

Attainment Value and Developmental Experiences in Youth Sport: Exploring
the Role of Gender and Age.

Cathy Drane

Bachelor of Psychology with Honours

Murdoch University

*This thesis is presented in partial fulfillment of the requirements for the
degree of Bachelor of Psychology (Honours), Murdoch University, 2010.*

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary educational institution.

.....

Copyright Acknowledgement

I acknowledge that a copy of this thesis will be held at the Murdoch University Library.

I understand that, under the provisions of s51.2 of the Copyright Act 1968, all or part of this thesis may be copied without infringement of copyright where such a reproduction is for purposes of study and research.

This statement does not signal any transfer of copyright away from the author.

Signed:

Full Name of Degree: Bachelor of Psychology with Honours

Thesis Title: Attainment Value and Developmental Experiences in Youth

Sport: Exploring the Role of Gender and Age.

Author: Cathy Drane

Year: 2010

Abstract

This study examined associations between attainment value and experiences in adolescent sport, and explored whether gender and year level moderated this association. A sample of 690 year ten and 304 year twelve students from schools across Western Australia responded to a computer-administered self-report survey. Participants were asked to report the developmental experiences in adolescent sport in 4 domains: identity (exploration, reflection), initiative (goals, effort, and time management), team work and social skills and the negative experience of stress. The findings indicate that higher levels of attainment value in sport predicted more experiences of identity, initiative, team work and social skills, and stress. In addition, the role of gender and year level was explored, with both gender and year level moderating the attainment value and identity reflection link, which was pronounced for year 12 adolescent males. The value or importance that an adolescent attaches to their sport may facilitate the psychological benefits experienced, especially for year 12 adolescent males in relation to reflecting on their identity. Implications of these findings and suggestions for future research are presented.

Keywords: adolescence, sport, attainment value, experiences, gender, year level.

Acknowledgments

In preparation of this thesis, thanks go to my supervisor Professor Bonnie Barber, for her guidance and timely words of encouragement and insight.

Thank you for believing in me, and inspiring me.

Thank you, to my friends and colleagues at Murdoch University, in particular Jenine Wenn and Lyn Vernon, for their friendship and encouragement which has kept me going through the challenging times. Thank you to Corey Blomfield and Karina Annear for their advice and support, and the YAPS office for all their help with data collection and collation.

Most importantly, thanks to my husband Mark and my children, Alexander, James, and Annabel. Thank you for coming with me on this amazing journey and for giving me the love, space and understanding to follow my dreams.

**Attainment Value and Developmental Experiences in Youth Sport:
Exploring the Role of Gender and Age.**

Youth of today spend much of their out of school time involved in extracurricular activities, which can be considered as distinct learning environments, offering opportunities for growth and development. The extensive literature outlining the role of extracurricular activities highlights the multiple worlds of an adolescent, who are transitioning from adolescence to adulthood. It has become evident that extracurricular activities play a role in the development of real-world skills and aid in the connection of young people to the society in which they must live. Peer groups, sporting teams, churches, community-based youth organizations and so forth are providing young people with the experiences that help integrate them into adult society (e.g., Fletcher et al., 2000). The importance of these contexts as an avenue for development is beginning to be addressed by policymakers, making funding decisions, who are recognizing that adolescents have a life in “after school” hours, in addition to their lives at home and school, which may be critical to their development (e.g., Eccles & Gootman, 2001; Pittman, Diversi, & Ferber, 2002).

According to Larson (2000) structured youth activities, which include extracurricular school activities and community-based activities, are contexts that provide adolescents with the conditions necessary to actively engage in psychosocial growth (Larson, 2000). The evidence for the benefits of activity involvement is growing (Barber, Abbott, Blomfield, & Eccles, 2009; Feldman

& Majasko, 2005; Marsh & Kleitman, 2002). Participation in organized extracurricular activities is positively associated with indicators of academic performance (Eccles & Barber, 1999; Eccles et al., 2003; Fredricks & Eccles, 2006b), psychological adjustment (Barber, Eccles, & Stone, 2001; Fredricks & Eccles, 2006b; Marsh & Kleitman, 2002) and reduced antisocial behavior (Durlak & Weissberg, 2007; Fredricks & Eccles, 2006b).

The growing literature highlighting the benefits of participating in structured extracurricular activities offers considerations for policymakers regarding the availability and quality of activities for children. The implications of this research may influence policymakers to make assumptions about the derivation of positive outcomes; that benefits are available to all regardless of motivational intent, regardless of choice. Ultimately this may influence policy to promote mandatory participation in activities, so that all children benefit. It is possible, however, that the benefits of activity participation are contingent on intrinsic mechanisms associated with choice and voluntary participation, such as the importance or meaning an individual attaches to an activity. In other words, children who voluntarily participate in activities choose to participate because the activity interests them and is meaningful to them. Furthermore, children who choose not to participate in activities may have intrinsic reasons for not doing so. It is possible that some of these reasons originate from a lack of interest or motivation for an activity that contains little value to them. If activity participation becomes mandatory or coercive, and not meaningful, it may not

offer the same benefits. An understanding of the potential of the activity context, differentiating the specific processes of development that occur across organized activities, will provide useful information to guide policy. As a step toward this goal, this study will investigate what organized sport experiences are like for children with more or less interest or value in sporting activities.

Adolescents and the Role of Extracurricular activities.

Adolescence

Adolescence is a unique developmental period characterized by numerous changes that transpire simultaneously. These changes include the biological, cognitive, and emotional changes associated with puberty, as well as the social and educational changes associated with the transition from primary school to high school (Eccles & Midgely, 1989; Eccles et al., 1993). During puberty individuals increase their ability to think abstractly, recognize the hypothetical as well as the real, engage in more complex information processing strategies, consider multi-faceted problems, and reflect on the self (Wigfield & Eccles, 2002). These changes can challenge an adolescent's evolving sense of self and offer opportunities for identity exploration and social role definition (Eccles, Lord & Roeser, 1996). According to Arnett (1999) this perspective suggests that adolescence is a period when specific types of problems, such as involvement with risky problem behavior, are more likely to arise than in any other period of development. Eccles and her colleagues suggest that changes in the social and educational environments

can be associated with shifts in adolescents' trajectories (Eccles et al., 1993). For some adolescents a positive trajectory of positive growth and adjustment, for others, the outcomes are more negative, such as poor self-esteem, mental health issues, and are often coupled with increases in involvement with risky, problem behavior (Eccles & Midgely, 1989; Eccles et al., 1993). Across all youth, the adolescent experience contains many similarities. However the individual journey encompasses a developmental pathway that is unique to the individual and reliant upon complex interactions between individual characteristics and features of their environment (Silbereisen & Lerner, 2007). The concurrent changes in the individual and their social environment, along with the transitional nature of adolescence, make adolescence ideal for studying developmental experiences (Eccles, Lord & Roeser, 1996).

Extracurricular Activities

Adolescents spend much of their leisure time in both structured and unstructured activities (Larson & Verma, 1999; Staff, Mortimer & Uggem, 2004). Leisure provides adolescents with unique opportunities for development, providing a context in which adolescents can begin to manage their own experiences. The capacity to manage experiences occurs as a result of their increased personal decision-making capabilities, their need for increased autonomy and increased control over their environment (Brown & Theobald, 1998; Silbereisen & Eyferth, 1986; Eccles, Lord, & Buchanan, 1996).

Extracurricular activities provide highly structured leisure environments, in which participation significantly affects social, educational, civic, and physical development (Durlak & Weissberg, 2007; Feldman & Matjasko, 2005; Fredricks & Eccles, 2006b; Mahoney et al., 2005). Mahoney and Stattin (2000) describe highly structured activities as including “regular participation schedules, rule-guided engagement, direction by one or more adult activity leaders, an emphasis on skill development that is continually increasing in complexity and challenge, activity performance that requires sustained active attention, and clear feedback on performance” (pp.114-115).

Sport is an example of an extracurricular activity that can be described as highly structured. Sport can be formally defined as an “institutionalized competitive activity involving two or more opponents and stressing physical exertion by serious competitors, who represent or are part of formally organized associations” (Nixon, 1984, p.13). In Australia 63.7% of adolescents, aged 12-14 years, participated in sport outside of school hours, decreasing to 54.6% for 15-17 year olds (ABS, 2006).

In order to evaluate how participation in organized sport activities contributes to adolescent development, researchers have been examining the role these activities play in the development of age-appropriate competencies (Collins et al., 2000). Sports have been identified for enabling adolescents to socialize with their peers and with adults, establish and achieve personal goals, compete fairly, recover from defeat, and peaceably resolve disputes (Danish & Gullotta, 2000). Dworkin, Larson, and Hansen (2003) suggest that

sports stand-out from other school contexts because they offer opportunities for adolescents to develop initiative, form an identity, and learn new skills as well as emotional competencies. Acquiring competencies, such as initiative and identity, allows adolescents to tap into the resources that promote positive functioning as well as reducing the risks of developing problem behavior (Eccles et al., 2003; Mahoney & Bergman, 2002; Mahoney et al., 2006).

Theoretical Frameworks: The Implications of the Expectancy-Value Theory and Stage-Environment Fit Theory.

Expectancy-Value Theory

When children are offered a choice of activities in which to participate, what motivates them to select one activity over another? Theorists attempt to answer this question by looking at how motivation influences choice, persistence, and performance (Wigfield & Eccles, 2000). One perspective on motivation is the expectancy-value theory which links choice to performance expectations and to the importance, or value, individuals attach to the available options (Eccles (Parsons), 1984; Eccles (Parsons et al., 1983). This theoretical framework can be applied to investigating the motivational factors that underlie individuals' decisions regarding activity and achievement-related choices (Eccles (Parsons), 1984; Eccles (Parsons et al., 1983).

Task value is suggested as the quality of the activity that contributes to the increasing or decreasing chance that an individual will select it (Eccles (Parsons) et al., 1983). Eccles and her colleagues argue that an individuals' choice of an activity, persistence, and performance can be explained by their beliefs about how well they will do in the activity and the extent to which they

value the activity (Eccles et al., 1993; Wigfield, 1994; Wigfield & Eccles, 1992). Expectancies and values are considered to be influenced by task-specific beliefs; their perceptions of competence, perceptions of the difficulty of the tasks, an individuals' goals and self-schema, and their expectations for success (Eccles et al., 1993; Eccles & Wigfield, 2001; Eccles & Wigfield, 1995; Wigfield & Eccles, 1994; Wigfield, Eccles, & Rodriguez, 1998). Eccles and colleagues hypothesized that student's motivation to complete tasks stems from their value structure: intrinsic value, utility value, and attainment value associated with the task (Wigfield & Eccles, 1994).

Intrinsic value will often result from the enjoyment an activity produces for the participant (Wigfield, 1994). Both interests and personal relevance produce intrinsic value for a student. Generally, adolescents are intrinsically motivated to pursue activities that are moderately novel, interesting, enjoyable, exciting, and optimally challenging. For a sport to have intrinsic value, an athlete would view their sport as enjoyable, exciting and challenging.

Utility value is described as how the task relates to future goals. While students may not enjoy an activity, they may value a later reward or outcome it produces (Wigfield, 1994). To be valued for utility, the activity must be fundamental to their vision of their future, or it must be contributive to their quest for other goals. For example, an athlete may view their sport as an avenue to eventually play elite level sport or simply to become physically fit.

Attainment value is the importance students attach to the task as it relates to their concept of identity and their ideals or competence in a given field (Wigfield, 1994). For example, an adolescent who identifies themselves as an athlete will set goals related to their sport. This adolescent is then motivated to attain these goals as they are associated with their understanding of who they are (Barber et al., 2005; Wigfield, 1994). Attainment value can be regarded as a mechanism that underpins choice and may highlight the importance of activity participation being voluntary. Personal performance expectations coupled with the value adolescents attach to an activity will ultimately guide activity choice, as well as provide an environment that is matching or fitting individual psychological needs, offering opportunities to be challenged and grow.

As children grow, they begin to develop mental images of who they are and who they would like to be (Eccles & Harold, 1991). These images include such things as personal values, ideations of their personality and capabilities, long-term plans/goals, conceptions of gender roles, and self-schema (Eccles & Harold, 1991). Eccles (Parsons) et al, (1983), suggest that individuals will choose to participate in activities that they see as being compatible with their self images and avoid activities that are inconsistent with these images. Applying the concept of attainment value specifically to sporting activities suggests that if an individual views a sporting activity as requiring the characteristic of strength and they want to confirm that they possess strength,

then the attainment value of the sporting activity increases, as does the likelihood of selecting it (Eccles & Harold, 1991).

The value an adolescent places on the sporting task or its outcome and their perceived likeliness of success will determine the level of effort exerted to complete the sporting task successfully (Eccles & Harold, 1991). There is a motivating potential that comes about when anticipating outcomes, which is largely determined by the subjective value placed on its attainment (Bandura, 1997). Two people may have the same beliefs about the outcomes of their behavior but may evaluate the attractiveness of that outcome differently. The person who finds the outcome more attractive or values the outcome will be more motivated to attain it (Bandura, 1997).

Furthermore, value may have the effect of compensating for low probabilities of success in an activity. That is, an individual may put forth effort because they value the outcome, even when there is a low probability of success. This is an example of the influence that value has in determining behavior (Wigfield, 1994). As stated by Wigfield: “When students value a task, they will be more likely to engage in it, expend more effort on it, and do better on it” (Wigfield, 1994, p. 102). Investigating adolescents’ attainment value may strengthen our understanding of how children develop motivational values in sport.

Stage-environment fit theory

The school environment is a context that provides an avenue for socialization that emphasizes educational development and the acquisition of

cognitive skills and knowledge required for functioning in the workforce and in the economic community at large (Kleiber, 1999; Larson 2000). However it is argued that this environment may not provide a sufficient context for the development of the life and social skills necessary for successful adult life (Kleiber, 1999; Larson 2000). A conceptual framework is required to understand the impact that the environment has on adolescent development, a framework that considers schools as a context for development, as well as considering the changing developmental needs, emotional, cognitive, and social, of the individual as they move through the school system (Eccles et al., 1993). Eccles and colleagues proposed the stage-environment fit model to guide research on the impact the school transition has on adolescent development (Eccles et al., 1993). A developmental variant on the person-environment fit theory (see Hunt, 1975), the stage-environment fit approach proposes that behavior, motivation, and mental health are influenced by the fit between the characteristics individuals bring to their social environments and the characteristics of these social environments (Eccles & Midgely, 1989; Eccles et al., 1993; Eccles, 2008).

The period of adolescence brings with it extensive changes in developmental needs as well as changes in their social contexts (Eccles et al., 1993). Adolescents whose psychological needs are not being met by their social environment are not likely to do very well or be very motivated. If there isn't a fit between psychological needs and the social environment then there is a mismatch that can result in a decline in motivation, interest, performance,

and behavior (Eccles & Midgely, 1989; Eccles et al., 1993; Eccles, 2008). The challenges associated with their changing developmental needs and changing social context, bring with them opportunities for adolescents to embark on different developmental trajectories, either positive or negative (Eccles, Lord & Roeser, 1996). For some this challenging period can promote positive growth and adjustment, for others the challenges augment vulnerabilities to self-esteem and mental health difficulties, as well as to a peer pressure involving risky and problem type behaviors (Eccles, Lord & Roeser, 1996). Therefore according to this perspective, adolescents whose environments are not developmentally suitable are more likely to experience difficulties or negative outcomes, while adolescents whose social environments are responsive to the adolescents changing needs are likely to experience more positive outcomes. Research by Eccles and colleagues (Gutman & Eccles, 2007; Eccles & Midgley, 1989; Eccles et al., 1993) provides strong support for this hypothesis.

Applying the stage-environment fit theory specifically to the sporting arena suggests that a fit is required between the psychological needs of the individual and what the sporting environment has to offer, for growth and challenge to occur. It may be that this fit is contingent on other factors, such as the importance or value an individual places on the sporting activity.

Developmental Experiences and the Youth Experience Survey 2.0

Extensive research has documented the relationship between participation in structured activities and positive adolescent development. A limitation of

this literature has been the lack of empirical research concerning the mechanisms or processes underlying this positive relationship. Positive development is not simply about avoiding a negative developmental trajectory; it is more about providing opportunities for growth and challenge (Lerner, 2001). Positive development is not about being problem free, but rather about being prepared; reducing the chance of negative development, protection from risks, and offering opportunities for growth and life skills development (Lerner, 2001).

Researchers have begun to investigate these mechanisms and in doing so have recognized the role extracurricular activities play as a context affording adolescents a range of developmental experiences. However, in the process of investigating experiences as a mechanism for positive development, researchers are recognizing development as multidimensional. Therefore developmental experiences can be considered as more than just a mechanism for development, but rather as important in their own right. Developmental experiences can be considered key developmental milestones in adolescence which need to be achieved. Understanding and articulating how these milestones are achieved is important and a key focus of this present study.

The Youth Experience Survey (YES) 2.0 was formulated to chart the developmental experiences of youth participating in organized leisure activities (Hansen et al., 2003; Larson et al., 2006). The YES 2.0 was developed using qualitative methodology, with adolescents reporting the types

of developmental experiences they perceived as pertinent to their organized leisure activities (Dworkin et al., 2003; Larson et al., 2006). Larson and colleagues found that adolescents in faith-based activities reported high rates of experiences related to identity, emotional regulation, and interpersonal development compared to other activities. Sports and arts programs provided more experiences related to the development of initiative, although sports were also related to stress. Service-based activities were associated with experiences related to the development of teamwork, positive relationships, and social capital (Larson et al., 2006).

The YES 2.0 Survey is comprised of 70 items that measure the frequency of developmental experiences in 3 domains; interpersonal, personal and negative experiences. The personal domain measures experiences that relate to identity, initiative and basic skills (emotional regulation, cognitive skills). The interpersonal domain measures experiences such as interpersonal relationships, teamwork and social skills in addition to adult networks and social capital. The negative experience domain measures experiences relating to stress, negative peer influence, social exclusion, negative group dynamics and inappropriate adult behavior (See Appendix A for YES 2.0 Survey). The YES 2.0 survey provides valuable information regarding the distinct learning experiences that leisure activities provide for the individual (Hansen et al., 2003; Larson et al., 2006) and is the survey of choice for this study. The experiences of identity formation, initiative development, team work and

social skills, as well as the negative experience of stress, have been selected to represent each domain of developmental experiences in this study.

Experience of Identity Formation

Identity development is a life-long process which tends to pass through a particularly intense phase during adolescence. It is an adolescent's capacity for self-reflection that makes identity exploration possible (Erikson, 1968; Sharp et al., 2007). Explorations are made into the various aspects of identity that culminate in commitments that set the foundation for adult life (Sharp et al., 2007). If this exploratory process is successful, the adolescent emerges more individuated with an understanding of who they are and how they fit into the world (Erikson, 1968; Sharp et al., 2007).

Research on identity development has recognized the role activity participation plays as a context for identity work (Barber et al., 2005; Eccles & Barber, 1999; Eccles et al., 2003; Hansen, Larson, & Dworkin, 2003; Larson, 2000; Waterman, 1990; Youniss & Yates, 1997). Voluntary participation in youth activities stimulates an individual to evaluate their own interests, talents and values, as well as their place in the social structure (Eccles et al., 2003; Youniss & Yates, 1997). In addition, it has been suggested that the relatively fixed structure of the school academic environment doesn't provide adequate freedom to explore and express identity alternatives, and to find developmental opportunities. In comparison, extracurricular activities, including sport, can provide the freedom for personal development through identity-related reflection and exploration

(Barber et al., 2001; Eccles et al., 2003). Voluntary activities provide this freedom by offering adolescents opportunities to experience autonomy, exert control, and become active agents in their own development (Larson, 2000). Hanson and colleagues found that adolescents were more likely to comment that activities such as service related, faith-based, and sporting activities, “got me thinking about who I am” than did their academic classes, and that those experiences differed, depending on the type of activity (Hansen, Larson, & Dworkin, 2003).

Activities provide a means in which an individual’s identity can be expressed and refined (Eccles, 1987; Eccles & Barber, 1999). Waterman (1984) suggests that as part of identity exploration, adolescents try out different activities. When an activity supports the self-concept of an adolescent, it is also likely to cultivate psychological well-being as well as attachment to the context providing the opportunities (Eccles et al., 2003; Waterman, 1984). Likewise when opportunities are unavailable to an individual, or there is a bad match to their interests, then there is a lack of support for identity exploration and affirmation (Eccles et al., 2003; Waterman, 1984).

Participating in team sports provides a good example of identity exploration and the attainment value process. Adolescents who participate in sport have the opportunity to demonstrate that they are an athlete, and explore whether being an athlete is an identity that is meaningful to them (Barber et al., 2005; Eccles et al., 2003). An adolescent’s decision to participate in sport

should be influenced by the high value or importance placed on being an athlete (Barber et al., 2005; Eccles et al., 2003). Once an adolescent is engaged in sport then their identity as an athlete should be internalized as a result (Eccles et al., 2003). However, not all sports that adolescents engaged in will facilitate identity formation (Barber et al., 2005; Eccles & Barber, 1999). Activities that are voluntary or self-selected are more likely to provide a greater fit with their interests and talents, and therefore have higher attainment value (Barber et al., 2005; Eccles & Barber, 1999). Adolescence is a period of time most salient to identity formation; however the opportunities for identity-related experiences may be contingent on the level of importance attached to the sporting activity. It is possible that adolescents who place high attainment value or importance on their sporting activity will report more opportunities for identity-related experiences, such as exploration and reflection.

Experience of Initiative Development

The economic, social, and political climate of our Western society presupposes an individual who is capable of acting autonomously and possesses the capacity for initiative (Larson, 2000). According to Larson (2000), initiative can be defined as the capacity to direct attention and effort over time toward a challenging goal. He suggests that the development of initiative is a core quality of positive youth development within western culture and a requirement for adulthood (Larson, 2000).

The construct of initiative is closely related to the capacity for agency or for autonomous action (Deci, 1995; Ryan, 1993). Initiative consists of the

ability to be motivated from within and to direct attention and effort toward a challenging goal (Larson, 2000). Larson suggests, that in addition to being a core quality of positive development, other aspects of positive development, for example, creativity, leadership, altruism, and civic engagement is contingent on initiative (Larson, 2000).

Larson argues that initiative is a quality that emerges from an adolescent's every day experiences, from the excitement and absorption that occurs in an adolescent's ordinary life experiences transpiring in the present moment (Larson, 2000).

However the development of initiative is by no means a given result of childhood and adolescence (Larson, 2000). Furthermore, it has been argued that the pathway to becoming an autonomous and agentic adult in our culture is paved with problems (Larson, 2000). Much of this may be due to the disparity between our expectations of children and our expectations of adults, especially in regards to initiative (Larson, 2000). Children in Western society are given few responsibilities and treated as dependent, while adults are expected to be independent and have complete control over their lives (Larson, 2000). This is problematic to the extent that society doesn't provide children with the necessary support or scaffolding required to practice and further develop initiative (Larson, 2000; Larson et al., 2005). Research suggests that structured extracurricular activities provide the required supportive context for the development of initiative particularly when compared with academic classes or hanging out with peers (Abbott & Barber,

2007; Hansen, Larson & Dworkin, 2003; Larson, Hansen, & Moneta, 2006). Researchers have argued that organized sports provide opportunities for the development of goal setting, persistence, problem solving, teamwork, managing emotions, and managing time (Danish, Taylor, & Fazio, 2003; Larson et al., 2005). Many of these skills are associated with learning to organize and manage effort and they fit under the heading of what Larson (2000) calls initiative.

As a means to understanding the developmental processes occurring in sport participation, researchers have focused on the roles that task orientation and goal achievement play (Brustad et al., 2001; Duda & Ntoumimis, 2005). According to Larson and colleagues, organized sports are a distinct context for high rates of initiative experiences. It has been suggested that the development of skills for persistence, while pursuing a goal is facilitated by the challenge and achievement-focused nature of sport (Duda & Ntoumimis, 2005; Larson & Kleiber, 1993), and this may partly explain the positive link found between athletic participation and improved academic performance (Mahoney & Cairns, 1997; Marsh & Kliettman, 2002). The types of initiative found in sports can include experiences of goal setting, applying effort, and learning time management (Duda & Ntoumimis, 2005; Larson & Kleiber, 1993), and these will be the focus of attention for measuring initiative in this present study. It is possible that the high rates of initiative that have been found in sporting activities depends on the level of value or importance an adolescent attaches to their sport. It is possible that the more important

sporting activities are to adolescents, the more they will set goals, apply effort, and manage their own time.

Experience of team work and social skills

The abilities required to understand other people's points of view involves a long developmental process which spans throughout adolescence and beyond (Larson, Hansen & Walker, 2005). The process of acquiring the capacity to understand other people as having their own thoughts and feelings commences in early adolescence (Larson, Hansen & Walker, 2005).

Adolescents tend to make the assumptions that others are thinking about the same information that they are, and this egocentrism may impede their understanding and anticipation of the differing points of view of fellow sport players, making the coordination of a sport team more problematic (Larson, Hansen & Walker, 2005).

Participation in team sporting activities provide adolescents with opportunities to meet other individuals at school who share common interests, people who they may not have come in to contact with otherwise.

Participation strengthens adolescents' social skills and confidence in relating to peers both in and out of their activities (Fredricks & Eccles, 2002). Social skills are important in team settings because working in teams increases the interdependence among members, often produces greater conflict, increases the shared workload as well as the coordination demands, compared to working independently (Morgeson et al., 2005).

Team sports offer adolescents an environment conducive to developing team work and social skills, an environment where they are required to relate to their peers and perform as an integrated team in order to be successful. However, the opportunities for team work and social skill development afforded to them may be contingent on the value that is attached to their sporting activity. It is possible that the more important the sporting activity is to them, the more important it is for them to get along with their peers and work as a team.

Negative experience: Stress

Research indicates that organized youth activities are most often a context of positive development; however, there is a smaller body of evidence suggesting that these activities are sometimes a context of negative experiences that may impede learning or lead to dropping out (Dworkin & Larson, 2006; Scanlan, Babkes, & Scanlan, 2005; Smoll & Smith, 1996). Studies suggest that participation in sports can lead to increased alcohol use (Eccles & Barber, 1999) and participation in both music and sports can lead to unhealthy levels of stress (Scanlan, Babkes, & Scanlan, 2005; Smoll & Smith, 1996). Competitive sport in particular can be stressful to some participants because of its fundamental achievement elements which include the evaluation of athletic ability, testing, and the very public demonstrations associated with participation (Scanlan, 2002). In addition, the goal achievement focus of sport is also likely to explain the frequent experiences of stress found in sports (Scanlan, Babkes, & Scanlan, 2005).

According to Fredricks & Eccles, (2002) adolescents who reported negative experiences in sport reported feeling pressured by the competition aspect of sport and felt dejected when their performance didn't measure up to their expectations. Adolescents also discussed the stress associated with conflicts they had with their coach or teammates (Fredricks & Eccles, 2002). Research documents the occurrence of negative peer dynamics among youth and inappropriate behavior by coaches on some sports teams (Brustad, 1993; Brustad et al., 2001). Balancing their sporting activities with other interests and obligations in their lives, as well as lack of time were also thought to contribute to feelings of stress (Fredricks & Eccles, 2002). Adolescents reported that they didn't have enough time to complete homework, to be with their friends who were not involved in their sporting activities and to try out different activities (Fredricks & Eccles, 2002). Moreover, adolescents reported the stress associated with the physical consequences of sport participation, feeling tired or being injured (Fredricks & Eccles, 2002).

An understanding of the impact that negative experiences may have on sport participation and how attainment value may not compensate for these negative experiences is valuable. Based on the literature by Fredricks & Eccles, (2002), it is possible that the more meaningful sport is to an adolescent, the more personally invested they are, the higher their expectations are to succeed, the more stress they experience.

The Moderating Roles of Gender and Age.

Gender

There are consistent gender differences in the types of activities in which adolescents participate (Eccles, Barber, Stone, & Hunt, 2003; McHale et al., 2004; Passmore & French, 2001), but little is known about the gender differences in experiences within these activities. Children prefer activities that are congruent with their gender roles and participate in gender-typed activities more often than in gender atypical activities (Jacobs et al., 2005). It appears that one of the main ways in which children express gender identity is by participating in and valuing gender-appropriate activities (Jacobs et al., 2005). Sport is considered a gender-stereotyped domain with boys participating more frequently, reporting higher sport self-concepts, as well as stronger beliefs about the value of sport, than girls do (Eccles & Harold, 1991; Eccles & Wigfield, 2001).

In accordance with the expectancy-value theory, one way that gender roles can affect task values is through their influence on the importance that females and males attach to particular personal characteristics (Eccles & Harold, 1991). An example of this could be the value the male gender-role places on competitiveness, strength, and physical prowess compared to the female gender role (Eccles, 1987). The extent to which some activities embody these masculine characteristics compared to others, may predict the differing attainment values for men and women (Eccles & Harold, 1991). Although the research literature acknowledges the influence gender has on the

type of activities in which an adolescent participates, and has begun to uncover how gender may influence the value an adolescent attaches to these activities, little is known about the role of gender in how experiences within these activities are perceived. It is possible that gender may moderate the relationship between the value attached to sport and the experiences gained from sport. Perhaps adolescent males, for whom sport is reinforcing of their gender role, may not need to value their sport to have high levels of developmental experiences in sport. Alternatively, the importance an athlete attaches to their sport may predict levels of experiences regardless of gender. Based on the limited research regarding gender differences in the attainment value and experiences association, the direction of the prediction is unclear.

Age (year levels 10 and 12).

Very little research has explored developmental differences within the adolescent period in regards to attainment value and experiences. However adolescence is a period of growth both physically and psychologically, during which adolescents are gradually acquiring certain abilities and capabilities. Erikson argued that certain tasks become primary at different ages or stages of development, and highlighted, in particular, the developing capacity for self reflection as a feature of adolescence (Erikson, 1968). Larson et al., (1989), in reference to the development of initiative, suggested that motivation and attention increase with age, and adolescents learn to coordinate these two elements during the high school years. They also found that older adolescents reported more control and self regulation of motivation and attention than

younger adolescents. However due to little previous research in this area, it is uncertain whether to expect age to condition the relationship between attainment value and any of the experiences in sport. As the four developmental experiences examined in this study are central tasks of adolescence, it would be useful to determine whether or not being two years older makes a difference for the association between attainment value and experiences.

An important consideration of the adolescent period is the impact that the final school year may have on both developmental experiences and attainment value. Adolescents in year 12 are preparing to transition out of high school at a time which is developmentally sensitive, particularly in regards to identity. It is possible that these experiences are more salient at this time of transition. Decisions made at the end of high school can have consequences that affect adult life, and as adolescents approach the end of high school they are forced to make decisions about employment, higher education, relationships, sexuality and morality. The long-term consequences of these choices transform the identity question from an abstract future problem into an urgent problem (Sharp et al., 2007).

As year 12 adolescents are on the threshold of final exams, and time is pressured, it is important that adolescents involve themselves in activities that they care about and are meaningful to them. As mentioned previously, sport is regarded as a context which facilitates identity formation (Eccles & Barber, 1999; Eccles et al., 2003; Hansen, Larson, & Dworkin, 2003; Larson, 2000;

Waterman, 1990; Youniss & Yates, 1997), and should therefore facilitate an adolescents capacity for self reflection, a necessary element of identity formation (Erikson, 1968). Youth involved in activities deemed less personally relevant are possibly less likely to be engaged in the reflection process during those activities. As very little research has explored the role of age differences in attainment value and experiences, the present study offers a unique contribution to this field. It is possible that age may moderate the relationship between attainment value and experiences. However based on the limited research regarding age differences in the attainment value and experiences association, the direction of the prediction is not clear.

Present study

The present study had two major goals. First, to investigate the association between attainment value and the developmental experiences of identity formation; initiative development; team work and social skills; and the negative experience of stress in sport, among Australian adolescents. The second goal was to determine whether this relationship was moderated by gender and age (year levels 10 and 12).

In order to fulfill the first goal, the present study investigated the relationship between attainment value and the developmental experience of identity formation. Previous research has identified two key elements of identity formation as exploration and reflection (Erikson, 1968). It is possible that the more meaningful a sport is to an adolescent, the more opportunities there will be to explore and reflect on identity. Therefore, it was hypothesized

that higher levels of attainment value in sport would be a positive predictor of identity exploration and identity reflection. Secondly, the present study investigated the relationship between attainment value and the developmental experience of initiative. Initiative includes the ability to set goals, apply effort and manage time, and these skills may be used more often when a sport is of higher importance to an adolescent than when the sport is less valued. It was hypothesized that high levels of attainment value would be a positive predictor of high levels of goal setting, effort, and time management. Thirdly, the present study investigated the relationship between attainment value and the developmental experience of team work and social skills. Team sports offer adolescents an environment conducive to developing team work and social skills, an environment where they are required to relate to their peers and perform as an integrated team in order to be successful. It was hypothesized that higher levels of attainment value in sport would be a positive predictor of higher levels of team work and social skills because the more value attached to a sport, the more one might invest in team work and enhancing social interaction. The fourth hypothesis was that higher levels of attainment value in sport would be a positive predictor of higher levels of stress. Based on the literature by Fredricks & Eccles, (2002), it is possible that the more meaningful sport is to an adolescent, the more personally invested they are, the higher their expectations are to succeed, and the more stress they experience.

The second goal, designed to be exploratory, was to examine the role of gender and age (year levels 10 and 12) in the relation between attainment value and the four developmental experiences. Based on the limited research exploring gender and age differences in attainment value and experiences, no specific hypotheses about how gender and age might moderate these relations were made.

Method

Participants

Participants were drawn from the Youth Activity Participation Study of Western Australia (YAPS-WA; see Appendix 1), as part of a larger study of adolescent extracurricular activity choice and developmental outcomes, which included 1800 participants from 34 schools in Western Australia. This current study includes participants from wave 3 only, due to availability of required constructs. The sample consisted of 994 students, including 690 year ten students (380 female, 310 male), and 304 year twelve students (154 female, 150 male). The mean age of the participants was 15 years and 8 months (SD = .98). Informed parent and student consent was provided and was a prerequisite for participating in this study.

Measures

Items used for this study were derived from the larger YAPS study, with an additional item included to measure the negative experience of stress. The stress item was derived from the Youth Experiences Survey - YES (Hansen, Larson, & Dworkin, 2003). The self-report survey was based on previous

measures of activity participation (Barber, Stone, & Eccles, 2005) and was updated to reflect Australian youth activity participation (Blomfield & Barber, 2009). The survey design included a checklist format for reporting sport and activity participation, with a list of 25 sports (e.g., hockey, soccer) and 15 non-sporting activities (e.g., chess, band). Only data related to sport participation were used for this present study.

Demographic Background. Demographic information included gender and the school year the participants were completing. The two-level categorical variables (gender and Year) were coded as follows, for gender: male = 0, female = 1; and year: year 10 = 0 and year 12 = 1.

Extracurricular Sport Participation. Participants were provided with a detailed list of extracurricular sports from which they were asked to check off all of the sports in which they were currently involved or had been involved during the past year. Participants were asked to state their sport in 'other' if it was not present in the list.

Attainment Value. Attainment value was measured with one item, a question used in other research to assess attainment value (Eccles, 1983; "How important is it to you to be good at this sporting activity?"). This item used a 7 point scale (1= not at all important to 7= very important). A centered score for attainment value was calculated by subtracting the mean from each score in order for attainment value to have a meaningful zero point and increase the interpretability of coefficients and the constant in regression (Field, 2009).

Experiences in sport. The participants were presented with a series of questions related to their experiences in relation to their sport participation. These questions were based on items from the Youth Experiences Survey - YES (Hansen, Larson, & Dworkin, 2003). These items measured 4 developmental experience domains, identity formation (exploration, identity reflection), initiative development (goals, effort, time management), team work and social skills (leadership and responsibility) and negative experience (stress). These items were assessed using a 4 point scale (1= Not at all; 2= A little; 3= Quite a bit; 4= Yes definitely). Therefore, a score of 1 indicates a low level of developmental experiences and 4 indicates a high level of developmental experiences.

The identity formation domain consisted of 5 items, 3 relating to identity exploration (e.g., tried doing new things), and 2 relating to identity reflection (e.g., this activity got me thinking about who I am). The initiative development domain consisted of 10 items divided into 3 sub-scales; Goals, effort and time management. The goal sub-scale consisted of 3 items (e.g., I set goals for myself in this activity). The effort sub-scale consisted of 4 items (e.g., I put all my energy into this activity) and the time management sub-scale consisted of 3 items (e.g., learned about setting priorities). The team work and social skill domain consisted of 3 items (e.g., others in this activity counted on me). The negative experience domain included 1 subscale, stress, that was matched with one item (this activity has stressed me out).

Continuous variables were created for each of the sub-scales as a mean of their individual items. Scale reliability for each sub-scale was tested using Cronbach's alpha, with moderate to good reliability: Identity, exploration ($\alpha = .59$); identity, reflection ($\alpha = .69$); initiative, goals ($\alpha = .76$); initiative, effort ($\alpha = .80$); initiative, time management ($\alpha = .76$); team work/social skills, leadership and responsibility ($\alpha = .82$). Negative experiences, stress consisted of 1 individual item.

Procedure

Prior to data collection, ethical clearance and approval to conduct research was obtained from the university Human Research Ethics Committee. Data were collected from 34 schools which were recruited by letter of invitation through the school principal (see Appendix B) to participate in the YAPS-WA survey. On acceptance of the invitation, an information package was sent to the school outlining the intentions and goals of the study followed by discussions to arrange day and time of data collection. The recruitment of participants was left to the discretion of each individual school in order to minimize disruption, with the main suggestion being to send out consent letters to all students in years 10 and 12 within the school. Although this occurred in the majority of cases; a small number of principals targeted certain groups within each year (e.g., a particular class). A prerequisite for participation in this study was the return of parent and student consent forms (see Appendices D, E, F and G). Participants were informed of an immediate prize draw entry (e.g., vouchers, sporting memorabilia) in return for survey

participation, as well as inclusion in a final larger prize draw (e.g., guitar, ipod).

The survey was administered over a 45-minute session using 20 wireless-laptop computers connected to a server by a wireless router. The computer-based format has been successfully used in longitudinal studies in the United States (Larson et al., 2006). Responses were directly entered into computers in most schools, eliminating the need for post-survey data coding and entry. Paper surveys were provided for schools preferring them rather than laptop computers. Participants were informed of confidentiality and reminded that participation was voluntary.

The wave 3 survey was conducted during term 3 and 4 of 2009. The venue for data collection, as well as the assembling of participants, was arranged by school personnel. The schools that elected computer surveys were set up with 20 laptop computers which allowed for 20 participants at a time to complete the survey. Written surveys and pens were distributed, replacing computers, for schools electing to use paper surveys. Participants were given instructions on how to proceed (see Appendix 5), and were supervised by researchers.

Results

The research aim was to examine how attainment value was related to experiences in sport and examine whether gender and year level moderated this relationship. The results are presented in two sections. First, bivariate relations were examined. Then a series of multiple regressions were conducted to test for moderation.

Correlations.

Bivariate correlations were used to test the associations between the predictor variable (attainment value), the moderating variables (gender, year level) and the criterion variables (experiences), before testing for moderated multiple regression (MMR). Table 1 contains means, standard deviations, and bivariate correlations for all variables included in the analysis. As expected, significant positive correlations were found between attainment value and positive experiences. Higher attainment value was associated with more identity (exploration, reflection), initiative (goals, effort, time management), team work and social skills, and stress. Therefore further analyses were conducted, using MMR, to test for any moderating effects of gender and year level on the correlations found between the predictor and criterion variables (Aguinis, 2004). When examining the correlation between attainment value and the negative experience of stress, the relationship was weak. Aguinis, (2004) indicated that interaction effects are not likely to be found unless there is a strong relationship between the predictor (attainment value) and the criterion (experiences). Therefore it was unlikely that a moderating effect would be detected in this sample that could generalize to the population. However it was decided that although the correlation between attainment value and stress was weak, ($< .19$; Field, 2009), it was significant, therefore warranting further investigation.

Multicollinearity can be a concern in a regression model (Field, 2009). It has been argued that strong correlations between the predictor and

moderator variables lead to unstable regression coefficients, increased error terms, and a decrease in the power of the MMR. However, according to Aguinis (2004) and Hayes & Matthes (2009) these concerns regarding multicollinearity have proven to be unfounded. Regardless of the conflicting views regarding multicollinearity, the correlations presented in this data between attainment value and the moderating variables of gender and year, though significant, are weak, ($< -.19$; Field, 2009).

Moderated Multiple Regression

To test the hypotheses, a series of regression analyses were conducted to examine the independent and interactive effects of attainment value, gender, and year level on experiences (Baron & Kenny, 1986; Holmbeck, 2002). Interaction terms were created using a centered quantitative predictor variable and dummy coding procedures (Aiken & West, 1991), reducing multicollinearity (Aiken & West, 1991). Centering achieved the goal of making zero a meaningful value, otherwise the interpretation of lower-order effects may be have less meaning, due to the zero point not being defined on the scale (attainment value is measured on a scale of 1 to 7). Centered scores were obtained by subtracting the attainment value mean from each score, resulting in transformed scores with a mean = 0. Dummy coding is recommended for categorical moderators because of simplicity and ease of interpretation of results (Aguinis, 2004). The categorical variables used for the interaction terms were as follows: For gender, male students were coded 0,

Table 1. *Adolescent Reports of Experiences and Attainment Value with Moderating Variables, Gender and Year: Correlations and Descriptive Statistics (N = 994)*

Variables	1	2	3	4	5	6	7	8	9	10
1. Attainment value	-									
2. Gender	-.09**	-								
3. Year level	-.10**	-.02	-							
4. Identity exploration	.24**	.02	-.06*	-						
5. Identity reflection	.41**	-.16**	-.07*	.49**	-					
6. Initiative goals	.46**	-.04	-.04	.45**	.52**	-				
7. Initiative effort	.52**	-.01	-.08*	.45**	.44**	.68**	-			
8. Initiative time management	.36**	-.04	-.02	.41**	.52**	.64**	.54**	-		
9. Team work/social skills	.31**	-.01	.01	.30**	.39**	.47**	.39**	.44**	-	
10. Stress – negative	.13**	-.05	.01	.21**	.25**	.20**	.15**	.20**	.27**	-
Mean	5.19	.56	.33	2.77	2.39	2.97	3.4	2.7	2.7	1.8
SD	1.61	.50	.47	.70	.88	.75	.63	.77	.90	.90

Gender: 0 = male, 1 = female. Age: 0 = Year 10, 1 = Year 12. Attainment value scale: 1= not at all important to 7= very important.

* $p < .05$. ** $p < .01$. *** $p < .001$.

female students were coded 1; For year, year 10 students were coded 0 and year 12 students were coded 1. The interaction terms were created by multiplying the independent variables. The two-way interaction terms were attainment value x gender; attainment value x year level; and gender x year level. The three-way interaction term was attainment value x gender x year level. The interaction terms were entered after the independent variables were already in the equation, as entering the interaction terms first may inflate the size of the moderating effect. Therefore the first order effects were entered as step 1, the two-way interaction terms (attainment x gender; attainment x year and gender x year) were entered as step 2, followed by the three-way interaction term (attainment x gender x year) as step 3.

Predicting Adolescents' Experiences in Sport from Attainment Value, Gender, and Year.

Identity exploration. Results of the regression predicting identity exploration in sport from attainment value, gender, and year are presented in Table 2. The simple effects of the regression predicting identity exploration was significant, $F(3,987) = 21.76, p < .001$, indicating that attainment value was significantly associated with identity exploration. Higher levels of attainment value predicted more experiences of exploring identity. The two-way and three-way interactions were not significant, indicating that gender and year did not significantly moderate the relationship between attainment value and identity exploration.

Table 2.
Hierarchical Multiple Regression Analysis Predicting Identity Exploration in Sport from Attainment Value, Gender and Year.

Predictor	Identity Exploration			
	ΔR^2	B	SE B	β
Step 1	.06***			
Attainment value		.24***	.01***	.11***
Gender		.04	.04	.05
Year Level		-.04	.05	-.06
Step 2	.00			
Attain x gender		-.14	.03	-.04
Attain x year		.12	.03	.03
Gender x year		-.04	.09	-.07
Step 3	.00			
Attain value x gender		-.08	.06	-.09
Total R ²	.07			

Note. The β weights are from the variable's first entry into the model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Identity reflection. Results of the regression predicting identity reflection in Sport from attainment value, gender, and year are presented in Table 3. The simple effect of the regression predicting identity reflection were significant, $F(3,988) = 73.79, p < .001$, indicating that attainment value was significantly associated with identity reflection. Higher levels of importance placed on sport predicted more identity reflection experiences. A significant simple effect for identity reflection was qualified by a significant three-way interaction among attainment value, gender, and year (see Table 3).

Table 3.
 Hierarchical Multiple Regression Analysis Predicting Identity
 Reflection in Sport from Attainment Value, Gender and Year.

Predictor	Identity Reflection			
	ΔR^2	B	SE B	β
Step 1	.18*			
Attainment value		.40***	.02***	.22***
Gender		.13***	.05***	.22***
Year Level		-.04	.05	-.07
Step 2	.01			
Attain x gender		-.19	.03	-.06
Attain x year		.02	.03	.08
Gender x year		-.01	.11	-.02
Step 3	.00			
Attain value x gender		-.13**	.07**	-.19**
Total R ²	.19			

Note. The β weights are from the variable's first entry into the model.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

To probe the three-way interaction, the simple slopes were plotted (See Figure 1), selecting values that were 1 standard deviation above and below the mean for each variable (Aiken & West, 1991).

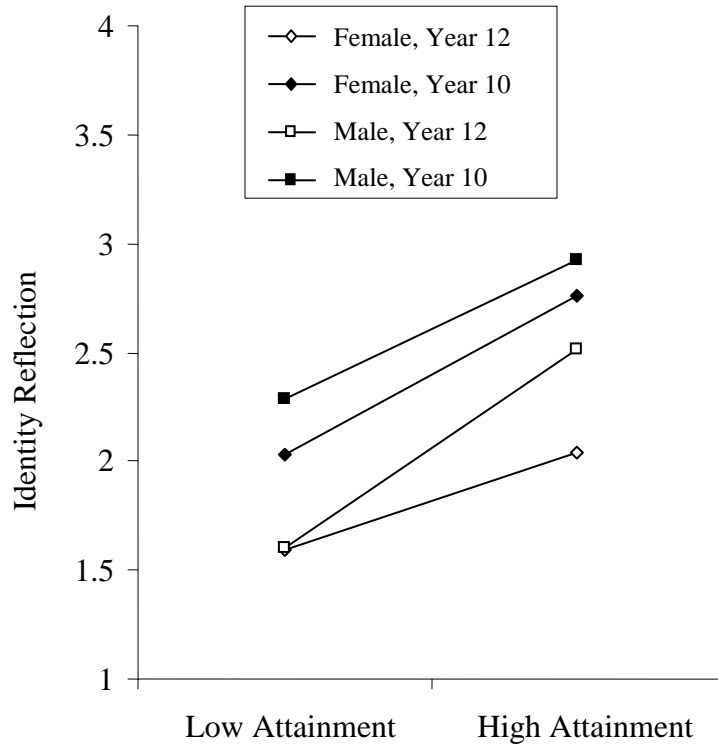


FIGURE 1 Three-way interaction effects for adolescent males and females in years 10 and 12 of the regression of attainment value on identity reflection in sport.

The interaction was further probed using slope difference tests set forth by Dawson and Richter (2006) and the results are shown in Table 4. The slope difference test revealed that year 12 boys significantly differed from all other groups in the strength of the link between attainment value and identity reflection. The attainment value to identity reflection relationship is strongest for year 12 boys. No other groups' slopes differed significantly from each other.

Table 4.

Slope difference tests for attainment value and identity reflection.		
Pair of slopes	<i>t</i> -value for slope difference	<i>p</i> -value for slope difference
(1) and (2)	-1.65	0.10
(1) and (3)	-2.98	0.00
(1) and (4)	-1.05	0.29
(2) and (3)	-2.21	0.03
(2) and (4)	0.72	0.47
(3) and (4)	2.18	0.03

Note. Female, year 12 = 1; Female, year 10 = 2; Male, year 12 = 3; Male, year 10 = 4.

Although the slopes from all groups appear positive when plotted, a final examination of the interaction was required to test whether the link between attainment value and identity reflection was significant in all groups. To test this, the 3-way interaction was probed using a traditional method of separating the files into subgroups (Aguinis, 2004; Aiken & West, 1991). The results from this analysis should be viewed cautiously because according to Dawson and Richter (2006) is prone to error. Dawson & Richter (2006) suggest that separating the files limits the power of the analysis, as the sample size of

subgroups is reduced. They also suggest that separating the files does not allow for a comparative test of slopes that exist across the barriers of subgroups, as subgroups are treated as separate samples and restricted to examine slope differences within the subgroup only (Dawson & Richter, 2006). However, the results of the separate file analysis confirm that attainment value was positively associated with identity reflection for year 12 adolescent males, but was not significant for any other group.

Goals. Results of the regression predicting goals in sport from attainment value, gender, and year are presented in Table 5. The simple effect of the regression predicting goals was significant, $F(3,987) = 85.93, p < .001$, indicating that attainment value was significantly associated with goals. The more value attached to sport, the more goals students reported setting. The two-way and three-way interactions were not significant, indicating that gender and year did not significantly moderate the relationship between attainment value and initiative goals.

Table 5.
Hierarchical Multiple Regression Analysis Predicting Goals
in Sport from Attainment Value, Gender and Year.

Predictor	Goals			
	ΔR^2	B	SE B	β
Step 1	.21***			
Attainment value		.46***	.01***	.21***
Gender		.00	.04	.00
Year Level		.00	.05	.01
Step 2	.00			
Attain x gender		-.05	.03	-.01
Attain x year		.06	.03	.02
Gender x year		-.07	.09	-.15
Step 3	.00			
Attain value x gender		-.01	.06	-.02
Total R ²	.21			

Note. The β weights are from the variable's first entry into the model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Effort. Results of the regression predicting effort in Sport from attainment value, gender, and year are presented in Table 6. The simple effect of the regression predicting effort was significant, $F(3,988) = 126.03$, $p < .001$, indicating that attainment value was significantly associated with effort. The higher the attainment value, the more effort applied in sport. The two-way and three-way interactions were not significant, indicating that gender and year did not significantly moderate the relationship between attainment value and effort.

Table 6.
Hierarchical Multiple Regression Analysis Predicting Effort
in Sport from Attainment Value, Gender and Year.

Predictor	Effort			
	ΔR^2	B	SE B	β
Step 1	.28*			
Attainment value		.52***	.01***	.20***
Gender		.03	.03	.04
Year Level		-.03	.04	-.05
Step 2	.00			
Attain x gender		-.03	.02	-.01
Attain x year		.20	.02	.05
Gender x year		-.03	.07	-.05
Step 3	.00			
Attain value x gender		.01	.05	.01
Total R ²	.28			

Note. The β weights are from the variable's first entry into the model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Time Management. Results of the regression predicting time management in sport from attainment value, gender, and year are presented in Table 7. The simple effect of the regression predicting time management was significant, $F(3, 984) = 48.39, p = <.001$, indicating that attainment value was significantly associated with time management. The higher the attainment value, the more frequent the opportunities for learning to manage time were reported. The two-way and three-way interactions were not significant, indicating that gender and year did not significantly moderate the relationship between attainment value and time management.

Table 7.
Hierarchical Multiple Regression Analysis Predicting Time Management in Sport from Attainment Value, Gender and Year.

Predictor	Time Management			
	ΔR^2	B	SE B	β
Step 1	.13*			
Attainment value		.36***	.01***	.17***
Gender		-.01	.05	-.01
Year Level		.01	.05	.02
Step 2	.00			
Attain x gender		-.14	.03	-.04
Attain x year		.07	.03	.02
Gender x year		-.08	.10	-.18
Step 3	.01			
Attain value x gender		-.08	.06	-.10
Total R ²	.14			

Note. The β weights are from the variable's first entry into the model.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Team work and social skills. Results of the regression predicting team work and social skills in Sport from attainment value, gender, and year are presented in Table 8. The simple effect of the regression predicting team work and social skills was significant, $F(3,988) = 36.46, p < .001$, indicating that attainment value was significantly associated with team work and social skills. The higher the attainment value, the more students reported experiences related to team work and social skills. The two-way and three-way interactions were not significant, indicating that gender and year did not

significantly moderate the relationship between attainment value and team work and social skills.

Table 8.
Hierarchical Multiple Regression Analysis Predicting Team Work
And Social Skills in Sport from Attainment Value, Gender and Year.

Predictor	Team Work and Social Skills			
	ΔR^2	B	SE B	β
Step 1	.10***			
Attainment value		.32***	.02***	.17***
Gender		.03	.05	.05
Year Level		.04	.06	.07
Step 2	.00			
Attain x gender		-.10	.03	-.03
Attain x year		.13	.04	.04
Gender x year		.00	.12	.00
Step 3	.00			
Attain value x gender x		-.07	.07	-.10
Total R ²	.10			

Note. The β weights are from the variable's first entry into the model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Negative experience of stress. Results of the regression predicting stress in sport from attainment value, gender, and year are presented in Table 9. The simple effect of the regression predicting stress was significant, $F(3,983) = 6.06, p < .001$, indicating that attainment value was significantly associated with stress. Greater value attached to sport, predicted more frequent perceptions of stressful experiences. The two-way and three-way

interactions were not significant, indicating that gender and year did not significantly moderate the relationship between attainment value and stress.

Table 9.
Hierarchical Multiple Regression Analysis Predicting Stress
in Sport from Attainment Value, Gender and Year.

Predictor	Stress			
	ΔR^2	B	SE B	β
Step 1	.02***			
Attainment value		.13	.02***	.07***
Gender		-.03	.06	-.05
Year Level		.02	.06	.03
Step 2	.00			
Attain x gender		-.05	.04	-.02
Attain x year		.11	.04	.04
Gender x year		-.01	.12	-.03
Step 3	.00			
Attain value x gender		-.07	.08	-.10
Total R ²	.02			

Note. The β weights are from the variable's first entry into the model.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

The first goal of this study was to extend previous research on extracurricular participation, specifically by determining the association between attainment value and the developmental experiences of identity (exploration, reflection), initiative (goals, effort, time management), team work and social skills, and the negative experience of stress, in sport. The

second goal was to explore the moderating influence of gender and age (year level 10 and 12) on the relations between attainment value and experiences. Higher levels of attainment value were found to be associated with higher levels of developmental experiences in sport. In addition, gender and age were found to moderate the strength of the link between attainment value and identity reflection.

Previous research has shown the benefits associated with participating in sport activities. Sporting activities have shown to be a context for experiences that are developmentally important for adolescents. The period of adolescence is a time when developmental milestones need to be attained, such as exploring identity options, and sport may provide that context. The stage-environment fit theory highlights the need for a fit between the characteristics individuals bring to their social environments and the characteristics of these environments (Eccles & Midgely, 1989; Eccles et al., 1993; Eccles, 2008). The extent to which sport provides the context for experiences which meet the needs of the individual, is the extent to which there is a 'fit' between their needs and the sporting environment. However, it appears that not all adolescents benefit equally from sport or experience this 'fit'. The results of this study have shown that adolescents who value their sport, who consider their sport as important, report more developmental experiences. When adolescents value their sport, they are engaged in and personally invested in their sport (Eccles & Harold, 1991). The expectancy-value theory links activity choice to performance expectations and to the

importance or value individuals attach to their available options. Attainment value underpins choice and highlights the importance of sport participation being voluntary. As the expectancy-value theory proposes, the choice to voluntarily participate in a sport may influence the importance an adolescent places on their sport, and as a result influence the level of developmental experiences reported in sport. The present study found that adolescents with higher levels of attainment value reported more developmental experiences associated with identity formation, initiative development, team work and social skills, and stress.

Identity Formation

Exploration. The first hypothesis that high levels of attainment value in sport would be a positive predictor of high levels of identity exploration was supported. The results indicate that participating in team sports provided a context for identity exploration allowing adolescents to explore different identities and find an acceptable 'fit' that works for them. The more important sport was to youth, the more opportunities for self exploration. The results are consistent with research that adolescents who reported their sport as being important to them reported having a more sport-based identity (Eccles & Barber, 1999; Eccles et al., 2003).

The association between attainment and identity exploration was not significantly moderated by gender or age. It is possible that identity exploration occurs throughout adolescence and is influenced by the availability of opportunities for exploration as well as the value attached to

these opportunities, and less on age or gender. It is also possible that the restricted age range of year 10 and year 12 was not wide enough to capture any age differences.

Reflection. The hypothesis that high levels of attainment value in sport would be a positive predictor of high levels of identity reflection was supported. The results indicated that individual for whom sport was very important reported higher levels of identity reflection. This finding is consistent with previous findings that suggested that sport provided the freedom necessary for personal development, including experiences related to reflection (Hansen, Larson, & Dworkin, 2003). Previous research suggested that sport is a context which facilitates identity formation (Eccles & Barber, 1999; Eccles et al., 2003; Hansen, Larson, & Dworkin, 2003; Larson, 2000; Waterman, 1990; Youniss & Yates, 1997), and should therefore facilitate an adolescent's capacity to self reflect, a necessary element of identity formation. Those individuals involved in sport deemed less important engaged less often in the reflection process.

The attainment value and identity reflection link was significantly moderated by gender and age. Specifically, the attainment value and identity reflection link was stronger for year twelve adolescent males. The results are consistent with research suggesting that sport is considered a gender-stereotyped domain with adolescent males participating more frequently than adolescent females do (Eccles & Harold, 1991; Eccles & Wigfield, 2002). Previous research suggests that in accordance with the expectancy-value

theory, gender roles can affect task values through their influence on the importance that females and males attach to particular personal characteristics (Eccles & Harold, 1991), for example, the value the male gender-role places on competitiveness, strength, and physical prowess compared to the female gender role (Eccles, 1987). The high value or importance that adolescent males attach to sport allows sport to be a context for reflection, particularly in year twelve when adolescents are transitioning out of high school. According to Erikson (1968), adolescents have a developing capacity for self reflection that makes consideration of identity possible. Therefore, the capacity to self-reflect is developing throughout adolescence. It is possible that for adolescent males identity remains quite an abstract concept until year twelve, then they are forced to transition out of high school and furthermore make life changing decisions about employment, higher education, relationships, sexuality and morality. An increased capacity for identity reflection, and ultimately identity formation, becomes necessary rather than optional.

Initiative Development

Goals / effort / time management. The hypotheses that high levels of attainment value in sport would be a positive predictor of high levels of initiative; goals, effort, and time management, were supported. The results indicate that participating in team sports provided a context for initiative development which included the elements of setting and pursuing goals, applying effort, and learning time management. Adolescents who placed a higher value on sport were afforded more initiative experiences. Previous

research has suggested that organized sports provided a distinct context for high rates of initiative experiences, in particular the development of the skills for persistence while pursuing a goal, are facilitated by the challenge and achievement-focused nature of sport (Duda & Ntoumimis, 2005; Larson & Kleiber, 1993). However according to the present study, the high rates of initiative that have been found in sport activities varied depending on the level of value or importance that an adolescent attached to their sport. The more important the sporting activity, the more they got out of it in terms of developing initiative. The attainment value and initiative association was not significantly moderated by gender or age. It is possible that the development of initiative simply occurs as adolescents learn to set their own goals and manage their time and effort, and is not dependent on gender or age. Learning initiative skills may depend on the opportunities to participate in sport, as well as the importance and value attached to sport, in order for an adolescent to be motivated and engaged to the point of setting goals, applying effort and managing time.

Team work and Social skills

The hypothesis that high levels of attainment value in sport would be a positive predictor of high levels of team work and social skills was supported. The results indicate that participating in sport provided the context for developing team work and social skills. The more important sport is to the individual, the more important it is to possess these skills, as ultimately the possession of these skills will result in a team that is integrated and increase

the likelihood of success on the sporting field. This is consistent with previous research suggesting that participation in team sports provides adolescents with opportunities to meet other individuals who share common interests, people who they may not have come in to contact with otherwise, strengthening social skills and confidence in relating to peers both in and out of their activities (Fredricks et al., 2002). However, this present study found that the development of these skills depends on how important the sporting activity is to the individual, the more important the sport is, the more developing team work and social skills really matters. The relations between attainment value and team work and social skills was not significantly moderated by gender or age.

Negative Experience

Stress. The hypothesis that high levels of attainment value in sport would be a positive predictor of high levels of stress was supported. The results indicate that the more important sport is to the individual, the more stressful experiences are reported in sport. This is consistent with previous research that suggested competitive sport in particular can be stressful because of its fundamental achievement elements, including the evaluation of athletic ability, testing, and the very public demonstrations associated with participation (Scanlan, 2002). In addition, the goal achievement focus of sport is also likely to explain the frequent experiences of stress found in sports (Scanlan, Babkes, & Scanlan, 2005). It is possible that the more highly valued sport is to an adolescent, the more pressured they feel by the

competition, and their individual performance. This is consistent with research that suggests that adolescents who reported negative experiences in sport reported feeling pressured by the competition aspect of sport and felt dejected when their performance didn't measure up to their expectations (Fredricks et al., 2002). It is possible that high levels of attainment value in sport compensates for feeling stressed, otherwise an individual may be tempted to drop out of sport completely. It appears that although high levels of attainment value were associated with high levels of stress in sport, the importance outweighed the negative experience. The relationship between attainment value and stress was not significantly moderated by gender or age for adolescents in sport.

Stress tends to be considered purely in terms of a negative experience, an experience to be avoided rather than embraced. Stress involved in sport participation may be better viewed in terms of challenge. Individual performance expectations can bring challenge as adolescents critique their own performance and expectations. Exploring and reflecting on one's identity is often uncomfortable and challenging, yet a requirement for identity formation. Developing initiative, working in teams, and developing social skills all require aspects of challenge. Challenge can be considered positive as it brings about growth, and adolescents need to be challenged in order to grow and meet developmental milestones. Stress is likely to be part of that challenge. Therefore when adolescents are challenged it is a developmentally important moment. When considering the stage-environment fit theory, stress

may be part of the fit, as it may facilitate growth in other areas which meet the needs of the individual, such as identity formation and initiative development. Although the findings of the present study showed that adolescents who value their sport reported higher levels of stress, this stress may reflect part of growing up and learning to face developmental challenges rather than stress that is directly associated with sport participation.

Policy Implications.

In a society that is concerned with increasing obesity and lack of physical activity among youth, there has been a push towards sport participation. While participating in sport may provide physical benefits, developmental scholars are focusing on the psychological benefits, looking beyond the physicality of sport activities. In terms of the psychological benefits of sport, research has shown positive outcomes of participation. However, caution should be taken in over interpreting the positive benefits to become a policy platform for imposing sport on children. It is important to look closely at who is benefiting from sport, because it appears that some may derive more positive experiences than others. The results of this research suggest that policy-makers may want to consider a more nuanced approach when deciding future policy directions of sport participation.

Consider children who highly value sport but are not afforded the opportunities to play sport, due to cost or lack of resources, what are the implications for them? Consider the children who are forced to participate in sport through either parental coercion or compulsory school sport, where

choice is not acknowledged as being intertwined with value. The implications for policy include the decisions made by policymakers who fund resources and influence regulations regarding compulsory sport, who do so with incomplete information about who really benefits from sport participation, and the ideal contexts for these benefits.

Limitations and Future Directions of Present Study

Interpreting the results of this current study should be considered in light of its limitations. First, the variables measured in this study were assessed through self-report. While past research has shown that youth can be accurate reporters of their own experiences, the use of self-report measures may have inflated associations among the constructs. Yet it is also possible that adolescents are the most accurate reporters of their own experiences, inasmuch as youth are active agents of developmental change in the sport setting, and data on their conscious experiences are likely to be relevant (Hansen et al., 2003; Larson et al., 2006).

Second, the cross-sectional nature of the data makes it impossible to make any type of causal or temporal interpretations regarding the associations among the constructs being assessed. The guiding theoretical models used in this study suggest that high levels of attainment value are associated with high levels of experiences. It is also plausible, however, that adolescents who have high levels of experiences in sport, begin to value their sport more. The directional nature of these relationships could not be examined in this study. Future research might consider longitudinal studies to determine how the

attainment value and experiences relationship unfolds over time, to untangle the causal direction of the relationship.

Third, although the results have shown a positive attainment value and experiences association, caution must be taken to not over interpret these results. The results should not be interpreted to mean that all adolescents involved in sport will have positive experiences, as this would be over interpreting the attainment value and experiences association. The population participating in this current study participate in sport voluntarily, therefore the range of participants would be truncated and bias in an upward direction. The adolescents who have lower attainment value are probably not being represented in the data, as they most likely did not volunteer to participate in sport. Therefore the results may over represent the value of sport to all children. The final limitation involves the population surveyed for this current study, a sample of adolescents who voluntarily participate in sport. With this in mind, the present study does not reflect the outcomes for adolescents who really do not like sport, but are in a setting where sport is enforced. As this present study looked at voluntary participation in sport, another avenue for future research would be to look at compulsory participation and examine the links between them.

Strengths of Present Study

In spite of the limitations outlined previously, this study should also be viewed in light of its strengths. The current study surveyed a large number of adolescents in government and non government schools using a format that

they found engaging. The format was inclusive of all sports, covering a wide range of popular sports and offering opportunities to identify less common sports, such as karate or golf, in order to capture a comprehensive sport sample. As adolescents are asked to recall their participation in all sporting activities in the past twelve months, they may be prompted by the extensive list of sports and encouraged to report their related experiences in the less common sports.

The use of the YES 2.0 as a measurement tool is an important strength, demonstrating reliable use of the YES 2.0 for Australian adolescents. The reliability measures obtained on the YES 2.0 were compatible with those of previous researchers (Hansen et al, 2003) demonstrating adequate internal consistency. The YES 2.0 has been established as a valuable tool investigating experiences within activities. As a result, the findings from this current study may be compared with international research available on adolescent activity participation. As the majority of research on adolescent activity participation has been carried out in the United States, the current study is the first study to examine the attainment value and experiences in sport relations in an Australian context, where sport is different from sport in the United States.

The present study makes a unique contribution because it is the first study to consider individual differences in attainment value and experiences in sport. It is important for researchers in this field to consider in detail under what circumstances sport offer the most benefits for adolescents, as it will not be uniform for all children. Therefore the present study contributes to an

individual differences approach to thinking about activities and their effect on adolescents.

Conclusion

The present study highlights the complexities surrounding sport participation as a context for psychological benefits. The psychological benefits of sport participation are not inevitable, participation doesn't automatically guarantee the benefits. The benefits are an outcome of the fit that occurs between the psychological needs of an individual and the environment in which they are embedded, with attainment value being a motivating factor affecting this fit. The findings of this study extend the growing body of literature on the benefits of sporting activities (Barber, Abbott, Blomfield, & Eccles, 2009; Feldman & Majasko, 2005; Marsh & Kleitman, 2002). The results of this present study indicate that the more value that is attached to the sporting activity, the more invested the individual is in the activity, the more the psychological gain.

References

- Abbott, B.D., & Barber, B.L. (2007). Not just idle time: Adolescents' developmental experiences provided by structured and unstructured leisure activities. *The Australian Educational and Developmental Psychologist, 24*, 59-81.
- Aguinis, H. (2004). *Regression analysis for categorical moderators*. New York: The Guilford Press.
- Aiken, S. G., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: SAGE.
- Arnett, J.J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist, 54*, 317-326.
- Australian Bureau of Statistics (ABS). (2006). *Children's participation in cultural and leisure activities*, (cat No. 4901.0). Canberra: ABS. Retrieved February 10, 2010, from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4901.0>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Barber, B.L., Abbott, B.D., Blomfield, C.J., & Eccles, J.S. (2009). Secrets of their success: Activity participation and positive youth development. In R. Gilman & M. Furlong (Eds.), *Handbook of positive psychology in the schools* (pp. 273-289). Lawrence Erlbaum Associates.
- Barber, B. L., Eccles, J. S. & Stone, M. R. (2001). Whatever happened to the "jock," the "brain," and the "princess"? : Young adult pathways linked

to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.

Barber, B. L., Stone, M. R., & Eccles, J. S. (2005). Adolescent participation in organized activities. In K. Moore & L. H. Lippman (Eds.), *Conceptualizing and measuring indicators of positive development: What do children need to flourish?* (pp. 133-146). New York: Springer.

Barber, B. L., Stone, M. R., Hunt, J. E., & Eccles, J. S. (2005). Benefits of activity participation: The roles of identity affirmation and peer group norm sharing. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 185-210). Mahwah, NJ: Lawrence Erlbaum.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.

Brown, B.B., & Theobald, W. (1998). Learning contexts beyond the classroom: Extracurricular activities, community organizations, and peer groups. In K. Borman & B. Schneider (Eds.), *The adolescent years: Social influences and educational challenges* (pp.109-141). Chicago: University of Chicago Press.

- Brustad, R.J. (1993). Who will go out and play? Parental and psychological influences on children's attraction to physical activity. *Pediatric Exercise Science*, 5, 210-223.
- Brustad, R. J., Babkes, M. L., & Smith, A. L. (2001). Youth in sport: Psychological considerations. In R. N. Singer, H. A. Hausenblas, & C.M. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 604-635). New York: Wiley.
- Collins, W. A., Maccoby, E. E., Steinberg, L., Heatherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case of nature and nurture. *American Psychologist*, 55, 218-232.
- Danish, S. J., & Gullotta, T.P. (Eds.). (2000). *Developing competent youth and strong communities through after-school programming*. Washington, DC: Child Welfare League of America, Inc.
- Danish, S. J., Taylor, T. E. & Fazio, R. J. (2003). Enhancing Adolescent Development through Sports and Leisure. In G. R. Adams, & M. D. Berzonsky (Eds.), *Handbook of Adolescence*, USA: Blackwell Publishing.
- Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology*, 91, 917-926.
- Deci, E.L. (1995). *Why we do what we do: The dynamics of personal autonomy*. New York: Putman.

- Duda, J.L., & Ntoumanis, N. (2005). After-school sport for children: Implications of a task-involving motivational climate. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 311-330). Mahwah, NJ: Lawrence Erlbaum.
- Durlak, J. A., & Weissberg, R. P. (2007). *The impact of after-school programs that promote personal and social skills*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning.
- Dworkin, J. B., & Larson, R. (2006). Adolescents' negative experiences in organized youth activities. *Journal of Youth Development* [Online], 1(3). Available at: <http://www.nae4ha.org/directory/jyd/index.htm>
- Dworkin, J.B., Larson, R. & Hansen, D. (2003). Adolescents' accounts of growth experiences in youth activities. *Journal of Youth and Adolescence*, 32(2), 17-26.
- Eccles, J.S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, 11, 135-172.
- Eccles, J.S. (2008). Agency and structure in human development. *Research in Human Development*, 5(4), 231-243.
- Eccles, J.S. & Barber, B.L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14, 10-43.
- Eccles, J.S., Barber, B.L., Stone, M., Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59(4), 865-889.

- Eccles, J. S., & Gootman, J. (2001). *Community programs to promote youth development*. Washington, DC: National Academy Press.
- Eccles, J.S. & Harold, R.D. (1991). Gender differences in sport involvement: Applying the Eccles' expectancy-value model. *Journal of Applied Sport Psychology, 3*, 7- 35.
- Eccles, J.S., Lord, S., & Buchanan, C.M. (1996). School transitions in early adolescence: What are we doing to our young people? In J.A. Garber & J. Brooks-Gunn (Eds.), *Transitions through adolescence: Interpersonal domains and context* (pp. 251-284). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Eccles, J.S., Lord, S., & Roeser, R. (1996). Round holes, square pegs, rocky roads, and sore feet: The impact of stage-environment fit on young adolescents' experiences in schools and families. In D. Cicchetti & S.L. Toth (Eds.), *Rochester Symposium on Developmental Psychopathology: Vol.7. Adolescence: Opportunities and challenges* (pp. 47-93). Rochester NY: University of Rochester Press.
- Eccles, J.S., & Midgley, C. (1989). Stage/environment fit: Developmentally appropriate classrooms for early adolescents. In R. Ames & C. Ames (Eds.), *Research on motivation in education* (Vol.3, pp. 139-181). New York: Academic Press.
- Eccles, J.S., Midgley, C., Wigfield, A., Buchanan, C.M., Reuman, D., Flanagan, C., & MacIver, D. (1993). Development during adolescence: The impact of stage-environment fit on adolescents' experiences in

- schools and families. *American Psychologist*, 48, 90-101.
- Eccles-Parsons, J. (1983). Expectancies, values, and academic behaviors. In J.T. Spence (Ed.). *Achievement and achievement motivations* (pp. 75-121). San Francisco, CA: W.H. Freeman & Co.
- Eccles-Parsons, J. (1984). Sexual socialization and gender roles in childhood. In E.R. Algier & N. McCormick (Eds.). *Changing boundaries: Gender roles and sexual behavior* (pp. 19-48). Palo Alto, CA: Mayfield Press.
- Eccles, J.S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related-beliefs and self-perceptions. *Personality and Social Psychology Bulletin*, 21, 215-225.
- Eccles, J.S., & Wigfield, A. (2001). Academic achievement motivation, development of. In N.J. Smelser & P.B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 14-20). Oxford, UK: Pergamon.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.
- Feldman, A. F., & Matjasko, J.L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75, 159-210.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed). London: SAGE.
- Fletcher, A. C., & Shaw, R. A. (2000). Sex differences in associations between parental behaviors and characteristics and adolescent social integration. *Social Development*, 9, 133-148.

- Fredricks, J. A., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood to adolescence: Growth trajectories in two "Male-typed" domains. *Developmental Psychology, 38*, 519-533.
- Fredricks, J.A., & Eccles, J. S. (2006b). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*(4), 698-713.
- Gutman, L.M., & Eccles, J.S. (2007). Stage-environment fit during adolescence: Trajectories of family relations and adolescent outcomes. *Developmental Psychology, 43*(2), 522-537.
- Hansen, D.M., Larson, R.W., & Dworkin, J.B. (2003). What adolescents learn in organized activities: A survey of self-reported developmental experiences. *Journal of research on Adolescence, 13*, 25-55.
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods, 41*, 924-936.
- Holmbeck, G. N. (2002). Post-hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology, 27*(1), 87-96.
- Hunt, D.E. (1975). Person-environment interaction: A challenge found wanting before it was tried. *Review of Educational Research, 45*, 209-230.
- Jacobs, J.E., Vernon, M.K., & Eccles, J. (2005). Activity choices in middle childhood: The roles of gender, self-beliefs, and parents' influence. In

- J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 185-210). Mahwah, NJ: Lawrence Erlbaum.
- Kleiber, D. A. (1999). *Leisure experiences and human development: A dialectical interpretation*. New York, USA: Basicbooks, Inc.
- Larson, R. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55, 170-183.
- Larson, R.W., Hansen, D. & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42(5), 849-863.
- Larson, R.W., Hansen, D. & Walker, K. (2005). Everybody's gotta give: development of initiative and teamwork within a youth program. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Larson, R., & Klieber, D.A. (1993). Daily experience of adolescents. In P. Tolan, & B. Cohler (Eds.), *Handbook of clinical research and practice with adolescents* (pp. 125-145). New York: Wiley.
- Larson, R., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 25, 701-736.

- Lerner, R. (2001). Promoting promotion in the development of prevention science. *Applied Developmental Science, 5*, 254-257.
- Mahoney, J., & Bergman, L. (2002). Conceptual and methodological considerations in a developmental approach to the study of positive adaptation. *Applied Developmental Psychology, 23*, 195-217.
- Mahoney, J.L., & Cairns, R.B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology, 33*, 241-253.
- Mahoney, J.L., Harris, A.L., & Eccles, J.S. (2006). Organized activity participation, positive youth development, and the over-scheduling hypothesis. *Social Policy Report, 20*(4), 3-31.
- Mahoney, J.L., Larson, R.W., Eccles, J.S., Lord, H. (2005). Organized activities as developmental contexts for children and adolescents. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 185-210). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mahoney, J. L., & Stattin, H. (2000). Leisure activities and adolescent antisocial behavior: The role of structure and social context. *Journal of Adolescence, 23*, 113-127.
- Marsh, H., & Kleitman, S. (2002). The effects of participation in sport during the last 2 years of high school. *Sociology of Sport Journal, 10*, 18-43.
- McHale, S. M., Kim, J., Whiteman, S. D., & Crouter, A. C. (2004). Links between sex-typed time use in middle childhood and gender

development in early adolescence. *Developmental Psychology*, 40, 868-881.

Morgeson, F.P., Reider, M.H. & Campion, M.A. (2005). Selecting individuals in team settings: The importance of social skills, personality characteristics, and teamwork knowledge. *Personnel Psychology*, 58, 583-611.

Nixon, H. (1984). *Sport and the American dream*. New York: Leisure Press.

Passmore, A., & French, D. (2001). Development and administration of a measure to assess adolescents' participation in leisure activities. *Adolescence*, 36, 67-75.

Pittman, K., Diversi, M., & Ferber, T. (2002). Social policy supports for adolescence in the twenty-first century: Framing questions. *Journal of Research on Adolescence*, 12 (1), 149-158.

Ryan, R.M. (1993). Agency and organization: Intrinsic motivation, autonomy and self in psychological development. In J.Jacobs (Ed.), *The Nebraska symposium on motivation: Developmental perspectives on motivation* (Vol.40, pp. 1-56). Lincoln, NE: University of Nebraska Press.

Scanlan, T.K. (2002). Social evaluation and the competition process: A developmental perspective. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (2nd ed., pp. 393-407). Dubuque, IA: Kendall/Hunt.

Scanlan, T. K., Babkes, M. L., & Scanlan, L. A. (2005). Participation in sport: A developmental glimpse at emotion. In J. L. Mahoney, R. W. Larson,

& J. S. Eccles (Eds.), *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 275-311). Mahwah, NJ: Lawrence Erlbaum Associates.

Sharp, E. H., Coatsworth, J. D., Darling, N., Cumsille, P., & Ranieri, S. (2007). Gender differences in the self-defining activities and identity experiences of adolescents and emerging adults. *Journal of Adolescence*, *30*, 251-269.

Silbereisen, R.K., & Eyferth, K. (1986). Development as action in context. In R.K. Silbereisen, K. Eyferth & G. Rudinger (Eds.), *Development as action in context: Problem behavior and normal youth development* (pp. 3-16). Berlin: Springer-Verlag.

Silbereisen, R.K., & Lerner, R.M. (2007). *Approaches to positive youth development*. London: SAGE.

Smoll, F., & Smith, R. (1996). *Children and youth in sport: A biopsychosocial perspective*. Chicago: Brown and Benchmark.

Staff, J., Mortimer, J.T. & Uggem, C. (2004). Work and leisure in adolescence. In Lerner, R.M. & Steinberg, L. (Eds). *Handbook of adolescent psychology* (2nd ed). Hoboken, New Jersey: John Wiley & Sons, Inc.

Waterman, A.S. (1984). Identity formation: Discovery or creation? *Journal of Early Adolescence*, *4*, 329-341.

Waterman, A.S. (1990). Personal expressiveness: Philosophical and psychological foundations. *Journal of Mind and Behavior*, *11*, 47-74.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A

- developmental perspective. *Educational Psychology Review*, 6, 49-78.
- Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, 12, 265-310.
- Wigfield, A., & Eccles, J. S. (1994). Children's competence beliefs, achievement values, and general self-esteem: Change across elementary and middle school. *Journal of Early Adolescence*, 14(2), 107-138.
- Wigfield, A., & Eccles, J.S. (2000). Expectancy-value theory of motivation. *Contemporary Educational Psychology*, 25, 68-81.
- Wigfield, A., & Eccles, J. S. (2002). Students' motivation during the middle school years. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education* (pp. 159-184). New York: Academic Press.
- Wigfield, A., Eccles, J.S., & Rodriguez, D. (1998). The development of children's motivation in-school contexts. In A. Iran-Nejad & P.D. Pearson (Eds.), *Review of research in education* (Vol. 23, pp. 73-118). Washington, DC: American Educational Research Association.
- Youniss, J., & Yates, M. (1997). *Community service and social responsibility in youth*. Chicago: University of Chicago Press.

Adolescent Attainment Value and Experiences in Sport.

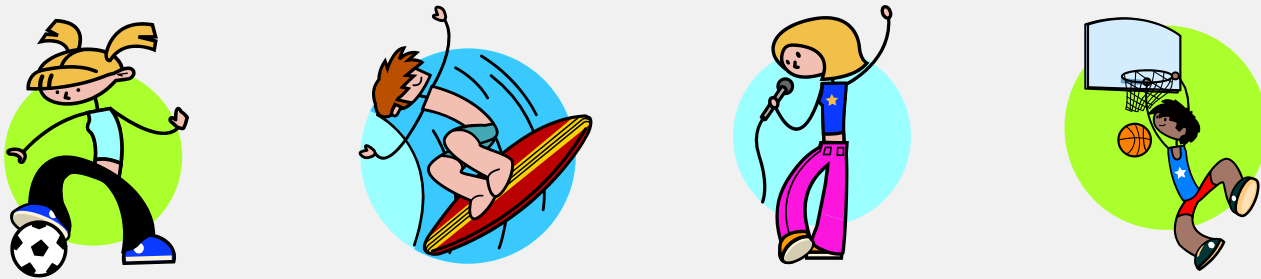
Appendix A

Copy of Youth Activity Participation Survey

Western Australia

2009

Thank you for choosing to participate in this survey. As the survey is completely confidential please try and answer all the questions as openly and honestly as you can. If you do not feel comfortable answering any of the questions please feel free to leave them blank.



ID Number ✂ _____

Date of Birth (dd/mm/yy) ✂ _____ / _____ / _____

What year are you in at school? Year 9 Year 10 Year 11 Year 12

If you are in Year 12, how many T.E.E. subjects are you doing? ✂ _____

Do you board (live) at your school? Yes No

What is your gender? Male Female

What suburb/town do you live in? ✂ _____ Post Code: ✂ _____

What education have your parents **completed**?

(Please tick all boxes that apply for each parent.)

Mother	Father	
<input type="checkbox"/>	<input type="checkbox"/>	Did not finish High School
<input type="checkbox"/>	<input type="checkbox"/>	Finished High School
<input type="checkbox"/>	<input type="checkbox"/>	Finished University

Adolescent Attainment Value and Experiences in Sport.
Youth Activity Participation Survey – Western Australia

Section A – Sports Participation



Q1) Have you participated in any **organised school sports /teams** outside of physical education classes in this school year? *(Please circle all the sports you do and indicate how many hours per week you participate in each of the sports you have selected).*

If you don't participate in any school-based sports please go onto the next page.

Example:

Activity	Approx hrs/week
Hockey	3 hrs per week

School-Based Sports (not Phys Ed)

Activity	Approx hrs/wk	Activity	Approx hrs/wk
<u>SPORTS</u>			
Athletics		Rugby	
Basketball		Soccer	
Cricket		Softball	
Cycling		Swimming/Diving	
Football (AFL)		Tennis	
Hockey		Touch Rugby	
Netball		Volleyball	
Other (please specify) 		Other (please specify) 	

Adolescent Attainment Value and Experiences in Sport.

Q2) Have you participated in any of the following **organised sports outside of school** in this school year? (*Please circle all the activities you do and indicate how many hours per week you participate in each of the activities you have selected*).

If you don't participate in any out-of-school-based sports please go onto the next page.

Example:

Activity	Approx hrs/week
<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> Soccer </div>	1.5 hrs per week

Out-of-School Sports

Activity	Approx hrs/wk	Activity	Approx hrs/wk
<u>SPORTS</u>			
Athletics		Horse riding/Pony club	
Baseball		Karate/Taekwondo	
Basketball		Netball	
BMX		Rugby	
Body Boarding		Soccer	
Boxing		Squash	
Cricket		Surfing	
Cycling		Swimming/Diving	
Football (AFL)		Tennis	
Golf		Touch Rugby	
Gymnastics		Volleyball	
Hockey		Other (please specify) 	
Other (please specify) 		Other (please specify) 	

Adolescent Attainment Value and Experiences in Sport.

Q3) Please specify which sporting activity you spend the most time in
(If you do not participate in any sporting activities please go to section B on page 10)

✍ _____

Q4) Is this a school-based activity? (e.g. school team)

Yes No

Q5) How many hours per week (*not including school time*) do you spend in this activity?

✍ _____ Hours

Not currently active (not participating right now, for example the sport is out of season)

Q6) How many months/years have you been participating in this activity?

✍ _____ Years *✍* _____ Months

Q7) Do you participate in this activity on your own or with a group of other people around your age?

On my own

In a group

Q8) Other participants in this activity are

The same sex as me

A mixture of boys and girls

Q9) How much time do you spend interacting with an adult during this activity?
(Circle one)

None of The time	a little of the time			all of the time
1	2	3	4	5

Adolescent Attainment Value and Experiences in Sport.

The following questions are related to the sporting activity you chose in question 3.

Q10) Based on your involvement in this activity please rate whether you have had the following experiences by ticking the appropriate box.

	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Was able to experience the challenges of being a leader				
This activity got me thinking about who I am				
Tried doing new things				
Learned I had a lot in common with youth from different backgrounds				
Tried a new way of acting around people				
I do things in this activity I don't get to do anywhere else				
Started thinking more about my future because of this activity				
I felt like what I did made a difference				
Experienced feeling liked by others in this activity				
Others in this activity counted on me				
This activity has stressed me out				
I learned to control my temper				
This activity has been a positive turning point in my life				
Became better at dealing with fear and worry				
Had an opportunity to be in charge of a group of peers				
I set goals for myself in this activity				
When I start something in this activity I always try my best to finish it				
Had to consider possible obstacles when making plans				
Got to know people in the community				
I made friends with someone new				
I put all my energy into this activity				
Had the chance to push myself				
Had to focus my attention				

Adolescent Attainment Value and Experiences in Sport.

Became better at handling stress				
Worked with other people my own age on a common goal				
Had experiences with organizing time and not procrastinating (not putting things off)				

	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Learned about setting priorities				
Practiced self discipline				
Made friends with someone from a different ethnic or cultural group				
Had to find ways to achieve my goals				
I have been successful in this activity				
Felt like I didn't belong in this activity				
Came to feel more supported by the community				
In this activity I saw that hard work pays off				
When this activity is difficult I keep trying anyway				
Learned to get along with others				
Made friends with someone from a different social class (someone from a family who were more or less well off than my family)				
I regularly achieve what I aim to in this activity				
This activity has given me many opportunities to improve my abilities				
Came to feel more a part of my community				
I felt like what I did mattered				

Adolescent Attainment Value and Experiences in Sport.

Q11) The following questions are about the adult leader in your sport; if your sport does not involve an adult leader please go onto question 12.

The adult leader in this activity.....	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Encourages me to always try my best				
Supports me when I am having difficulties				
Puts too much pressure on me during this activity				
Makes me feel like I can succeed in this activity				
Listens to my point of view				
Puts me down in front of others in this activity				
Creates a strong positive environment				

Q12) How true for you are the following statements about your parents, when participating in your sport?

I worry about letting my parents down when I play this sport.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

My parents and I have fun going to my games/competitions.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

No matter how well I do in my sport, my parents don't think its good enough.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

This sport has improved my relationship with my parents.

Not at all definitely Yes,
 1 _____ 2 _____ 3 _____ 4 _____ 5

My parents get upset with me when I don't do well in this sport.

Adolescent Attainment Value and Experiences in Sport.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

This sport interfered with doing things with my family.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

My parents support or help me with this sport.

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

How pleased do you think your parents are with how well you are doing in your sport this year?

Not at all pleased Extremely pleased
 1 _____ 2 _____ 3 _____ 4 _____ 5

Q 13) Please read the following statements about your sport and respond by circling one number.

How important is it to you to be good at this sport?

not at all important very important
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7

How much do you enjoy participating in this sport?

a little alot
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7

Compared to other kids your age, how good do you feel you are at this sport?

One of the Worst One of the Best
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7

Participating in this sport gives me a strong feeling that this is who I am

Never Always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7

Adolescent Attainment Value and Experiences in Sport.

During this sport I feel so involved that nothing seems to matter

Never 2 3 4 5 6 Always
 1 2 3 4 5 6 7

During this sport I have a very high level of concentration

Never 2 3 4 5 6 Always
 1 2 3 4 5 6 7

I become so involved in this sport that I lose track of time

Never 2 3 4 5 6 Always
 1 2 3 4 5 6 7

I concentrate so intensely that I can't think about anything else

Never 2 3 4 5 6 Always
 1 2 3 4 5 6 7

Q14) What proportion of your friends participating in this sporting activity are...

Planning to go to university? (*Circle one number*)

none half all
 1 2 3 4 5

Doing very well in school?

none half all
 1 2 3 4 5

Encourage you to do your best in school?

none half all
 1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

Regularly drink alcohol?

none		half		all
1	2	3	4	5

Regularly use illegal drugs?

none		half		all
1	2	3	4	5

Likely to skip class?

none		half		all
1	2	3	4	5

More than one year older than you?

none		half		all
1	2	3	4	5

Section B – Activity Participation

Q15) Which of the following **activities or clubs at school** have you participated in this school year outside of school classes? (*Please circle all the activities you do and indicate how many hours per week you participate in each of the activities you have selected*).





If you don't participate in any school-based activities go to the next page.

Example:

Activity	Approx hrs/week
<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> Drama </div>	4 hrs per week

Adolescent Attainment Value and Experiences in Sport.

School-Based Activities & Clubs

Activity	Approx hrs/wk	Activity	Approx hrs/wk
Arts and Performing Arts			
Art		Youth and health festival	
Band or Orchestra		Modeling	
Choir		Music lessons (please specify)	
Dance			
Drama		Other (please specify)	
Rock – Eisteddfod			
Clubs			
Chess club		School committee	
Service clubs		School council	
Computer game club		Debate club/Public speaking	
Other (please specify) 		Other (please specify) 	

Q16) Have you participated in any of the following **activities or clubs outside of school** in this school year? (Please circle all the activities you do and indicate how many hours per week you participate in each of the activities you have selected).





If you don't participate in any out-of-school activities go onto the next page.

Example:

Activity	Approx hrs/week
<u>Cadets</u>	2.5 hrs per week

Adolescent Attainment Value and Experiences in Sport.

Out-of-School Activities & Clubs

Activity	Approx hrs/wk	Activity	Approx hrs/wk
Arts and Performing Arts			
Community band		Dance club/competitions	
Private band		Music lessons (Please specify) 	
Drama club		Other (Please Specify) 	
Recreational Clubs			
Computer gaming/ networking		Other (Please specify) 	
Service Clubs			
Cadets		Surf life saving	
Church/Youth groups		Volunteer/service work	
Scouts/Girls, Boys Clubs		Other (Please Specify) 	

Q17) If you have circled any non-sporting activities please tell us which one you spend the most time in.

(If you do not participate in any non-sporting activities please go to Section C on page 18)

 _____

Q18) Is this a school-based activity? (e.g. school team)

Yes

No

Q19) How many hours per week (*not including school time*) do you spend in this activity?

 _____ Hours

Adolescent Attainment Value and Experiences in Sport.

Not currently active (not participating at this time)

Q20) How many months/years have you been participating in this activity?

✍ _____ Years *✍* _____ Months

Q21) Do you participate in this activity on your own or with a group of other people around your age?

On my own

In a group

Q22) Other participants in this activity are

The same sex as me

A mixture of boys and girls

Q23) How much time do you spend interacting with an adult during this activity?

(Circle one)

None of The time	a little of the time			all of the time
1	2	3	4	5

The following questions are related to the non-sporting activity you chose in question 17.

Q24) Based on your involvement in this activity please rate whether you have had the following experiences by ticking the appropriate box.

	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Was able to experience the challenges of being a leader				
This activity got me thinking about who I am				
Tried doing new things				

Adolescent Attainment Value and Experiences in Sport.

Learned I had a lot in common with youth from different backgrounds				
Tried a new way of acting around people				
I do things in this activity I don't get to do anywhere else				
Started thinking more about my future because of this activity				
I felt like what I did made a difference				
Experienced feeling liked by others in this activity				
Others in this activity counted on me				
This activity has stressed me out				
I learned to control my temper				
This activity has been a positive turning point in my life				
Became better at dealing with fear and worry				
Had an opportunity to be in charge of a group of peers				
I set goals for myself in this activity				
When I start something in this activity I always try my best to finish it				
Had to consider possible obstacles when making plans				
Got to know people in the community				
I made friends with someone new				
I put all my energy into this activity				
Had the chance to push myself				
Had to focus my attention				
Became better at handling stress				
Worked with other people my own age on a common goal				
Had experiences with organizing time and not procrastinating (not putting things off)				

Adolescent Attainment Value and Experiences in Sport.

	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Learned about setting priorities				
Practiced self discipline				
Made friends with someone from a different ethnic or cultural group				
Had to find ways to achieve my goals				
I have been successful in this activity				
Felt like I didn't belong in this activity				
Came to feel more supported by the community				
In this activity I saw that hard work pays off				
When this activity is difficult I keep trying anyway				
Learned to get along with others				
Made friends with someone from a different social class (someone from a family who were more or less well off than my family)				
I regularly achieve what I aim to in this activity				
This activity has given me many opportunities to improve my abilities				
Came to feel more a part of my community				
I felt like what I did mattered				

Q25) The following questions are about the adult leader in your activity; if your activity does not involve an adult leader please go onto question 26.

The adult leader in this activity.....	1 Not At All	2 A Little	3 Quite A Bit	4 Yes, Definitely
Encourages me to always try my best				
Supports me when I am having difficulties				
Puts too much pressure on me during this activity				
Makes me feel like I can succeed in this activity				
Listens to my point of view				
Puts me down in front of others in this activity				

Adolescent Attainment Value and Experiences in Sport.

Creates a strong positive environment			
---------------------------------------	--	--	--

Q26) How true for you are the following statements about your parents, when participating in your activity?

I worry about letting my parents down when I play this activity.

Not at all true for me Very true for me
 1 2 3 4 5

My parents and I have fun going to my performances/ club activities.

Not at all true for me Very true for me
 1 2 3 4 5

No matter how well I do in my activity, my parents don't think its good enough.

Not at all true for me Very true for me
 1 2 3 4 5

This activity has improved my relationship with my parents.

Not at all Yes, definitely
 1 2 3 4 5

My parents get upset with me when I don't do well in this activity.

Not at all true for me Very true for me
 1 2 3 4 5

This activity interfered with doing things with my family.

Not at all true for me Very true for me
 1 2 3 4 5

My parents support or help me with this activity.

Not at all true for me Very true for me
 1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

How pleased do you think your parents are with how well you are doing in your activity this year?

Not at all pleased Extremely pleased
 1 2 3 4 5

Q27) Please read the following statements about your non-sporting activity and respond by circling one number.

How important is it to you to be good at this activity?

not at all important very important
 1 2 3 4 5 6 7

How much do you enjoy participating in this activity?

a little a lot
 1 2 3 4 5 6 7

Compared to other kids your age, how good do you feel you are at this activity?

One of the Worst One of the Best
 1 2 3 4 5 6 7

Participating in this activity gives me a strong feeling that this is who I am

Never Always
 1 2 3 4 5 6 7

During this activity I feel so involved that nothing seems to matter

Never Always
 1 2 3 4 5 6 7

During this activity I have a very high level of concentration

Never Always
 1 2 3 4 5 6 7

Adolescent Attainment Value and Experiences in Sport.

I become so involved in this activity that I lose track of time

Never Always

1 2 3 4 5 6 7

I concentrate so intensely that I can't think about anything else

Never Always

1 2 3 4 5 6 7

Q28) What proportion of your friends participating in this activity are...

Planning to go to university? (*Circle one number*)

none half all

1 2 3 4 5

Doing very well in school?

none half all

1 2 3 4 5

Encourage you to do your best in school?

none half all

1 2 3 4 5

Regularly drink alcohol?

none half all

1 2 3 4 5

Regularly use illegal drugs?

none half all

1 2 3 4 5

Likely to skip class?

none half all

1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

More than one year older than you?

none		half		all
1	2	3	4	5

Please go on to Section D on Page 19 

Section C – Your Friends

Only answer the following questions if you do not participate in any sporting or non-sporting activities and have skipped sections A & B.

If you have answered sections A & B please go onto section D on page 19

Q29) What proportion of your friends are...

Planning to go to university? (*Circle one number*)

none		half		all
1	2	3	4	5

Doing very well in school?

none		half		all
1	2	3	4	5

Encourage you to do your best in school?

none		half		all
1	2	3	4	5

Regularly drink alcohol?

none		half		all
1	2	3	4	5

Regularly use illegal drugs?

Adolescent Attainment Value and Experiences in Sport.

none half all
 1 2 3 4 5

Likely to skip class?

none half all
 1 2 3 4 5

More than one year older than you?





none half all
 1 2 3 4 5

Section D

Q30) If you participate in any of the following activities outside of school hours please tell us how many hours per week you spend in each activity?

How many hours per week do you spend in each of these activities?	Hours per week
Paid Work (part time/casual job, not including work from parents)	
Doing homework or studying (outside of school)	
Home chores (doing dishes, cleaning)	
Taking care of younger siblings	
Practicing or playing a musical instrument	
Watching Television	
Working out or physical activity (on your own or at the gym, not as a part of an organised sports activity) Please Specify ✍ _____	
Computer Console Gaming (Playstation, X-Box etc) Which game do you play the most? ✍ _____	

Adolescent Attainment Value and Experiences in Sport.

<p>Internet Gaming (online games)</p> <p>Which one do you play the most?</p> <p> _____</p>	
<p>Internet Usage – Social Networking (webchat, MySpace)</p> <p>Which one do you use the most?</p> <p> _____</p>	
<p>Internet Usage – Other (downloading music, ebay)</p> <p>Please specify</p> <p> _____</p>	
<p>Hobbies (model making, scrapbooking etc)</p> <p>What hobbies do you do the most?</p> <p> _____</p>	

Section E – About You

Q31) Please read the following statements and rate how true each statement is for you. *(Circle one number)*

I feel really good about the way I look

Not at all true for me Very true for me

1 2 3 4 5

Overall I am satisfied with my physical abilities

Not at all true for me Very true for me

1 2 3 4 5

I feel really good about what I can do physically

Not at all true for me Very true for me

1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

I am very happy with the appearance of my body

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

Overall I am satisfied with my appearance

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

I am very happy with my performance in physical activities

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5

Section F

Q32) Please read the following statements and rate how true each statement is for you. (Circle one number)

I am very good at making friends

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

If I don't understand something in class I know I am capable of learning it

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

I am able to do most things very well

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Adolescent Attainment Value and Experiences in Sport.

If I work really hard I could be one of the best students in my school year

Not at all true for me					Very true for me
1	2	3	4	5	6

I am always comfortable talking to other people my age

Not at all true for me					Very true for me
1	2	3	4	5	6

A lot of things about me are good

Not at all true for me					Very true for me
1	2	3	4	5	6

I have the ability to be good at most school subjects if I try

Not at all true for me					Very true for me
1	2	3	4	5	6

If I really try I can be good at almost anything I want to

Not at all true for me					Very true for me
1	2	3	4	5	6

It is important to me to do well in school

Not at all true for me					Very true for me
1	2	3	4	5	6

I have a lot to be proud of

Not at all true for me					Very true for me
1	2	3	4	5	6

Adolescent Attainment Value and Experiences in Sport.

I always feel like I am part of a group of friends

Not at all true for me Very true for me
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Q33) How often are the following statements true for you?

I like the way things are going for me.

Never Almost always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

My life is going well.

Never Almost always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

I would like to change many things about my life.

Never Almost always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

I have a good life.

Never Almost always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

I feel good about what's happening to me.

Never Almost always
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Q33) How often do you.....

Feel good about yourself? (*Circle one number*)

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Lose your appetite or eat a lot when you get upset?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Adolescent Attainment Value and Experiences in Sport.

Feel that difficulties are piling up so high that you can't overcome them?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel satisfied with who you are?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel that you are capable of coping with most of your problems?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel lonely?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Keep a cool head in emergencies?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel sure about yourself?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel unhappy, sad or depressed?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Feel there is nothing nice you can look forward to?

never daily
 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6

Adolescent Attainment Value and Experiences in Sport.

Section G – You and School

Q34) Please rate how true the following statements are for you. (Circle one number)

How much do you like school?

Not at all A lot
 1 2 3 4 5 6 7

I feel like I really belong in my school

Not at all Very true
 true for me for me
 1 2 3 4 5

School is interesting

Not at all Very true
 true for me for me
 1 2 3 4 5

I feel that working hard at school is a waste of my time

Not at all Very true
 true for me for me
 1 2 3 4 5

I enjoy school activities

Not at all Very true
 true for me for me
 1 2 3 4 5

I would like to leave school as soon as I can

Not at all Very true
 true for me for me
 1 2 3 4 5

I believe that succeeding at school is important

Not at all Very true
 true for me for me
 1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

I look forward to going to school

Not at all true for me Very true for me
 1 2 3 4 5

I know that school can be boring but I try hard anyway because it will lead to better opportunities for me in the future

Not at all true for me Very true for me
 1 2 3 4 5

Q35) How likely is it that you will go to university after high school?

Not at all Likely Extremely Likely
 1 2 3 4 5 6 7

Section H – About Your Friends

Q36) Please answer the following questions about your friends (circle one number)

My friends treat me well

Not at all true for me Very true for me
 1 2 3 4 5

I wish I had different friends

Not at all true for me Very true for me
 1 2 3 4 5

My friends are great.

Not at all true for me Very true for me
 1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

My friends are nice to me.

Not at all true for me					Very true for me
1	2	3	4	5	

Compared to other teenagers in your school, how popular are you?

Least Popular					Most Popular
1	2	3	4	5	

Section I – About Your Family

Q37) Please answer the following questions about your family. (Circle one number)

I enjoy being at home with my family.

Not at all true for me					Very true for me
1	2	3	4	5	

My family gets along well together.

Not at all true for me					Very true for me
1	2	3	4	5	

I like spending time with my parents.

Not at all true for me					Very true for me
1	2	3	4	5	



My parents and I do fun things together.


Not at all true for me					Very true for me
1	2	3	4	5	


Adolescent Attainment Value and Experiences in Sport.

Section J

Q38) Have you ever created your own profile online that others can see, like on a social networking site like Myspace, Bebo, or Facebook (This does not include MSN/Yahoo)?

- No  skip questions below; go to **Section K, Page 30**
- Yes  answer the questions below.

What is the profile you use, or update most often?  _____

How long have you had your profile?  _____

Answer the following questions about the profile (Myspace/Bebo/Facebook) you use the most often. Please tick the applicable answer.

Q39) Is your profile set to public or private?

- Public Private

Q40) About how often do you visit your profile?

- Never
- Less than once a month
- Every few weeks
- 1-2 days a week
- 3-5 days a week
- About once a day
- Several times a day

Q41) How often do you change your profile (e.g. change status, change personal information, add photos)?

- Never
- Less than once a month
- Every few weeks
- 1-2 days a week
- 3-5 days a week
- About once a day
- Several times a day

Adolescent Attainment Value and Experiences in Sport.

Q42) Is any of the personal information (e.g. interests, etc) you have on your profile not true?

- Yes No

How often do you use Myspace/Bebo/Facebook etc to:

Make new friends (*please select one*)

- Never
 Less than once a month
 Every few weeks
 1-2 days a week
 3-5 days a week
 About once a day
 Several times a day

Stay in touch with friends you rarely see in person (*please select one*)

- Never
 Less than once a month
 Every few weeks
 1-2 days a week
 3-5 days a week
 About once a day
 Several times a day

Make plans with your friends (*please select one*)

- Never
 Less than once a month
 Every few weeks
 1-2 days a week
 3-5 days a week
 About once a day
 Several times a day

Flirt with someone (*please select one*)

- Never
 Less than once a month
 Every few weeks
 1-2 days a week
 3-5 days a week
 About once a day
 Several times a day

Adolescent Attainment Value and Experiences in Sport.

Q43) How important is it to you to have a lot of friends on your network?

Not at all important Very important

1 2 3 4 5

Q44) How many friends do you have on your profile? ✍️ _____

Q45) Compared to other people your age with a profile, how many friends on do you have?

- A lot less than others
- A little less than others
- About the same as others
- A bit more than others
- A lot more than others

Q46) Have you ever deleted a friend? (Do not include 'Tom' from MySpace)

- Yes No

Q47) How often do you usually communicate online with friends you met on the internet, who you didn't know from before?

- Never
- Less than once a month
- Every few weeks
- 1-2 days a week
- 3-5 days a week
- About once a day
- Several times a day

Q48) How much do you agree/disagree with the following statements?

Myspace/Bebo/Facebook has become part of my daily routine.

Completely disagree Completely agree

1 2 3 4 5

I feel out of touch when I haven't logged on to Myspace/Bebo/Facebook.

Completely disagree Completely agree

1 2 3 4 5

Adolescent Attainment Value and Experiences in Sport.

Section K

Q49) The following questions ask you about behaviors that may be considered risky, if you are uncomfortable answering any of the questions feel free to leave them blank.

About how often in the last 6 months have you **drunk alcohol?** *(Tick one box for each question)*

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **had more than 5 alcoholic drinks on one occasion?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **been drunk?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **used illegal drugs?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **skipped school without parent permission?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **done something you knew was dangerous just for the thrill of it?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **damaged public property?**

Adolescent Attainment Value and Experiences in Sport.

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **had contact with police for something you did or something they thought you did?** (*Tick one box for each question*)

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **gotten suspended from school?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **done some pretty risky things because you thought it was a kick?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **gotten in a physical fight with another person?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **cheated on an exam, or copied someone else's homework?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **taken something from a store without paying for it?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **taken money from home that was not your own without asking?**

Adolescent Attainment Value and Experiences in Sport.

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

About how often in the last 6 months have you **not used your seatbelt in a car?**

none	once	2-3 times	4-6 times	7-10 times	11-20 times	21-30 times	31 or more times
------	------	--------------	--------------	---------------	----------------	----------------	------------------------

Section L

Q50) How would you describe your family background? *(Tick all that apply)*

- Caucasian (Anglo-Australian, European or American)
- Aboriginal/Torres Strait Islander
- Asian
- Middle Eastern
- African
- Other (please specify) *✍* _____

In what country were you born? *✍* _____

If born outside Australia how old were you when you moved here? *✍* _____

In what country was your father born? *✍* _____

In what country was your mother born? *✍* _____

Adolescent Attainment Value and Experiences in Sport.

Q51) Are your parents?

- Married and living together all the time
- Divorced
- Married and living together but one works away a lot of the time (fly in-fly out)
- Single/ sole parent (never married)
- Living together in a marriage-like relationship
- Widowed/widower (parent(s) passed away)
- Separated

Does your father work for pay? Yes No

If your father is currently employed, what does he do in his job? ✍️ _____

Does your mother work for pay? Yes No

If your mother is currently employed, what does she do in her job? ✍️ _____

Q52) How much do you weigh? ✍️ _____ **What is your height?** ✍️ _____

Section M

Q54) Please read each item carefully and circle the answer that best corresponds to your agreement or disagreement:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I lose my temper easily.	SD	D	N	A	SA
I often get involved in things I later wish I could get out of.	SD	D	N	A	SA
I often act without stopping to think.	SD	D	N	A	SA
I have sometimes done things just for "kicks" or "thrills".	SD	D	N	A	SA
I like to be where the action is.	SD	D	N	A	SA
It takes a lot to get me angry.	SD	D	N	A	SA
I often crave excitement.	SD	D	N	A	SA

Adolescent Attainment Value and Experiences in Sport.

I try to do jobs carefully, so they won't have to be done again.	SD	D	N	A	SA
When a project gets too difficult, I'm inclined to start a new one.	SD	D	N	A	SA
I usually work quickly without bothering to check	SD	D	N	A	SA
Sometimes I'm not as dependable or reliable as I should be.	SD	D	N	A	SA
I'd have to be really sick before I'd miss a day of school.	SD	D	N	A	SA
I work hard to accomplish my goals.	SD	D	N	A	SA
I often get angry at the way people treat me	SD	D	N	A	SA
I waste a lot of time before settling down to work.	SD	D	N	A	SA
I don't feel like I'm driven to get ahead.	SD	D	N	A	SA
I strive for excellence in everything I do.	SD	D	N	A	SA
I have trouble making myself do what I should.	SD	D	N	A	SA
I often get into arguments.	SD	D	N	A	SA
Once I start a project, I almost always finish it.	SD	D	N	A	SA

😊 **End of Survey - Thank you for your participation** 😊

Adolescent Attainment Value and Experiences in Sport.

Appendix B

Invitation to Schools to Participate in Research Project.

Sample
Sample Street
Sample 6000

Dear Mr. Sample,

I am writing to ask you to consider the participation of xxxx School in the research project: Youth Activity Participation Study Western Australia (YAPS-WA) directed by myself, Professor Bonnie Barber (Murdoch University) and Professor Jacquelynne Eccles.

The research project, as noted in the attached press release by the Hon Julie Bishop (11-10-06), is being funded by a grant from the Australian Research Council, and will seek to investigate how youths' involvement in extracurricular activities contributes to positive development. More specifically, we will examine whether involvement in extracurricular activities predicts improved academic performance and school attachment, less risk behaviour and better psychological adjustment among youths. Our previous research in the US points to the important role of voluntary extracurricular activities in positive youth development, and we have received funding to consider this connection here in WA. This important research has already received in principle support from the Department of Education and Training and the Catholic Education Office of Western Australia (letters of approvals attached).

I have selected your prestigious school for participation in YAPS-WA for numerous reasons. ***** promotes an achievement of excellence that fully develops one's intellectual, moral, spiritual, social and physical capabilities. Through exceptional teaching facilities, such as the state-of-the-art ***** , in addition to high quality teaching, I strongly believe that your school offers an opportunity that is second to none. This is further evidenced by the extensive range of co-curricular activities, sporting programs, clubs and societies that ***** presents. Thus, this high quality academic institution can provide a rich source of information on the benefits of extracurricular activity participation.

The research project consists of a survey, administered to students via wireless laptop computers (we provide), and will ask students about their experiences with their peers, school and other adults. Please note that the actual running of the survey (including all setting up etc) would be entirely conducted by the research team. Contained in the survey are questions about student's participation in various extracurricular activities. Students will also be asked questions relating to their academic achievement, identity development, leadership experiences, risk behaviour (including drug and alcohol use) and psychological adjustment. Students will be informed that if they feel uncomfortable answering any of the questions that they may skip those questions.

All students in years 9 and 11 will be given the opportunity to participate, with the research aiming to recruit approximately 50 students from each year level. In order to study long-term benefits, the project is longitudinal in nature, with students being surveyed once a year for

Adolescent Attainment Value and Experiences in Sport.

three years. Therefore, at the completion of the project, students initially in year 9 will be in year 11, and students initially in year 10 will be in year 12. All students in the two year groups will be provided with an information and consent form for their parent and for themselves. In order to participate, students and their parents must give written consent. Student participation in the research project would be voluntary and confidential. As the project will be collecting longitudinal data, identifying information will be collected in order to match data across different points in time. However, the students will be assigned an identification number to ensure that their responses will not be directly stored with any personal identification information. No information about individuals or the school would ever be released – all publications will include only aggregated data.

In an effort to thank students for their interest in the research, all students who return their parental consent form, whether they have agreed to participate or not, will be entered into a raffle. It is anticipated that two raffles will be held, one for year 9's and one for year 11's, with a prize given out after the data collection has been completed each year. In an additional effort to show our appreciation, all students returning a parent consent form will be entered into a major prize-draw, where one student across all of the participating schools will win a major prize.

We will also supply your school with feedback from the study, providing interesting and useful information on how activity participation relates to positive outcomes such as school engagement. This feedback will consist of a report which provides an executive summary of the research findings, or if you would like, the research team will present the findings at your school.

There are a range of benefits that will result from the completion of this research project. First, the data will make a valuable contribution to the academic literature on activity participation and positive development. It is anticipated that the results of the project will be published in a range of high quality journals of the developmental literature. A list of some of our publications on activity participation from our US longitudinal study is attached as an indication of our track record in disseminating our research.

Second, this study will address crucial issues facing today's youth such as school connectedness and wellbeing. Research on these issues is of great importance as findings have the potential to be of great benefit to policy makers, schools and most importantly to young people. With the help of your school, we will provide data which will be of national benefit, improving the health and well-being of Australian youth.

All members of the research team have obtained National Police Clearances and Working with Children Checks, with copies available upon request. The study has been given ethical approval by the Murdoch University Human Research Ethics Committee (letter of approval attached).

If you have any questions regarding any part of the study please do not hesitate to contact me on ***** or b.barber@murdoch.edu.au. I will be in contact with you next week to discuss the participation of your school in this study.

Adolescent Attainment Value and Experiences in Sport.

Kind Regards

Professor Bonnie Barber
Professor of Psychology
Murdoch University

Selected relevant publications

- Barber, B. L., Stone, M. R., & Eccles, J. S. (2005). Adolescent participation in organized activities. In K. Moore and L. H. Lippman (Eds.) *Conceptualizing and measuring indicators of positive development: What do children need to flourish?* (pp. 133-146). New York: Springer.
- Barber, B. L., Stone, M. R., Hunt, J. & Eccles, J. S. (2005). Benefits of activity participation: The roles of identity affirmation and peer group norm sharing. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.) *Organized activities as contexts of development: Extracurricular activities, after-school and community programs* (pp. 185-210). Mahwah, NJ: Erlbaum.
- Hunt, J. E., Barber, B. L., & Banks, S. R. (2005). Sports participation: Impact on positive youth development. In Fisher, C. B. & Lerner, R. M. (Eds.) *Encyclopedia of applied developmental science*. Thousand Oaks: Sage.
- Perkins, D. F., Jacobs, J. E., Barber, B. L., & Eccles, J. S. (2004). Childhood and adolescent sports participation as predictors of participation in sports and physical fitness activities during young adulthood. *Youth and Society*, 35, 495-520.
- Eccles, J. S., Barber, B.L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59, 865-889.
- Eccles, J. S., Templeton, J., Barber, B. L., & Stone, M. R. (2003). Adolescence and emerging adulthood: The critical passage ways to adulthood. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, K. A. Moore, & The Center for Child Well-being (Eds.) *Well-being: Positive development across the life course* (pp. 383-406). Mahwah, NJ: Erlbaum.
- Durkin, K., & Barber, B. L. (2002). Not so doomed: Computer game play and positive adolescent development. *Journal of Applied Developmental Psychology*, 23, 373-392.
- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the Jock, the Brain, and the Princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.
- Raymore, L. A., Barber, B. L., & Eccles, J. S. (2001). Leaving home, attending college, partnership and parenthood: The role of life transition events in leisure pattern stability from adolescence to young adulthood. *Journal of Youth and Adolescence*, 30, 197-223.

Adolescent Attainment Value and Experiences in Sport.

Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research, 14*, 10-43.

*Reprinted in A. Yiannakis & M. J. Melnick (Eds.) (2001). *Contemporary issues in sociology of sport* (pp.125-142). Champaign, IL: Human Kinetics.

Eccles, J. S., Barber, B. L., Jozefowicz, D., Malanchuk, O. & Vida, M. (1999). Self-evaluations of competence, task values, and self-esteem. In N. Johnson, M. Roberts, & J. Worrell (Eds.) *Beyond appearances: A new look at adolescent girls* (pp. 53-83). Washington DC: American Psychological Association.

[†]Raymore, L. A., Barber, B. L., Eccles, J. S., & Godbey, G. C. (1999). Leisure behavior pattern stability during the transition from adolescence to young adulthood. *Journal of Youth and Adolescence, 28*, 79-103.

Adolescent Attainment Value and Experiences in Sport.

Appendix C

Copy of Letter of Acceptance for ARC Funding for Research Project.



The Hon Julie Bishop MP
Minister for Education, Science and Training
Minister Assisting the Prime Minister for Women's Issues
MEDIA RELEASE¹

11 October 2006

Australians to prosper from \$365 million in research projects

The Minister for Education, Science and Training, the Hon Julie Bishop MP, today announced \$365,069,342 in Australian Research Council grants.

The 1,154 grants were awarded in the latest Australian Research Council funding round for its two major schemes - *Discovery Projects* and *Linkage Projects* - and three smaller schemes, *Discovery Indigenous Researchers Development*; *Linkage Infrastructure, Equipment and Facilities*; and *Linkage International*.

"The projects funded today affect the whole community. Issues that are important in the lives of all Australians such as our health and wellbeing, the environment, and national security are all represented in the successful research projects."

Among the many successful projects are research programs that will:

- study the role that participation in organised extracurricular activities may play in the healthy development of Australia's youth (Murdoch University)
- develop micro-robots that will be powered to 'swim' through the vascular and digestive systems of the human body to perform medical tasks via remote control and, in many cases, avoid invasive major surgery (Monash University)

¹ http://www.arc.gov.au/media/releases/media_11Oct06.htm

Adolescent Attainment Value and Experiences in Sport.

- investigate previously unmapped venom systems for divergent, bioactive proteins with practical implications for the treatment of envenomations (from sources such as snakes, spiders, mosquitos and jellyfish), which is a recognised problem in Australia, as well as drug discovery and other commercial applications (The University of Melbourne)
- develop service delivery systems in the criminal justice system to better meet the needs of victims and witnesses (Monash University and Victoria Police).

Minister Bishop praised the 380 organisations partnering ARC-funded researchers in the *Linkage Scheme*, which have pledged a total of \$105,481,215 in cash and in-kind to the successful projects, representing \$1.77 for each dollar provided by the Government.

"When an independent organisation invests in an ARC-supported research program, it can be confident that it is committing its hard-earned dollars not only to a worthwhile project, but to a project undertaken by some of Australia's best researchers," Ms Bishop said.

In this round, average funding for *Discovery Projects* increased by 12 per cent on the previous funding round to \$334,267 per project, while average *Linkage Projects* funding increased by 9 per cent on the previous funding round to \$285,745 per project. The successful projects were selected from a record number of 4,834 applications and will begin in 2007.

The projects are funded under the ARC's National Competitive Grants Program, a component of the Government's 10-year \$8.3 billion additional commitment to innovation under *Backing Australia's Ability*.

Media Contacts: Ms Bishop's Office: Tory Vidler 0414 228 727
Australian Research Council: Simon Sedgley 0412 623 054

Adolescent Attainment Value and Experiences in Sport.

Appendix D

Letter of Explanation Sent to Parents Regarding Research Project.

DATE*****

PARENT CONSENT FORM: Student Participation in Research
Project Working Title: Youth Activity Participation Study of Western Australia

Dear Parent,

The Australian Research Council has provided funding for a team directed by Professor Bonnie Barber at Murdoch University to undertake a project investigating the role that extracurricular activity participation plays on the healthy development of adolescents. The purpose of this study is to find out the range of developmental experiences that occur within different leisure activities and examine how these experiences promote positive development in today's youth.

We are inviting students of Years 10 and 12 from ***** to participate in this important study regardless of whether or not they participate in extracurricular activities. In order to examine the long-term benefits of extracurricular activity participation, students will be surveyed once a year for three years.

With your consent, your child will complete a brief survey supplied by my research team. The survey will measure your child's experiences with their peers, school and other adults, and his/her participation in various extracurricular activities such as music and sport. Your child will be asked questions relating to academic achievement, identity development, leadership experiences, risk behaviour (including drug and alcohol use) and psychological adjustment. Example questions include "How much do you like school?", "What proportion of your friends are doing well in school?", and "How often do you feel sure about yourself?"

Participation in this survey is voluntary and written consent is required from both yourself and your child before the survey is undertaken. There are no expectations held by myself or your child's school that your child will participate. Your child is free to withdraw from the survey at any time, regardless of signed consent forms.

The survey is completely confidential – personal information and responses from individual surveys will not be made available to your child's school and only aggregated data collected from many schools will be published. At the completion of the study an executive summary of results will be provided to your child's school.

Adolescent Attainment Value and Experiences in Sport.

We plan to visit ***** to administer the survey to students on DATE*****
 Students with parental consent to participate will complete the survey during
 *****education. This survey will take approximately 40 minutes to complete.

In an effort to thank students for their interest in this study, all students who return the consent forms will be entered into two prize draws. The first draw will be a School Prize Draw, whereby two students will win either a
 ***** We shall conduct the School Prize Draw when we are at the school.

The second draw will be a Major Prize Draw, in which students from all participating schools will select one prize from a list that they would like to win (see card attached). This draw will be made towards the end of the year. Students should note that their chance of winning a specified prize is dependent on how many students throughout the state select that particular prize, with approximately 2000 students taking part in the project. Students simply circle which prize on the card they would like to win, and return this card along with the consent forms.

There are some excellent major prizes to be won including including:

If you are willing to allow your child to participate in this study, please complete the attached "Parent Consent Form" and return it to ... by If you have any questions about this project please feel free to contact me on 9360 2879, or alternatively you can contact Murdoch University's Human Research Ethics Committee on 9360 6677.

I am happy to discuss with you any concerns you may have on how this study has been conducted, or alternatively you can contact Murdoch University's Human Research Ethics Committee on 9360 6677.

Thank you for taking the time to consider your child's involvement in this important study.

Yours sincerely,

Professor Bonnie Barber
 Professor of Psychology
 Murdoch University

Adolescent Attainment Value and Experiences in Sport.

Appendix E

Copy of Parent Consent Form Issued to Parents Prior to Commencement of Survey.

PARENT CONSENT FORM

Project Title: Youth Activity Participation Study of Western Australia.

I _____ being the parent/guardian
of

_____ do / do not (circle one) consent to
my child's participation in the above research study. I understand the project requires
my child to complete a brief survey once a year for the next 3 years during a class
nominated by my child's school.

I understand that my child's participation is completely voluntary and confidential,
and that I may withdraw consent at any time, without providing a reason.

Parent/Guardian:

Signed: _____

Date:

Adolescent Attainment Value and Experiences in Sport.

Appendix F

Letter of Explanation to Students Regarding Research Project.

STUDENT CONSENT FORM: Student Participation in Research
School of Psychology

Project Working Title: The role of extracurricular activity participation in promoting healthy development of Australian youth

Dear Student,

The purpose of this study is to investigate your participation in extracurricular activities and the positive benefits these activities provide to you. You can help in this study by consenting to complete a survey. Should you participate it is anticipated that the time to complete the survey will be no more than 30-40 minutes. Contained in the survey are questions about your experiences during your participation in extracurricular activities and also questions about your friends, school and behaviour.

The survey is completely confidential; your survey answers will not be made available to your parents, peers or teachers. Participation in this survey is completely voluntary and written consent is required by you and your parent or guardian before you can complete the survey. As your participation is voluntary there will be no expectations held by either myself or your school that you will participate. You are free to withdraw from the survey at any time, without giving a reason, regardless of signed consent forms. You may also skip any questions that you feel uncomfortable with and would prefer not to answer.

A summary of results will be provided to your school at the completion of this research. These can be made available for all parents and students to read.

If you have any questions about this project please feel free to contact Professor Bonnie Barber, Chair of Psychology at Murdoch University, who is my supervisor for this research, on 9360 2879. My supervisor and I are happy to discuss with you any concerns you may have on how this study has been conducted, or alternatively you can contact Murdoch University's Human Research Ethics Committee on 9360 6677.

Please retain this letter for your information, and fill out and return the attached consent form if you are happy to participate in this study.

Regards

Professor Bonnie Barber
Chair of Psychology
Murdoch University

Adolescent Attainment Value and Experiences in Sport.

Appendix G

Copy of Student Consent Form Issued to Students Prior to Commencement of Survey.

STUDENT CONSENT FORM

Project Title: Youth Activity Participation Study of Western Australia.

I _____, of Year _____ agree to participate in the above research project by completing a brief survey during class time.

I understand the information that has been provided to me about the project. Any questions I have asked have been answered to my satisfaction. I agree to take part in this project, and know that I may change my mind and stop at any time, without providing any reason. I am also aware that I may skip any questions that I do not feel comfortable answering.

I also understand that all information provided is confidential.

Student:

Signed: _____

Date:

Adolescent Attainment Value and Experiences in Sport.

Appendix H

Notional Introduction Script for YAPS Data Collection.

First, all students should complete the student consent form and read the letter before we start. (Wait until they have signed before you go on.)

Good afternoon, I am _____, from Murdoch University. We appreciate your being willing to participate in our survey today about your leisure time activities.

We want to let you know that it is **completely confidential** – no one here at school, nor your parents, will see your individual answers, so please be completely honest.

There are **no right or wrong answers** – we just want to know what YOU think about these things.

If you choose not to participate, that is up to you, as you are not required to – but we hope you will be willing to share your opinions about your leisure time activities with us.

There are two types of prize draws for those participating today. First, we will be drawing for a school prize in the next couple of weeks, after the Year 11 students have also completed the survey, so please be sure you have filled out your prize card with your contact details. Then, on the back, number in order your preference for a choice of either a Dockers or Eagles footy, or a \$50 voucher for Music Gallery, which can be used towards an instrument, or for sheet music. Or, you can choose a Western Force visor and book, or Eagles stickers and player cards. So write down your first choice, second choice, and third choice on the back of your prize card for the school prize.

Example:

1. Eagles footy
2. music voucher
3. Western Force stuff

At the end of the term, we will draw for the prizes listed on the front of your card – from students across several schools in Perth. It is important you give us phone numbers where you could be reached in June – you can list two, a home phone and a mobile, if you like.

Instructions (Wait for students to complete prize cards, then continue)

The survey starts with 4 sections on sports and other activities.

The first set is about sports **IN SCHOOL**. If you do not play on a school team, skip this page. If you play on both a school team, and a team in your community or suburb, answer about the school team on the first section, and about the team you play on outside of school in the next section.

After you answer about your sports, please do the same for non-sports activities like music, clubs, and things like cadets. The school based ones are first, and then there is another page for the non-school ones.

Adolescent Attainment Value and Experiences in Sport.

FOR ALL OF THESE SPORTS AND ACTIVITIES, PLEASE THINK ABOUT THE ACTIVITIES YOU HAVE DONE IN THE PAST YEAR – SO NOT JUST THIS SCHOOL YEAR (SINCE JANUARY), BUT ALSO THOSE IN THE SECOND HALF OF THE PAST SCHOOL YEAR (SINCE LAST JULY).

Please put your hand up if you have any questions and I will come to you.

Adolescent Attainment Value and Experiences in Sport.

Appendix I

JOURNAL OF RESEARCH ON ADOLESCENCE: NOTICE TO CONTRIBUTORS

Journal of Research on Adolescence
The Official Journal of the Society for Research on Adolescence

Editor
Jacquelynne Eccles, University of Michigan

Associate Editors
Bonnie Barber, Murdoch University
Christy Buchanan, Wake Forest University
Linda Burton, Pennsylvania State University
Sumru Erkut, Wellesley College
Margaret Kerr, Orebro University
Stephen T. Russell, University of Arizona
Ingrid Schoon, University of London

Related Links
[Submit Online to JRA](#)
[Pre-Published Articles](#)
[Top Ten Article Downloads for JRA!](#)
[Available Tables of Content](#)
[View JRA Online! \(available to SRA members only\)](#)

Editorial Scope
We invite submissions to the Journal of Research on Adolescence (JRA). The JRA presents empirical and theoretical papers focused on development during adolescence and early adulthood. Studies are featured that use diverse methods including multivariate, longitudinal, demographic, clinical, ethnographic, and experimental analyses. Cross-national, cross-cultural, and studies of gender, ethnic, and racial diversity are of particular interest. We are committed to expanding the presence of qualitative and multi-method research reports, practical-based, policy-oriented research evaluations and reports, and studies related to biological processes. We are now accepting three new paper formats: (a) Brief reports (no more than 4,500 words, inclusive of everything). Such reports are particularly appropriate for studies that extend prior work to new populations in theoretically creative ways and are mandatory for all cross-sectional, correlational studies. These reports should be modeled after research reports in journals like Psychological Science and should focus on the methods and results. We plan to devote about half of our publication space to brief reports; (b) Comprehensive, monograph-type reports of longitudinal studies. These manuscripts can be up to 100 manuscript pages; (c) Theoretical papers

Adolescent Attainment Value and Experiences in Sport.

and comprehensive reviews of the literature similar to papers published in *Psychological Review* and *Psychological Bulletin*. In addition, we continue to accept more traditional papers based on empirical studies. These papers should be no more than 35 manuscript pages. Additional pages will have to be justified in the contributors' cover letter. These papers should involve either longitudinal analyses, multiple sets of analyses, or mixed methods and they must make unique empirical and theoretical contributions to the field. Questions concerning the submission process should be directed to the Managing Editor, Antonella Caiazza, at jra@s-r-a.org.

NEW Note from Editor: Brief reports will now be appearing at the front of each issue of *JRA*.

Editors: Jacquelynne S. Eccles, Bonnie Barber, Christy Buchanan, Linda Burton, Sumru Erkut, Margaret Kerr, Stephen Russell, Ingrid Schoon

Audience

Clinical, social, and developmental psychologists, sociologists, social workers, and those specializing in family studies.

Manuscript Submission

Please visit <http://www.s-r-a.org/jrasubmit/> to submit a manuscript.

Note to NIH Grantees

Pursuant to NIH mandate, The Society (through Wiley-Blackwell) will post the accepted version of Contributions authored by NIH grant holders to PubMed Central upon acceptance. This accepted version will be made publicly available 12 months after publication. For further information, see www.wiley.com/go/nihmandate.

Permissions

Authors are responsible for all statements made in their work and for obtaining permission from copyright owners to reprint or adapt a table or figure or to reprint a quotation of 500 words or more. Authors should write to original author(s) and publisher to request nonexclusive world rights in all languages to use the material in the article and in future editions. Provide copies of all permissions and credit lines obtained.

Regulations

Only original manuscripts, written in English, are considered. The corresponding author for a manuscript must, in an accompanying cover letter, warrant that all co-authors are in agreement with the content of the manuscript and that the study was conducted in accordance with the ethical standards of the American Psychological Association. Authors should also state that the findings reported in the manuscript have not been published previously and that the manuscript is not being simultaneously submitted elsewhere. Upon acceptance, the authors are required to sign a publication agreement transferring the copyright from the author to the Society.

Adolescent Attainment Value and Experiences in Sport.

for Research on Adolescence. Accepted manuscripts become the permanent property of the journal. A statement of Editorial Policy appeared in Volume 1, Number 1.

Manuscript Review

The Journal of Research on Adolescence has a Board of Editors that is vested with control over manuscript review and publication. Manuscripts are reviewed by the Editor and the Board of Editors and by invited reviewers with special competence in the area represented by the manuscript. Articles and reviews must be judged to be of substantial importance to the broad, multidisciplinary readership of the journal as well as meet a high level of scientific acceptability. A first level of review determines the importance and appropriateness of submissions to the journal readership at large in conjunction with scientific merit; on this basis, the Board of Editors decides whether the manuscript will be reviewed further.

A system of blind reviewing is used. It is the author's responsibility to remove information about the identity of the author(s) and affiliation(s) from the manuscript; such information should appear on the cover sheet. The cover sheet will not be included when a manuscript is sent out for review. The Board member responsible for a manuscript will have the discretion to integrate solicited review with the member's own opinions and recommendations into a determinative response. The Editor retains the right to reject manuscripts that do not meet established ethical standards. The Publications Officer regrets that, in case of rejection, manuscripts cannot be returned.

There is no charge for publication in the Journal of Research on Adolescence unless tabular or graphic materials exceed 10% of the total number of pages. Charges are also levied for changes in proof other than correction of printer's errors. Any inquiries relating to business matters (including reprint orders) should be addressed to the publisher:

BLACKWELL PUBLISHERS
Journal of Research on Adolescence
Production Coordinator
350 Main Street
Malden, MA 02148
(781) 388-8200