn my teachers' trust.	1	2	3	4	5
(49) I think about my future often.	1	2	3	4	5
(50) I usually like my teachers.	1	2	3	4	5
(51) My neighborhood is boring.	1	2	3	4	5
(52) My friends and I spend a lot of time talking about things.	1	2	3	4	5
(53) I have unique interests or skills that make me interesting.	1	2	3	4	5
(54) I care about my parents very much.	1	2	3	4	5
(55) What I do now will not affect my future.	1	2	3	4	5
(56) Doing well in school is important to me.	1	2	3	4	5
(57) I rarely fight or argue with the other kids at school.	1	2	3	4	5

Appendix F- Focus Group transcript

Researcher- A reflection on what they did during the programme. The programme they did was very unique in that it had never been done before and they probably had never done anything like it before. So what we are going to do here now is go down through the different questions. We're going to go down through the questions first, and then you are going to write down your own answer and I'll pick up the sheet at the end.

For the first question it says describe your experiences at Sport @ Dawn. Would anyone like to describe their experience of Sport @ Dawn. Did you find this to be a good experience, in general. Would anyone like to start off this discussion. Did you find it good or bad?

Student 8- Good. It was fun.

Researcher- Now, one thing lad, one at a time. Right Dylan, in what way did you find it to be a good experience.

Student 3 - I had fun at it.

Researcher- You had fun, that was the main thing you found with it right. And in what way was it fun for you?

Student 3- Coz like I was having fun with my friends.

Student 8- It was better than just sitting around in the gym in the morning waiting for class to start.

Student 5- It woke you up in the morning.

Researcher- Right, you were awake in the morning as opposed to just lying in bed and just coming to school. Was that it?

Student 3- You learned new sports and skills?

Researcher- For example?

Student 3- Boxing and Kickboxing

Researcher- Ok, Alright will you just write or scribble something down in regard to question one, describe your experiences at Sport @ Dawn. Ok the second question there lads. What challenges did you feel during the programme that you may have felt. Obviously this is a new thing that you did in that it involved you getting up earlier than you normally would and coming to school, as well as there are a number of different sports you did that you may not have done before. Now within the sports themselves you may have experienced different challenges in that you may never have done tae kwon do before. Did you find that challenging? Did you find that difficult, did you find it something that you would like to do more of or less of or whatever?

Student 8- The athletics sessions. The coach had a sheet with all ours names on it and at the end of every week we used to have to do an obstacle course, and we'd all be trying to beat one another. It's good.

Researcher- And you found that it was a good challenge, and did that motivate you to try harder and get you going?

Student 8- Yeah.

Student 1- Sometimes you want to show off.

Reseracher- You were trying to show off. In what sports did you try and show off?

Student 1- If you pick me, you can do everything and show them how to do it.

Researcher- Did that give you greater confidence in yourself?

Student 1- Yes

Researcher- Anybody else. Colin?

Student 7-No.

Researcher- I think you will be going back to class if you're not saying anything (jokingly). Ok third question here boys. "What were your personal achievements during the programme?. Like you personal achievements, Each one of you has a personal achievement in that 52 people enrolled to do it and 32 people successfully completed it.. Now, each one of ye in fact, well, Vincent you were injured for a while weren't you. Each of ye achieved a distinction in that you got more than 80% attendance during the programme which is an achievement in itself. Now, but within the programme then did you feel that you improved in any way in certain sports. What do you think your achievements were?

Student 1- In basketball I could shoot with my left hand.

Researcher-Right. Why was that? Was it because of the instructor?

Student 1- Yeah. Because the instructor taught us how to shoot with our right and our left hands.

Researcher-Right. So you are actually practicing that now because you've been shown by Vinny how to do it and he stressed the importance of doing it, that you can't do it properly if you're doing it with the wrong hand.

Student 2- Our skill has improved in all aspects because you do warm ups especially in basketball.

Student 6- In the athletics the coach taught you to run on the balls of your feet.

Researcher- You never heard that before?

Student 6- No, I've never done athletics.

Researcher- And that would be appropriate to football-you'd learn to spring off the mark.

Student 5- In the athletics and basketball everything really, it just helps you a lot with your football.

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Researcher- Yeah ok, Dylan- just helped you in what way?

Student 3-The boxing and the kick boxing I learned more.

Researcher- You learned more about those sports you've never done them before?

Student 6- I learned stuff in the kick boxing, be on your toes and stuff.

Student 8- For me it would be the boxing cause I'm after taking it up now. It has made my reflexes way faster.

Researcher- For you Gary your achievement would have been that you took up the sport.

Student 8- Yes.

Researcher- Now moving on to question four-Would you suggest any changes to the programme? You just need to look at it and say there were aspects of it that weren't good or could we do things different . Was there sports that you didn't enjoy. So we'll start at this side this time, what did you feel, not in terms of the sports but in terms of the design of the programme-should it be earlier in the morning-should it be later? In terms of schooling is it difficult to get to school at a certain time.

Student 8-No it is not.

Student 1-You know the way we start at 8.20 this year, well we could start at 8.10 next year, because we were always there and ready for it.

Researcher- So you think it should be earlier in the morning?

Student 3-And you know the way the bell goes when you're finished. We 're rushing to get our books.

Researcher- That was a problem, was it?

Student 6-Yeah, next year if you could talk to the teachers that we have 1st class and tell them that we are going to be a few minutes late.

Reseacher-Ok.

Student 3-That we are getting togged off and getting our books and stuff.

Student 2-It could have been a bit earlier cause we don't have enough time.

Researcher-Ok Dylan?

Student 4- You need more time to get your books.

Student 6-I didn't like the boxing and the tae kwon do. If you did the boxing then the next day you had to come in and the tae kwon do.

Researcher- Which one did you enjoy?

Student 8-The boxing.

Researcher- You didn't like the tae kwon do?

Student 6- I didn't think it was that great.

Researcher-Was that due to the coach?

Student 3-I don't know, because he was moving too fast.

Student 8- He wasn't showing us one move, it was always a combination of moves.

Student 6-And the boxing you'd be fighting people, and in the tae kwon do you were doing stretches and kicking yourself.

Researcher-You felt it should be more competitive?

Student 2-Like you were saying earlier the interruptions of people coming in late, because the coaches have to start again, at what they had maybe spent some of the class doing. I know its hard for some people to come in early but maybe there should have been a cut off point at what time they should have come in.

Student 1-Should start earlier at 8.10. You can get your books at 8.55.

Researcher-Question Five- I just want to take ye back to when ye started here in the school and put yourself into the position of a first year coming into the school again. "Would you recommend the programme to the incoming 1st years"?

Student 1-You get to make friends faster cause there are people doing it and you talk to them.

Researcher-Do you think you know more people in the school because of the programme?

Child 1-Yes

Researcher-And thats because your being mixed into different groups with different classes.

Student 1-Your playing with them.

Student 2-Coaches would put you on a team and you have to co operate with your team mates and it gets everyone working together even if you didn't like that person you'd still have to work with them.

Student 6-It's better because in the morning you are usually asleep but after doing loads of running and you feel more awake.

Student 3-It's easier to make friends and you get to know people quicker.

Student 4-It wakes you up in the morning.

Student 3-It helps you make friends with people who weren't in sport@dawn aswell.

Researcher-How do you make that out?

Student 3-Cause I would have made friends with Colin in sport@dawn and then I'd get to know the boys from Holy Family through Colin then.

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Researcher- Colin?

Student 7-You were able to get up earlier and be more awake in class.

Researcher- Gary?

Student 8- You make new friends cause in my primary school Holy Family the two sixth classes would hate each other and I talk to all of them now like.

Researcher- Because of your involvement in the programme?

Student 8- Yeah.

Researcher- Question Six says "What effect did the programme have on your schoolwork and your ability to make friends". So with your schoolwork the very fact that you were getting up early in the morning did it have any effect on your schoolwork?

Student 8- Yeah cause first class in the morning used to be a wreck the head I used to just put my head down on the table now after Sport@Dawn you'd be hyper?

Researcher- Is that not a bad thing?

Student 8- No not really.

Student 7- I used to be tired in the first class, but from getting up you'd be more alert.

Student 3 – I was more awake in class.

Student 4- Listening more.

Researcher- You were listening more?

Student 5 – It just wakes you for first class and you are able to get more done.

Student 6- If you didn't do you'd forget half your books but because of doing Sport@Dawn you'd be more aware of whats going on.

Student 7- We had science first class Monday morning and if we had a test you'd be wide awake for the test and do better.

Student 1- You'd be more alert to the teachers questions and know what they mean.

Researcher- Now the other side of that is did you feel as the day went on they got tired because they got up earlier.

Student 1- No not really. After you went home if you had sports aswell after school you d be tired.

Researcher- Now question seven "did the programme have any effect on your attitude to physical activity"? Now most of ye would have been involved in sport prior to coming in to this school. Now has the programme effected you in terms of attitude to physical activity. Do you now value physical activity more?

Student 1- I do the same sports but I try harder now.

Researcher- Do you? Why is that?

Student 1- I learned more skills I think at Sport@Dawn. Like you were told to shoot with two hands and kick with both legs.

Student 2- It affected my fitness a whole lot. Like before this programme I could do ten lengths of the pool and now I can do thirteen or fourteen.

Researcher- Why is that?

Student 2- I think it's because of all the exercises, stretches that they taught us.

Researcher- So the different coaches would have given you tips on the different sports. So the martial arts guys would have been big into stretching. Is that you have better knowledge of sport in general?

Student 2- Yeah.

Student 6- I think it teaches you discipline in the morning getting out of bed and that will help you in a real match.

Student 5- It makes you do basketball at lunch time.

Researcher- It makes you more inclined to do sport because you've done this programme.

Student 5– It makes you more determined in other sports.

Student 4- It makes you fit.

Student 3- It makes faster and fitter because I was getting up in the morning and I was running and then I'd have football after school, nearly every day, and I'd do sprints in that aswell so I got faster.

Student 7- I got fitter cause I had sport in the morning and I'd have training as well after school.

Student 8- I was way more determined to go into competitions because I used to do judo before and I used to be nervous going onto the mat.

Reseracher- You felt more confident in yourself. Where do you think that confidence came from?

Student 8-Moss like he's always encouraging you, the boxing coach.

Researcher- Now the last question. "What did you learn about yourself during the programme"? Just take yourself back again to coming into the new school and not knowing anyone. Well, knowing some people within the school, and what type of person were you and what type of person you are now? So have you changed? What effect did the programme have on you as a person?

Student 8- When I came into this school I had bad temper problems but since I did the sports I noticed everyone else getting over it and I just do the same thing now.

Student 7- I learned how to get out of bed earlier cause before I wouldn't get up until about half eight.

Researcher-How is that better for you?

Student 7- I feel better going into school and I'm always on time.

Student 3- I can make friends very easy cause before I started Sport@Dawn I'd just talk to the boys from the CBS but now I'd talk to everyone in the class.

Student 4- Same

Student 5- It makes you more determined and less likely to give up.

Student 6- It made me more fitter and I took on other sports like judo which are alot different than other sports like gaelic football.

Student 2- I think we learned how to push ourselves when it comes to sports and that gives us confidence say like when you scored a basket you'd get more confidence off it.

Student 1- Just more confidence.

Researcher- Why more confidence?

Student 1-Whearas before I would n't want to kick the ball with my bad foot before now because I would mess it up now I would do it.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Self Determination1 Total is normal with mean 38.795 and standard deviation 7.81.	One-Sample Kolmogorov-Smirnov Test	.507	Retain the null hypothesis.
2	The distribution of PreSelfDetermination is normal with mean 36.614 and standard deviation 7.381.	One-Sample Kolmogorov-Smirnov Test	.643	Retain the null hypothesis.
3	The distribution of PostPercievedChoice is normal with mean 19.909 and standard deviation 4.307.	One-Sample Kolmogorov-Smirnov Test	.166	Retain the null hypothesis.
4	The distribution of PrePercievedChoice is normal with mean 18.341 and standard deviation 4.291.	One-Sample Kolmogorov-Smirnov Test	.522	Retain the null hypothesis.
5	The distribution of PostAwarnessofOthers is normal with mean 18.886 and standard deviation 4.637.	One-Sample Kolmogorov-Smirnov Test	.192	Retain the null hypothesis.
6	The distribution of PreAwarenessofOthers is normal with mean 18.273 and standard deviation 4.742.	One-Sample Kolmogorov-Smirnov Test	.623	Retain the null hypothesis.
7	The distribution of PostResilience is normal with mean 56.955 and standard deviation 17.669.	One-Sample Kolmogorov-Smirnov Test	.525	Retain the null hypothesis.
8	The distribution of PreResilience is normal with mean 59.568 and standard deviation 18.205.	One-Sample Kolmogorov-Smirnov Test	.317	Retain the null hypothesis.
9	The distribution of PostConnectednessFamily is normal with mean 44.886 and standard deviation 7.564.	One-Sample Kolmogorov-Smirnov Test	.661	Retain the null hypothesis.
10	The distribution of PreConnectednessFamily is normal with mean 46.614 and standard deviation 9.698.	One-Sample Kolmogorov-Smirnov Test	.451	Retain the null hypothesis.
11	The distribution of PostConnnectNeighFriends is normal with mean 46.75 and standard deviation 7.53.	One-Sample Kolmogorov-Smirnov Test	.229	Retain the null hypothesis.
12	The distribution of PreConnnectNeighFriends is normal with mean 47.432 and standard deviation 6.95.	One-Sample Kolmogorov-Smirnov Test	.116	Retain the null hypothesis.
13	The distribution of PostConnnectPeers is normal with mean 23.477 and standard deviation 3.938.	One-Sample Kolmogorov-Smirnov Test	.175	Retain the null hypothesis.
14	The distribution of PreConnnectPeers is normal with mean 22.659 and standard deviation 4.142.	One-Sample Kolmogorov-Smirnov Test	.339	Retain the null hypothesis.
15	The apstribution of PostSelfNowFuture is normal with mean 48.114 and standard deviation 5.604.	One-Sample Kolmogorov-Smirnov Test	.562	Retain the null hypothesis.
16	The distribution of PreSelfNowFuture is normal with mean 48.114 and standard deviation 6.146.	One-Sample Kolmogorov-Smirnov Test	.703	Retain the null hypothesis.
17	The distribution of PostConnectednessSchool is normal with mean 45.341 and	One-Sample Kolmogorov-	.987	Retain the null

Appendix H

Choice of Activities

Non competitive

Focus on attendance

Adequate Gym Facilities

Teacher Support

Coaches trained in youth development

Accessibility for all students

School Management support

Continuous Feedback