

Title: Sport activity as a determinant of multi-dimensional self concept, academic motivation and locus of control.

By

Lauren Kingston

**Submitted in partial fulfilment of the requirements of the Bachelor of Arts Degree
(Psychology Specialisation) at DBS School of Arts, Dublin.**

Supervisor: Patricia Orr.

Head of Department: Sinead Eccles.

April 2012

Department of Psychology

DBS School of Arts

Table of contents

	<u>Page numbers</u>
List of tables	i
Acknowledgements	ii
Abstract	iii
1. Introduction	
1.1 Introduction	1
1.2 Self-concept	3
1.3 Locus of Control	5
1.4 Motivation	7
1.5 Academics	9
1.6 Rationale	10
2 Method	12
2.1 Material	
2.2 Participants	14
2.3 Design	15
2.4 Procedure	15
2.5 Data Analysis	16
3 Results	
3.1 Descriptive statistics	17
3.1.1 Locus of control	
3.1.2 Self-concept	
3.1.3 Motivation	
3.2 Inferential Statistics	20
3.2.1 Sport participation and Loc	
3.2.2 Sport participation and Self-concept	
3.2.3 Sport participation and Academic motivation	
3.2.4 Sport participation, gender and Loc	
3.2.5 Sport participation, gender and Self-concept	

3.2.6 Sport participation, gender and Academic motivation

4 Discussion	26
4.1 Sports participation	26
4.2 Sports participation and Gender	30
4.3 Limitations	33
4.4 Further research	34
4.5 Conclusion	35
4 References	37
5 Appendices	41
Appendices 1 Consent letters.	
Appendices 2 Questionnaire Booklet	
2.1 Locus of Control Scale for Children	
2.2 Piers-Harris Self-concept Scale for Children	
2.3 Academic Motivation Scale (elementary)	

List of tables:

Table 1: Means of Locus of Control scores

Table 2: Means of Self-concept scores

Table 3: Means of Academic motivation scores

Table 4: Independent samples T-test Loc and sports participation

Table 5: Independent samples T-test sports participation and Self-concept

Table 6: Independent samples T-test sports participation and Academic motivation

Table 7: Univariate anova, Sports participation, gender and Self-concept

Table 8: Univariate anova, Sports participation, gender and Academic motivation.

Acknowledgements:

I would like to thank the two schools principals who enabled me to access data. I would also like to thank the children who participated in the current study for their time and patience. I would like to thank Michael Nolan for his help in accessing questionnaires. Thank you Niamh for the help and advice you provided during the process. Finally, I would like to thank my supervisor Patricia Orr for her input, advice and encouragement.

Abstract.

The purpose of this study was to investigate whether sports participation has a relationship with Self-concept, Locus of Control and Academic Motivation in children. The current study employed a between subject design where raw data was obtain through survey methods. The participants were children in 5th or 6th class in primary school, with a mean age of 11.5 years. All participants completed a booklet which included a short demographic page and three questionnaires. The three questionnaires included the Locus of Control Scale for Children, The Piers-Harris Self-Concept Scale for children and The Academic Motivation Scale (elementary). Results demonstrated that there is a significant relationship between sports participation and Loc. ($t = -2.679$, $df = 60$, $p = .01$, two-tailed). There is a significant relationship between sports participation and behavioural adjustment group ($t=2.22$, $df 60$, $p = < .05$, two tailed $p=0.03$).

There is a significant relationship between gender, sports participation and popularity ($F =4.09$, $p= 0.048$, partial $\eta_2= 0.07$). There is a significant relationship between gender, sports participation and intrinsic motivation. ($F= 7.184$, $p= 0.010$, partial $\eta_2= 0.110$).

Chapter 1: Review of literature

1.1. Introduction

There is very little research on the influence of sport participation on psychosocial well-being therefore this research is largely an exploratory study. Recent studies have shown that exercise has a positive effect on many different levels including health, mood, motivation, cardio-vascular fitness and even levels of attention. For example a study conducted showed that there was much improvement in cardiovascular fitness, strength and levels of arousal and attention in the classroom after adding five hours of physical activity per week to the schedule of children between the ages of six and eleven years old (Howe & Freedson, 2008).

In July 2010 the US Department of Health and Human Services carried out a review of the association between school based extracurricular activities, physical education and academic performance. The reason for this study was because the 60 minute physical activity per day guideline was being compromised due to the increasing challenges to find time for physical education within the school day. This research examines a number of different studies focusing on physical education, recess, classroom based P.E and extracurricular physical activity. Academic achievement is based on a number of different academic indicators including grades, behaviour during tasks, attendance, and cognitive skills such as attention, concentration, memory and mood. Nineteen studies were included in the section on extracurricular physical activity. The results of these studies showed that nearly all the associations between extracurricular physical activity (ECPA) and the indicators of academic performance were either positive (52%) or neutral (46%), with none having negative

associations. Twelve times out of twenty two when grade point average was measured it was positively associated. It was concluded that there was an association between student reports of ECPA, self-reported grades, positive academic attitudes and higher academic aspirations (US Department of Health and Human Services, 2010).

Pivarnik et al. (2006) aimed to determine the effect of physical education class enrolment and physical activity on academic achievement in middle school using a sample of two hundred and fourteen 6th graders who were assigned to a P.E class which engaged in moderate to vigorous physical activity during either the 1st or 2nd semester. The achievement academically was measured by grades from four core academic classes. The results demonstrated that grades were similar in semester one and two regardless of P.E enrolment. However it was found that students who met some or all of the guidelines for healthy people for vigorous activity had significantly higher grades than those students who did not perform any vigorous activity in either semester. In short although academic achievement was not significantly related to P.E enrolment, higher grades were associated with vigorous physical activity (Privarnik, Nomack, Reeves et al, 2006). There is no causal relationship established, therefore it could likely be that children have reached higher grades due to meeting the guidelines or that those who have high grades choose to engage in vigorous exercise that meet the guidelines for healthy people. An investigation to establish if exercise improves the executive function and achievement and alters brain activation in overweight children was carried out by Davis & Tomporowski et al (2011). These findings could determine if and exactly how exercise could improve mental functioning in overweight children and later be applied to all children. The children were put into either an exercise program of 20 to 40 minutes of exercise per day or a control group. Cognition and academic achievement was assessed as well as a functional MRI which measured brain activity during executive

function tasks. The results showed that specific improvement on executive function and brain activation changes were attributable to exercise (Davis & Tomporowski, 2011). Executive functions included the ability to plan, make decisions, judgement, problem solving and also regulation of response control, all tasks necessary for everyday living.

1.2 Self concept

Self concept refers to the perceptions that an individual holds regarding themselves. This can include the persons perceptions of their own abilities in different aspects of life skills (Harter, 1990, Wilgenbusch & Merrell, 1999.)

Jaffe and Wu (1996) found that girl involvement in physical activity is a factor of high body image. It was added that the participation would also affect self satisfaction levels, confidence and perceived competence. In the same article it was suggested that girls who participate in sport tend to have a higher self-esteem than those who do not participate. In 1981, Puckell and Ford looked into the relationship between self-concept scores and participation in recreational league team sports. There was 224 in the sample, all of which were 3rd or 4th grade boys. The study consisted of before and after scores. It involved a 5 week period of participation or non- participation in recreational league team sports. Pretest scores suggested significant differences in favour of participants. However post test scores showed no significant difference.

The objective of a study conducted by Ekeland and Heian et al. (2009). was to determine if exercise alone or exercise as part of a comprehensive intervention can improve self esteem among children and young people. It was thought that by improving self esteem it may help to prevent the development of psychological or behavioural problems in youths. There is

strong evidence for the positive physical health outcome of exercise but evidence of exercise on mental health is scarce. The investigation involved 23 trials and 1821 children and young people. The results showed that exercise has a short term positive effect on self-esteem in this age bracket. No negative effects of exercise were found. However the improvements that have been found in Self- esteem due to exercise could be due to the environment that the exercise takes place. The effects of autonomy, supportive coaching , need satisfaction and self- perceptions on initiative and identity in youth swimmers were investigated by Coatsworth and Conroy (2009). Over the course of 7 weeks, 119 children between the ages of 10 and 18 participated in a community directed summer swim league and during this time the participants filled out questionnaires to analyse their self-perceptions. The results indicated that coaches' autonomy support especially through process focused praise predicted youth competence need satisfaction. This competence need satisfaction indirectly predicted self-esteem. It was concluded that the climate of coaching is an important predictor of the developmental benefits of sport participation.

A link was found between children's' sport participation and self-esteem (Slutzky and Simpkins 2009). The purpose of this research was to investigate whether sports participation is positively associated with indices of adjustment such as self-esteem. Many studies have determined that sport participation can benefit children but less is known about the processes through which the benefit is created. This longitudinal study tested whether there is an association between the time spent in individual or team orientated organised sports the child's sport self-concept and later self esteem. The sample consisted of 987 elementary school children. The results were as follows. Children who spent more time participating in team sports, but not in individual sports, reported a higher self-concept than those who did not participate in team sports. High self concept was associated with high self-esteem. These

results did not vary across gender, sport ability, sport importance beliefs or peer acceptance. This study did not take into account the sporting ability of the child nor the particular sport which the child participated in.

Colley, Roberts and Chipps (1985) explored whether participation in team sports affected sex-role identity and personality. It was found that sports participants were higher on extraversion and masculinity than non participants. Females that participated in non competitive individual sport scored lower on extraversion than females involved in competitive sports. This suggests that extraverts are attracted to the competitive nature of sports.

Dishman & Hales et al (2006) investigated whether physical self concept and self-esteem mediate cross-sectional relations of physical activity and sports participation with depression symptoms among adolescent girls. Using a sample of 1,250 girls in 12th grade it was found that there was a strong positive relationship between global physical self concept and the girls self esteem. It also found that sport participation and physical activity had a positive indirect relation with physical self concept. It was suggested by Dishman & Hales that due to its positive influences on self concept, sports participation and physical activity may help reduce depressive symptoms.

1.3 Locus of control

Locus of control refers to the degree of perceived responsibility that one has for one's own behaviour. A person either has an internal or external locus of control. Someone with an internal locus of control believes that when positive or negative things happen it is down to the individual. An individual with an external locus of control believes that things happen

mainly down to luck and they do not possess the power to change things even when they want to.

Gilmor (1978) discovered in his research that children and adolescents who hold an internal beliefs function showed a more positive, efficacious and adaptive manner in both achievement and non achievement situations than children and adolescents who hold external beliefs. Labbe & Welsh (1993) studied 4th and 5th graders who were randomly assigned to regular P.E class or a programme which included 3 days per week of aerobic training for 8 weeks. For the students that participated in the programme the results were significant. They had a lower resting pulse, as well as higher self efficacy scores at the end of the program. After 6 months most of the differences had disappeared except that the running group evidenced a higher internal health locus of control.

Phyllis & Post (1999) suggested that child centred play therapy has an impact on the child's self -esteem, locus of control and anxiety. Participants were placed in randomised groups, one of which participated in play therapy whilst the other did not participate. The 4th, 5th and 6th graders from both groups were asked to fill out a questionnaire that would analyse their self -esteem, their intellectual achievement responsibility, and anxiety. Results showed that those children participating in play therapies did not change. However children who did not participate in the play therapies demonstrated a decrease in both self esteem and locus of control over the course of the school year.

Parsons & Betz (2001) explored the possibility that different sports might be differently related to psychological variables according to perceived masculinity or femininity.

It describes three attributes, the extent of participation, the nature of the sport that the individual is involved in, and the extent of physical fitness activity. Body shame was related to participation of sports and physical activity, mainly with more feminine sports, which also

related consistently with individual locus of control. Sorrentino and Sheppard (1978) conducted an experiment comparing both male and female swimmers racing 200m free style firstly as individuals and later as part of a team. They also assessed affiliation motivation. It was found that the swimmers best performance depended on the situation (alone or on a team) and also the motive type; approval-orientated or rejection threatened. Those with approval orientated motive best performed on a team, while those with a rejection-threatened motive performed better as an individual. (Weinberg& Gould, 2007).

Gruen, Korte & Baum (1974) researched group measures of locus of control amongst 1,100 black, white and Spanish children in 2nd, 4th and 6th grade. These children were from moderately disadvantaged schools. Evidence suggests that when the white children from a moderately disadvantaged background were compared with a sample of 155 white children from an affluent background, the more affluent children tended to have more internal responses than the disadvantaged children. Older children's' responses were also more internal than the younger participants. White children had more internal responses than black and Spanish children. Among the black subjects, females responded more internally than males. This study demonstrates differences in locus of control between races, ages and different affluence levels. This study also found that locus of control scores were significantly related to grade point averages, but were not significantly related to measures of IQ or social desirability.

1.5 Motivation

Pepjin and Van De Pol et al. (2011) looked at differences between training and competition, the consistency and differences in goal orientation between them, and whether these goal

orientations predict differences in effort, enjoyment and trait anxiety. A higher ego orientation was found in competition rather than in training. It was found that stress and mood can also affect the way in which we learn. (Williamson & Dewey, 2001). Mood change was assessed within the age bracket of nine and ten. It was carried out by the children responding to a self-report mood measure after either watching 15 minutes of video as part of the control group or participating in 15 minutes of exercise. It found significant increase in positive mood after physical exercise, suggesting that short bouts of exercise does have a psychological benefit. The relationship between perceived coaching behaviours and developmental benefits of high school sports was examined by Gould & Carson, 2010. This study recorded athletes' perception of coaches behaviours and their own development of life skills. These life skills included the ability to take initiative, goal setting and showing emotional control. The sample included former high school athletes, 67 males and 123 females. Each participant was given a survey assessing their development of life skills and the experience they had with their primary high school sport. The results showed for example that participants who showed higher levels of coaching behaviours, talked about sports lessons in relation to life, competitive strategies and also goal setting. They also reported that development of life skills such as emotional regulation, certain cognitive skills, feedback, pro social norms and linkage to community were more characteristic of their high school sport. Participants who reported negative coaching behaviours were less likely to see their coaches as someone who helped them with goal setting, sportsmanship and other life skills. They also were more likely to have reported having experienced stress, social exclusion and negative group dynamics. Gould and Carson concluded that the link between sports participation and life skills is more complex and requires further investigation.

Academics 1.6

Zeiser examined racial differences in the effect of popular sports participation on academic achievement (2011). It showed that participation in varsity football had a negative effect on 12th grade GPA scores for black men but not for white. Varsity basketball had positive association with a high 12th grade GPA in white woman but not in black woman.

Samuel Johnson (1982) describes in the article sport participation and psychological adjustment, the recreational and the therapeutic value of sport participation. It also mentions the social adjustment opportunities made available through group/ team sports and the muscular movements that are involved which help not only physical fitness but in turn can contribute to mental health. Sport is not simply a leisure time activity as it acts as a catharsis among subjects by sublimating tensions or stress that has built up throughout the day into socially acceptable outlets. This release of tension can be learned through sport and applied in other life situations. If children learned sports systematically in the long run they would have greater success not only in games but also in other life situations. (Samuel Johnson 1982). A variety of skills are necessary in sport such as agility, speed, and stamina. Mental skills are also required; being able to face a “problematic or tension bound situation with maximum self confidence and courage without losing heart or getting depressed in the event of a failure” (p. 274). These skills could be applied to any aspect of life including education. Johnson states that it is likely that those who participate in sports in the long term may carry over values that will help enrich future personality.

The physiological, biochemical and psychological status of “normal” men indicated that

distinct personality differences exist between physically trained and untrained men. (Ismail & Young, 1977).

1.7 Rationale

The benefits of physical activity for physical or psychological health are unquestionable. It is shown in many different studies how it can effect female self-esteem, but there are not as many studies that have examined the benefits of physical activity on males, how a once off fitness camp can improve a Childs locus of control. Studies do not show if continuous participation in sport whether it be team sport or individual sport can affect LOC or self-concept. Furthermore gender differences are not considered in conjunction with team sport or individual sport. This study aims to investigate whether there is a significant link between participation in regular team sport, individual sport or non-sport participation and multi-dimensional self-concept. It also investigates the link between sport participation and motivation and locus of control.

Overall this study should highlight the importance of team sport and sport in general and how it may contribute to improved psychological well being. The study has a between subjects design. The predictor independent variable will include the responses to the demographic question about the subject's participation in team sport, individual sport or non participation. The outcome variables will include global and domain-specific self-concepts assessed using the Piers Harris multi dimensional measure, locus of control and academic motivation. It is a convenience study using children from a mid socio economic background between the ages of ten and twelve (5th and 6th class) in co educational schools. The main

hypothesis is that there will a relationship between participation in sport (team and individual), multi-dimensional self -concept, motivation level and locus of control.

Hypothesis 1. There will be a significant relationship between sports participation and locus of control.

Hypothesis 2. There will a significant relationship between sports participation and self-concept.

Hypothesis 3. There will be a significant relationship between sports participation and academic motivation.

Hypothesis 4. There will be a significant relationship between gender, sport participation and self-concept.

Hypothesis 5. There will be a significant relationship between gender, sport participation and locus of control.

Hypothesis 6. There will be a significant relationship between gender, sport participation and academic motivation.

Chapter 2: Method

2.1 Materials

The materials used in the current study consisted of a self report questionnaire including the Locus of Control Scale for Children, the Piers-Harris 2 Self concept Scale, and the Academic Motivation Scale (elementary). The first page of the questionnaire included a short demographic section. It required the participant to write their age, gender and to indicate whether they are involved in either team sport, individual sport or do not participate in any sport.

The Locus of Control Scale for children consists of 40 questions in total. The responses are in a 'yes' or 'no' format. The participant is asked to select 'yes' if the statement applies to them and to select 'no' if the statement does not apply to them. Certain questions are weighted depending on the answers provided. Some questions carry points if the participant answers yes and other questions carry points if the participant answers no. The higher the overall score for the participant the greater the degree of external locus of control.

The Piers-Harris 2 is a self report questionnaire designed for children and adolescents between the ages of 7 years old and 18 years old. It consists of 60 items where the participant must indicate whether or not the statement applies to them by circling yes or no. It is comprised of 6 domain scales which assess specific components of self concept. They include behavioural adjustment (BEH), intellectual and school status (INT), physical

appearance and attributes (PHY), freedom from anxiety (FRE), popularity (POP), happiness and satisfaction (HAP). All of the subscales are added together for a total score in self concept. The higher the score, the more positive the self evaluation. Piers – Harris 2 validity is consistent with the original the Piers-Harris and other studies which include multi-dimensional measures of self- concept. It has 20 items less than the original however the reduction does not hold any impact on the measures of the total score. There are four major types of validity issues that need to be taken into consideration, (a) exaggeration (b) response bias (c) random responding and (d) moderator variables. “Exaggeration refers to a more or less deliberate attempt by a child to distort his or her answers in order to produce a given effect.”. (Piers& Herzberg, 2003). It is common for a child to alter their answers on the Piers-Harris 2 in a socially desirable direction however this alteration does not represent the deliberate attempt to mislead others. In the main Children are less aware of the significance of the way they present themselves. (b) Response bias names the tendency to agree or disagree with the statement given in the questionnaire, without taking the content of that statement into consideration. (c) Random responding, meaning that the answers given for each item are inconsistent. (INC). If a child scores highly on response bias and/ or INT it is an indication that the child did not understand the test items or had some other difficulty leading to these responses. (d). Moderator variables are independent variables that affect the response such as ethnic group, culture, or gender.

The Academic Motivation Scale (elementary) assesses intrinsic and extrinsic motivation at elementary school level. It is comprised of different situations that the participant may find themselves in as students. They are asked to indicate the extent to which they do these school related behaviours for the reasons provided by each situation. The responses are made on a 5 point scale. The items across each situation for each construct is added together to obtain the

scores for:

1. Extrinsic motivation (identified regulation)
2. Amotivation.
3. Extrinsic motivation (introjected regulation).
4. Intrinsic motivation.

The Academic Motivation Scale, the Piers-Harris Self-concept scale and the LOC questionnaire was changed from the standard portrait layout to landscape layout to make it easier to read.

2.2 Participants.

The participants in the current study consisted of 64 5th and 6th class primary school students from two co-educational primary schools in south county Dublin. Out of the 64 participants 62 were used in the study. Only 2 reported participating in no sport at all and since this number was too small for a non-sport participation group to be included in the statistical analysis, questionnaires for these 2 participants were eliminated. Forty-eight pupils participated in team sport and 14 pupils participated in individual sport. The participants were aged between 10 years old and 13 years old with a mean age of 11.5 years, (SD=0.621). The gender breakdown was exactly even with 31 females and 31 males participating in the research. Each child took part in the study voluntarily. Prior consent for the children to participate was given by the school principal of both schools. The parents from the second school also gave consent for their child's participation. Participants, school principals and parents were assured of anonymity and confidentiality.

2.3 Design.

The current study employed a between subjects design where raw data was obtained through survey methods. The predictor variables include sports participation and gender. The outcome variables include self concept, Locus of Control and academic motivation.

2.4 Procedure.

Ahead of commencing the data collection, a pilot study was carried out to make sure that all instructions were clear and to assess the overall length of time it took to complete the questionnaires. The participant was an 11 year old female. Completion of the questionnaire took 22 minutes and this was a very useful indicator of the average length of time it would take for the other participants to complete the questionnaire pack. Prior to the undertaking of the research, permission to access children in the first school was granted by the principal. The research was carried out differently in both schools. The second school required a consent form to be sent home to the child's parent or guardian to sign. A brief written description of the study was sent home to the child's parent or guardian with a consent form and a copy of the questionnaire. If the parent wished for their child to participate they were asked to return the completed questionnaire and consent form to the school. In the first school the data collection took place in the classroom. Each class were given a brief verbal description of what the current study involved, and then talked through each section of the questionnaire describing how the questions should be answered. The children were reminded

of the importance of answering every question and that there were no right or wrong answers. Each participant was given a booklet consisting of the demographic page and the three questionnaires The Locus of Control Scale for Children, the Piers-Harris 2 Self concept Scale and the Academic Motivation Scale (elementary)). Participants were asked to read each question carefully and to raise their hand if they experienced any difficulty. No time limit was placed on the completion of the questionnaire. The data collection took approximately 30 minutes for each class. On completion the participants were thanked for taking part in the study. After all questionnaires had been collected, the responses were scored and entered into SPSS.

2. 5 Data Analysis

Data were analysed using SPSS 18. Independent samples T-tests were used to analyse whether scores on self-concept, locus of control and motivation differed according to participation in a team or individual sport. A one-way ANOVA was used to compute the relationship between gender and sport participation and the 3 outcome variables.

Chapter 3: Results

Descriptive Analysis:

Table 1: Locus of control - Means and standard deviation scores for locus of control for children across both types of sport - team participants and individual participants.

Sport	N	Mean	Standard deviation
Team sport	48	14.35	3.773
Individual sport	14	17.43	3.797

Table 1 shows that 77.4% of the sample participated in team sport and 22.6% participated in individual sport. The mean value of locus of control for the team sport group was 14.35 and the SD was 3.773. The mean value of locus of control for individual sport group was 17.43 and the SD was 3.797.

Table 2: Self-concept - Means and Standard Deviation scores for the Piers-Harris test domains by sport group.

Sub- scale	Sport	N	Mean	Standard deviation
BEH	Team	48	12.29	2.062
	Ind	14	10.86	2.349
INT	Team	48	11.71	3.189
	Ind	14	10.93	3.605
PHY	Team	48	8.58	2.483
	Ind	14	7.64	2.134
FRE	Team	48	10.96	3.364
	Ind	14	10.00	2.882
POP	Team	48	9.42	2.360
	Ind	14	8.00	3.595
HAP	Team	48	8.67	1.837
	Ind	14	7.93	1.859

Total	Team	48	60.25	13.715
	Ind	14	55.36	13.574

The mean value of the Piers-Harris total score for team sport was 60.25 and the SD was 13.715.

The mean value of the Piers-Harris total score for individual sport was 55.36 and the SD was 13.574.

The mean value of behavioural adjustment score for team sport was 23.29 and the SD was 2.062.

The mean value of the behavioural adjustment score for individual sport was 10.86 and the SD was 2.349.

The mean value of intellectual and school status score for team sport was 11.71 and the SD was 3.189.

The mean value of intellectual and school status score for individual sport was and the SD was 3.189.

The mean value of physical appearance and attributes score for team sport was 8.58 and the SD was 2.483

The mean value of physical appearance and attributes score for individual sport was 7.64 and the SD was 2.134

The mean value of freedom from anxiety score for team sport was 10.96 and the SD was 3.364

The mean value of freedom from anxiety score for individual sport was 10.00 and the SD was 2.882

The mean value of popularity score for team sport was 9.42 and the SD was 2.360.

The mean value of popularity score for individual sport was 8.00 and the SD was 3.595.

The mean value of happiness and satisfaction score for team sport was 8.67 and the SD was 1.837.

The mean value of happiness and satisfaction score for individual sport was 7.93 and the SD was 1.859.

Table 3: Motivation - Means and standard deviations of participants across the sport participation groups.

Sport		N	Mean	Std. Deviation
Individual sport	Extrin mot (id reg)	48	9.73	4.036
	Amot	48	5.33	3.257
	Extrin mot (intro)	48	13.02	2.855
	Intrinsic	48	8.50	3.684
Team sport	Extrin mot (id reg)	14	8.79	3.599
	Amot	14	5.64	4.308
	Extrin mot (intro)	14	12.00	3.508
	Intrinsic	14	7.57	4.415

The mean value of extrinsic motivation identified regulated for team sport was 8.79 and SD was 3.599.

The mean value of extrinsic motivation identified regulated for individual sport was 8.79 and SD was 4.036.

The mean value of Amotivation for team sport was 5.64 and SD was 4.308.

The mean value of Amotivation for individual sport was 5.33 and SD was 3.257.

The mean value of Extrinsic motivation introjected regulated for team sport was 12.00 and SD was 3.508.

The mean value of Extrinsic motivation introjected regulated for individual sport was 13.02 and SD was 2.855.

The mean value of intrinsic motivation for team sport was 7.57 and SD was 4.415.

The mean value of intrinsic motivation for individual sport was 8.50 and SD was 3.684.

Inferential statistics :

Sport participation and Locus of control

The data of sports participation and LOC were normally distributed therefore an independent samples T-test was carried out.

Table 4:

Independent samples T test.

		T	df	Sig (2 tailed)	Mean difference.
Locus of control	Equal variances assumed	-2.679	60	0.010	-3.07

The above table shows that the mean scores on LOC differed significantly according to whether participants belonged to the team sport group or the individual sport group ($t = -2.679$, $df = 60$, $p = .01$, two-tailed).

Self concept

The data in the self concept scales and sport participation is in the main normally distributed apart from few outliers. An independent T test is used to analyse the data.

Table 5:

Independent samples T test

Domain		T	df	Sig.(2-tailed)	Mean dif.
BEH	Equal variance assumed	2.220	60	0.03	1.435
INT	Equal variance assumed	0.782	60	0.437	0.780
PHY	Equal variance assumed	1.284	60	0.204	0.940
FRE	Equal variance assumed	0.966	60	0.338	0.958
POP	Equal variance not assumed	1.390	60	0.183	1.417
HAP	Equal variance assumed	1.319	60	0.192	0.738
TOT	Equal variance assumed	1.177	60	0.244	4.893

There was a significant relationship between behavioural adjustment (BEH) scores and sport participation. Post-hoc analysis indicated that mean scores on the behavioural adjustment sub-domain were significantly higher for the team sports group ($t=2.22$, $df\ 60$, $p = < .05$, two tailed $p=0.03$). None of the other domains of self concept demonstrated significant group differences.

Motivation:

Normal distribution assumed as few variables deviated from the normal curve.

Table 6:

Independent samples t test

Motivation		T	df	Sig tailed	2	Mean diff
Extrinsic mot (id reg)	Equal variance assumed	0.787	60	0.434		0.943
Amotivation	Equal variance assumed	-0.290	60	0.773		-0.310
Extrinsic mot (intro reg)	Equal variance assumed	1.117	60	0.268		1.021
Intrinsic mot	Equal variance assumed	0.793	60	0.431		0.929

Mean scores on the 4 different types of Motivation did not significantly differ according to sport participation group.

Gender and sport participation

Locus of control

The mean value of Loc for female team sports participants was 15.28 and SD was 4.088. The mean value of Loc for female individual sports participants was 18.33 and SD was 3.266.

The mean value of Loc for male team sports participants was 13.35 and SD was 3.185. The mean value of Loc for male individual sports participants was 16.75 and SD was 4.234.

There is no significant relationship between sports participation, gender and Locus of Control score. ($F= 0.32$, $p=0.879$, $\eta_2= 0.00$)

Self-concept.

Table 7:

Source	Dependant variable	Type 3 sum of squares	Mean squares	F	Sig.	Partial Eta Squared
Gender*sport	BEH	0.142	0.142	0.032	0.859	0.001
	INT	0.135	0.135	0.012	0.913	0.000
	PHY	8.247	8.247	1.440	0.235	0.024
	FRE	1.618	1.618	0.000	0.999	0.000
	POP	27.311	27.311	4.097	0.048	0.066
	HAP	1.234	1.234	0.355	0.554	0.006
	TOT	92.665	92.665	0.483	0.490	0.008

There is a significant relationship between gender and sport participation and popularity. ($F =4.09$, $p= 0.048$, partial $\eta_2= 0.07$). The mean value of popularity for female team sport participants was 9.56 and SD was 2.219. The mean value of popularity for female individual sport participants was 10.00 and SD was 2.191. The mean value of popularity for male team participation was 9.26 and SD was 2.544. The mean value of popularity for male individual

sport was 6.50 and SD was 3.817. There is no significant relationship between gender sports participation and behavioural adjustment. ($F=0.032$, $p=0.859$, partial $\eta_2= 0.001$).

There is no significant relationship between gender sports participation and intellectual and school status. ($F= 0.012$, $p= 0.913$, partial $\eta_2= 0.000$)

There is no significant relationship between gender sports participation and physical appearance and attributes. ($F= 1.440$, $p=0.235$, partial $\eta_2= 0.024$).

There is no significant relationship between gender sports participation and freedom from anxiety. ($F=0.000$, $p= 0.999$, partial $\eta_2= 0.000$).

There is no significant relationship between gender sports participation and happiness and satisfaction. ($F= 0.355$, $p= 0.554$, partial $\eta_2= 0.006$)

There is no significant relationship between gender sports participation and total self-concept. ($F= 0.483$, $p= 0.490$, partial $\eta_2= 0.008$).

Motivation.

Table 8:

<u>Source</u>	<u>Dependent variable.</u>	<u>Type 3 sum of squares.</u>	<u>Mean square.</u>	<u>F</u>	<u>Sig.</u>	<u>Partial Eta squared.</u>
Gender*sport	Extrinsic mot (id reg)	6.190	6.190	0.388	0.536	0.007
	Amotivation	13.350	13.350	1.072	0.305	0.018
	Extrinsic mot (intro reg)	8.156	8.156	0.981	0.326	0.017

	Intrinsic mot	90.888	90.888	7.184	0.010	0.110
--	---------------	--------	--------	-------	-------	-------

There is no significant relationship between gender, sport participation and extrinsic motivation identified regulated. (F= 0.388, p= 0.536, partial η_2 = 0.007).

There is no significant relationship between gender, sports participation and Amotivation. (F= 1.072, p=0.305, partial η_2 = 0.018).

There is no significant relationship between gender, sports participation and extrinsic motivation introjected regulated. (F= 0.981, p= 0.326, partial η_2 = 0.017).

There is a significant relationship between gender, sports participation and intrinsic motivation. (F= 7.184, p= 0.010, partial η_2 = 0.110). Females total scored higher on intrinsic motivation M= 9.35, than males total M= 7.23. The mean value of females who participate in team sport was 10.12 and SD was 3.059 which was higher than the mean value of females who participate in individual sports 6.17 and SD was 2.563. The mean value of males who participate in team sports was 6.74 and SD was 3.535 was lower than males who participate in individual sport 8.63 and SD was 5.344.

Chapter 4: Discussion

The purpose of this study was to investigate whether there is a relationship between sport participation and locus of control, self concept and academic motivation in children between the ages of 10 and 13 years old. The current study also investigated whether the relationship between these variables differed according to gender.

Sport participation and Locus of Control

The results of the independent samples t-test showed that sport participation does influence Locus of Control . Children who participated in individual sports had a more external LOC than those children who participated in team sports. LOC refers to the degree of perceived responsibility one has on one's own behaviour. An individual with an internal LOC believes, be it positive or negative, that when things happen it is their own doing. On the other hand, individuals with an external locus of control believe that when things happen it is mainly due to external factors such as luck.

Persons with an external LOC have a belief that they do not control things that are happening around them. If a student believes that they cannot change their situation this could affect their grades - for example not seeing the point in studying for an exam. These results from the current study are consistent with the findings of Labbe & welsh (1993). In Labbe &

Welsh's research it was found that a group of children who had been introduced to an aerobics exercise regime for 8 weeks had a higher self efficacy at the end of the program than those in the control group who participated in regular P.E. After 6 months the aerobics group still maintained a higher internal LOC. Phyllis & Post (1999) findings also showed that those involved in play therapy did not change their results for self esteem and LOC and throughout the course of the therapy. However, those who did not participate in play therapy showed a decreased level in self esteem and internal LOC.

The current study used an independent samples t test to analyse sports participation and self concept. This analysis obtained results for the 6 sub scale domains and the total Piers Harris score. The results showed that there was a statistically significant relationship between behavioural adjustment and sport participation. ($t= 2.22$, $df 60$, $p=0.03$). This means that those who participate in individual sports tended to be those with a lower behavioural adjustment score. Those who participated in team sport tended to have a higher behavioural adjustment score. Children who score highly on the behavioural adjustment scale perceive themselves to be able to comply with rules and expectations at home and in school. Children who have low scores in behavioural adjustment may perceive themselves as always causing trouble and unable to adhere to the rules and standards set by their parents and teachers. Slutzky and Simpkins (2009) investigated if there was a relationship between time spent in either team sports or individual sport and later self esteem. They found that those who participated in team sports had a higher behavioural adjustment score in self concept than those who did not participate in sport.

Intellectual and school status did not show significant results between team and individual sport. The mean of INT for team sports was 11.71 ($SD=3.189$) and the mean for INT for

individual sport was 10.93 (SD= 3.605). This sub scale assesses the child's general satisfaction with school and their future expectations for achievement. The results of this sub scale within the self-concept scale can help demonstrate how team sport and individual sport can affect unexpected aspects of life, such as intellectual and school status. This can then be used to help encourage children to participate in both team sports or individuals sports.

The mean of physical appearance and attributes for team sport participants was 8.58 (SD=2.483) and the mean for individual sport was 7.64 (SD= 2.134). Although the mean is higher there was no statistically significant relationship between physical appearance and attributes and sport participation. This scale measures a child's attitude towards their physical appearance as well as attributes that include leadership and the ability to express ideas. Dishman & Hales et al (2006) researched the physical self concept with sports participation among adolescent girls and found that there was a positive indirect relation between physical self concept and physical activity.

The freedom from anxiety scales assess a number of different emotions that the youngster may feel such as nervousness, worry, shyness, sadness and fear. The higher the results on the scale the lower anxiety the individual feels. The results showed that for team sports the mean was 10 (SD=2.8820) and the mean for individual sport was 9.42 (SD= 2.364). The mean is higher for teams sports meaning that those participating in teams sports feel less anxiety than those participating in individual sports. However this result is not statistically significant therefore it cannot be inferred that there is a relationship between freedom from anxiety and choice of sport.

Popularity represents the child's self evaluation on his or her social functioning. It takes into

Consideration how popular the child feels through inclusion in games and sports, as well as their perception on their ability to make friends. Team sports mean was 9.42 (SD=2.360) and the mean for individual sport was 8.00 (SD= 3.595). There was no significant difference between the two means therefore there is no significant relationship between popularity and sport participation. How a child evaluates his or her social functioning is extremely important, how they view their popularity can affect not only their self-esteem but their education as well. Although the results in this study were not significant they showed that those in participated in team sport had a higher average score in popularity than those who participated in individual sport. Demonstrate the importance of sports as a way to keep active, stay fit and increase social functioning scores.

Happiness and satisfaction reflects general satisfaction with life and happiness. In the current study team sport participant mean scored 8.67 (SD= 1.837) and individual sports participants scored 7.93 (SD= 1.859). There is no significant relationship between happiness and satisfaction and sport participation.

The total self concept score reflects the total of all the other sub scales in the Piers- Harris questionnaire. A high score reflects a more favourable global self concept. Those who score highly are confident in their abilities across all 6 sub-domains. In terms of sport participation the mean for team sport was 60.25 (SD= 13.715) and the mean for individual sport was 55.36 (SD= 13.574). It can be concluded that there is no significant relationship between sports participation and self concept ($t= 0.18$, $df 60$, $p= 4.89$). Puckell and Ford (1981) study investigated to see if there was a relationship between self concept and recreational league team sports. The pretest scores suggested that there was a significant relationship in favour of the participant however post test scores did not see any significant relationship. Although the

results in the current study do not demonstrate significant results it is clear that all of the Self-concept sub domain show a trend of a positive association with team sport. This positive association can be used to encourage team sport which not only may affect the child self-concept but their fitness and health.

Gender and sports participation.

There is a significant correlation between gender, sports participation and popularity. The results showed that females who participated in team sports have a lower mean value of POP, 9.56 than those females who participated in individual sports who scored a mean of 10.00. However males who participated in team sports had a higher mean of popularity 9.26 than males who participated in individual sport, $M= 6.50$. The results show that males are affected more by sports participation than females when it comes to how they perceive their social functioning. Future studies could look into sport participation with particular focus on males to see if there are any other aspects which are affected by these determinants.

There is no other significant correlation between gender and other Piers-Harris scales. Many other studies looked at self concept in girls. Jaffe and Wu (1996) found that girls who participated in sport had a higher self esteem than those who do not. There is no significant relationship between gender and self concept including behavioural adjustment; intellectual and school status, physical appearance and attributes, freedom from anxiety, happiness and satisfaction and the total self-concept.

The current study supports Wilgenbusch & Merrell (1999) research that there is no significant difference in LOC between males and females at elementary level education. However it was found that in secondary level education males have a significantly higher self concept than females. In the current study there is no statistically significant relationship

between LOC and gender and sport participation($F= 0.32$, $p=0.879$, $\eta_2= 0.00$).

Gruen, Korte & Baum (1974) found gender differences in locus of control. This study also took race and socio economic background into account, the results showed many differences between those from disadvantaged backgrounds and affluent background, significant differences between white, Spanish and black participants. It was found that black subject females had a higher internal LOC than males.

There is a no significant relationship between gender, sports participation and extrinsic motivation (identified regulation). ($F= 0.388$, $p= 0.536$, partial $\eta_2= 0.007$). And there is also no significant relationship between gender, sports participation and amotivation. ($F= 1.072$, $p=0.305$, partial $\eta_2= 0.018$). There is no significant relationship between gender, sports participation and extrinsic motivation (introjected regulation) . ($F= 0.981$, $p= 0.326$, partial $\eta_2= 0.017$).

Males tend to be those with the lower score of extrinsic motivation (introjected regulation). Males who participated in individual sports scored the lowest with a mean value of 10.63, males who participate in team sports scored slightly higher with a mean value of 12.26. Females tend to be those with the higher scores of extrinsic motivation (introjected regulation). There is little difference between females who participate in team sport and females that participate individual sport. Team sport had a lower mean score of 10.72 than individual sport participates the mean value was 10.83.

There is a statistically significant relationship between gender, sports participation and intrinsic motivation. ($F= 7.184$, $p= 0.010$, partial $\eta_2= 0.110$). Females total scored higher on intrinsic motivation $M= 9.35$, than males total $M= 7.23$. The mean value of females who participate in team sport was 10.12 and SD was 3.059 which was higher than the mean

value of females who participate in individual sports 6.17 and SD was 2.563. The mean value of males who participate in team sports was 6.74 and SD was 3.535 was lower than males who participate in individual sport 8.63 and SD was 5.344.

A study examined the differences of the effect of popular sport on academic achievement by Zeiser (2011) showed that 12th grade GPA scores were negatively affected for black men (but not white men) that participated in varsity football. However varsity basketball had a positive correlation with 12th grade GPA score in white woman, and black women's GPAs remained stable as there was no negative effect. The current test focused gender in the correlation with academic motivation. It showed that females have a higher academic motivation than male in turn affecting their education. These results are consistent with Zeisers results as it shows that there is a difference between females and males, the woman had a positive correlation between sport and academic achievement as in the current study females had a positive correlation with academic motivation.

The findings show that children who participate in team sport have a more internal locus of control than those who participate in individual sport. Having an internal locus of control is extremely important as it is the belief that you can make a difference in your own life, that if you work hard enough you can succeed. This belief applies in all aspects of life including education. It was found that locus of control were significantly related to grade point average scores, not significantly related to IQ scores in a study carried out by Gruen, Korte & Baum, 1974. This information could be beneficial to schools to help encourage children to take up team sport to gain the physical benefits and the psychological benefits. There is also a significant correlation between team sport participation and behavioural adjustment meaning

that children participating in team sports believe they adhere to rules and guidelines set out by parents and teachers and reach expectations set out by themselves and others. Furthermore females scored higher than males on two types of motivation, extrinsic (introjective regulation) and intrinsic motivation. Further research must be carried out to discover the cause of this relationship. This study highlighted the percentage of children within these classes that participate in sport. Sport is a very important way of exercising, which has been known to effect health, weight, stamina, fitness, strength, as well as having a positive association with higher academic aspirations and academic attitudes.

Limitations.

The information obtained from this exploratory research is useful as further support for other research on team sport. However several limitations must be considered. It is recognised that a small sample was used in this study $n= 62$, making it difficult to generalise results. There was an imbalance on the distribution of the participant between the three groups, team participant $N= 48$, individual sport participants $N=14$. Due to the small sample in individual sport participation it may not have been a representative sample for the group. The children who did not participate in any sport had to be left out of the study as the sample was too small for data from this group to be statistically analysed. The current study could therefore not investigate whether or not there is a significant difference between participation in sport (both individual and team) and no participation in sport. The ratio between males and females was equal (male=31, female=31). The schools that the research was carried out in are both south Dublin co educational primary schools, both based in an area of middle socio economic background. A larger sample group from a variety of different schools would

provide a more representative sample for each of the three groups.

The schools had different requirements to how they wanted the study to be carried out, permission was granted by the principle from the first school and then the research carried out in the classroom. It is easier to control for external variables when the research is being carried out in the classroom, for example noise, bias from other students, parents, or siblings. The second school required the questionnaire to be brought home with the child to the parent with a letter describing the study and note from the principle. If the parent allowed their child to take part in the study they would return the completed questionnaire to the school. As these questionnaires were completed at home it is difficult to control the environment that the child filled it out. The child could have been influenced by the mood of the household, the noise, other siblings or friends that may have been present, by their parents. With parents present the child may answer the questions in the way they feel they are supposed to. They may not have been completely honest in their answers as complete confidentiality was not guaranteed.

Another limitation of the study was time constraints, with more time a larger scale study could have been carried out and with that a more representative sample.

Further research

In this study the results showed that there is a positive correlation between sport participation and behavioural adjustment scores. It found that those involved in team sport tended to have higher behavioural adjustment scores than those involved in individual sport. High scores in behavioural adjustment means that the youngsters see themselves as not causing trouble and

being able to comply with the standards of conduct and expectations that are set out by them by parents or teachers or even themselves. It cannot be assumed that team sports causes a high behavioural adjustment score. Further research must be carried out to investigate the cause variable. In the current research team sport participation had a higher score on all of the sub scale domains of the Piers- Harris 2, none of which were statistically significant. A larger sample in three variable groups; team sport, individual sport and no sport participation may produce significant results.

The current study could be replicated with the same students in a longitudinal experiment design to investigate whether their self concept, locus of control and or motivation has changed with maturity and also with a change of schools into secondary level education. Gruen, Korte and Gould (1974) research on locus of control demonstrates that older children have a more internal locus of control than the younger children that participated in this study. It was also found that locus of control significantly correlated to the participants grade point average but was not significantly related to measures of IQ.

Conclusion.

There are various practical implications of the current study, as sport is being increasingly encouraged for children and adults as a way of reducing the obesity epidemic. This study reinforces the idea that sport is beneficial in more ways than just physical health. Some schools in Ireland have made it school policy to participate in team sports.

In conclusion the main aim of this study was to measure the self concept of children on a

multi dimensional scale as well as measuring their locus of control and academic motivation. It investigates whether or not these variables have a relationship with sport participation. The results do not satisfy the majority of the hypothesis however, hypothesis 1 was supported by the results as a significant relationship was found between children's locus of control and sport participation. Hypothesis 2 was not supported by the results however Behavioural adjustment, a sub domain of the Self-concept Scale was supported by the results as being significantly correlated with sport participation. Hypothesis 3 was not supported by the results. Hypothesis 4 was not supported by the results, however gender, sports participation was found to have a significant relationship with popularity. Males team sport participants scored higher than male individual sport participants. Female team sport participants scored lower than individual sports participants. Hypothesis 5 was not supported by the results. Hypothesis 6 was not supported by the results however there was a significant relationship found between gender, sports participation and intrinsic motivation.

4 References:

- Coatsworth & Conroy, (2009). The effects of autonomy- supportive coaching, need satisfaction, and self- perceptions on initiative and identity in youth swimmers. *Developmental psychology, vol.45(2), pp320-328.*
- Colley, Roberts, & Chipps, (1985). Sex role identity personality & participation in team and individual sports by male and female. *International Journal of sports psychology, vol.16(2)*
- Davis, L., Tomporowski, P., Mc Dowell, J., Austin, B., Miller, P., Yanasak, N., Allison, J., & Niglieri, J. (2011), Exercise improves the executive function and achievement and alters brain activation in overweight children, a randomised controlled trial. *Health psychology, vol. 30, pp91-98.*
- Dishman, R.K., Hales, D, Pfuifer, Felton, Saunders, Ward, Dowda , & Pate. (2006). *Health psychology, vol.25 (3), pp. 396-407.*
- Ekeland, E., Heian, F., Hagen, K.B. Abott, JM., & Nordheim, L. (2009). Exercise to improve self-esteem in children and young people (review). *Hellenic journal of psychology.*

Gilmor, T. (1978). Locus of Control as a mediator of adaptive behaviour in children and adolescents. *Canadian Psychological Review/Psychologie canadienne, Vol 19(1)*, pp1-26.

Gould & Carson, (2010). The relationship between perceived coaching behaviours and developmental benefits of high school sports. *Hellenic journal of psychology*.

Gruen, G.E., Korte, J.R., & Baum, J.F. (1974), Group measures of locus of control. *Developmental psychology, vol 10 no.5, 683-686*.

Howe, C. & Freedson, P. (2008). Physical activity and academic performance. *The Presidents council on physical fitness and sports*.

Ismail, A. H, Young R.J. (1980). Intellectual differences of adult men related to age and physical fitness before and after exercise program. *Journal of gerontology. Vol. 35 (3), pp. 383-387*.

Jaffe, L., Wu, P., (1996). After school activity and self-esteem in adolescent girls. *The melpomeire journal*.

Johnson, S. (1982). Sport participation and psychological adjustment. *Journal of international social science. Vol.34 number 2. Pp 273-276*.

Labbe, & Welsh, (1993). Children & running; changes in physical fitness self- efficacy and

health locus of control. *Journal of sport behaviour*.

Parsons & Betz, (2001). The relationship of participation in sports and physical activity to body objectification, instrumentality and locus of control among woman. *Psychology of women quarterly*.

Pepjin, K., Van De Pol, C., & Kavussanu, M. (2011). Achievement motivation across training and competition in individual and team sports. *Sport, Exercise, and Performance Psychology*.

Phyllis & Post, (1999). Impact of child centred play therapy on the self-esteem, locus of control and anxiety of at risk 4th, 5th, and 6th grade students. *International journal of play therapy, vol. 8 (2), pp. 1-18*.

Pivarnik, Coe, Womack, Reeves, Malina, (2006), Effect of PE, & activity levels on academic achievement in children. *Medicine and science in sport and exercise, vol 38 issue 8, pp1515- 1519*.

Puckell, J., & Ford H.T. Jr. (1981). Self concept scores and participation in recreational league team sports. *Perceptual & motor skills*.

Slutzky, C. Simpkins, S. (2009). The link between childrens sport participation and self esteem; Exploring the mediating role of sport self concept. *Psychology of sport and exercise, vol. 10(3), pp. 381-389*.

Sorrentino & Sheppard (1989), Weinberg, R. Gould, D. (2007). *Foundations of sport and exercise psychology, 4th edition. 18*

U.S Department of Health and Human Services. (July 2010). The association between school based activity and P.E and academic performance (revised version).

Weinberg, R. Gould, D. (2007). *Foundations of sport and exercise psychology, 4th edition.*

Wilgenbusch, T., & Merrell, K.W. (1999). Gender differences in self-concept among children and adolescents: A meta-analysis of multi-dimensional studies. *School of psychology quarterly*, vol. 14 No2.

Williamson, D., Dewey, A., & Steinberg, H. (2001).. Mood change through physical exercise in nine-to- ten-year-old children. *Percept Motor Skills, 93(1).*

Zeiser, K. (2011). Examining racial differences in the effect of popular sports participation on academic achievement. *Social science research, vol. 40(4), pp.1142- 1169.*

6 Appendices:

Dear parents/ guardians,

My name is Lauren Kingston and i am a final year psychology student in Dublin Business School. As part of my coursework i am researching whether there is a relationship between sports participation, self concept and motivation in children.

I would like to ask the children to fill out a short questionnaire to help me with this research. It should take between 15 and 20 minutes and all information will be confidential.

Your support would be greatly appreciated and if you have any further questions don't hesitate in emailing me at [REDACTED]

Lauren.

My name is Lauren Kingston and I am a final year Psychology student in Dublin Business School. For my research project I am examining the relationship between participation in sport and psychological well-being. I really appreciate the time you are taking to help me with my research and please be assured that all information gathered will be treated as confidential.

Please tick the appropriate box below.

Age (to the nearest year):

Gender: Female Male

Sport participation: I participate in a team sport
I participate in an individual sport
I do not participate in any sport

Have you ever been diagnosed with a learning difficulty? Yes No

If the answer is yes, please specify:

We are trying to find out what young people think about certain things. We want you to answer the following questions about the way you feel. There are no right or wrong answers. Don't take too much time answering any one question, but do try to answer them all.

One of your concerns during the test may be "what should I do if I can answer both yes and no to a question?" It is not unusual for that to happen. If it does, think about whether your answer is just a little more one way than the other. For example, if you would assign 51% to yes and 49% to no, mark the answer yes. Try to pick one or the other response for each of the questions and do not leave any blanks. **Please tick yes or no next to each item.**

1. Do you believe that most problems will solve themselves if you just leave them?
Yes No

2. Do you believe that you can stop yourself from catching a cold?
Yes [] No []
3. Are some people born lucky?
Yes [] No []
4. Most of the time you feel that getting good marks at school means a great deal to you?
Yes [] No []
5. Are you often blamed for things that aren't your fault?
Yes [] No []
6. Do you believe that if somebody studies hard enough, he or she can pass any subject?
Yes [] No []
7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
Yes [] No []
8. Do you feel that if things start out well in the morning, it's going to be a good day no matter what you do?
Yes [] No []
9. Do you feel that most of the time parents listen to what their children have to say?
Yes [] No []
10. Do you believe that wishing can make good things happen?
Yes [] No []
11. When you get punished, does it usually seem it is for no good reason at all?
Yes [] No []
12. Most of the time do you find it hard to change a friend's mind/opinion?
Yes [] No []
13. Do you feel that cheering, more than luck, helps a team to win?
Yes [] No []
14. Do you feel that it is nearly impossible to change parents' minds about anything?
Yes [] No []
15. Do you believe that your parents should allow you to make most of your own decisions?
Yes [] No []
16. Do you feel that when you do something wrong there is very little you can do to make it right?
Yes [] No []
17. Do you believe that most people are just born good at sports?
Yes [] No []
18. Are most of the other people your age stronger than you are?
Yes [] No []
19. Do you feel that one of the best ways to handle most problems is just not to think about them?
Yes [] No []
20. Do you feel you have a lot of choice in deciding who your friends are?
Yes [] No []
21. If you find a four-leaf clover, do you believe that it might bring you good luck?
Yes [] No []

22. Do you often feel that whether you do your homework has much to do with the marks you get?
Yes [] No []
23. Do you feel that when someone your age decides to hit you, there's little you can do to stop him or her?
Yes [] No []
24. Have you ever had a good luck charm?
Yes [] No []
25. Do you believe that whether or not people like you depends on how you behave?
Yes [] No []
26. Will your parents usually help you if you ask them to?
Yes [] No []
27. Have you felt that when people were mean to you it was for no reason at all?
Yes [] No []
28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
Yes [] No []
29. Do you believe that when bad things are going to happen they are going to happen no matter what you do to stop them?
Yes [] No []
30. Do you think that people can get their own way if they just keep trying?
Yes [] No []
31. Most of the time do you find it useless to try to get your own way at home?
Yes [] No []
32. Do you feel that when good things happen they happen because of hard work?
Yes [] No []
33. Do you feel that when somebody your age wants to be your enemy there is little that you can do to change matters?
Yes [] No []
34. Do you feel that it is easy to get friends to do what you want them to do?
Yes [] No []
35. Do you usually feel that you have little to say about what you eat at home?
Yes [] No []
36. Do you feel that when someone doesn't like you there is little you can do about it?
Yes [] No []
37. Do you usually feel that it is almost useless to try in school because most other children are cleverer?
Yes [] No []
38. Are you the kind of person who believes that planning ahead makes things turn out better?
Yes [] No []
39. Most of the time, do you feel that you have little to say about what your family decides to do?
Yes [] No []

40. Do you feel it is better to be clever than to be lucky?

Yes [] No []

Below are some sentences that tell how some people feel about themselves. Read each sentence and decide whether it tells the way you feel about yourself. **If it is true or mostly true for you, circle the word yes next to the statement. If it is false or mostly false for you, circle the word no.** Answer every question, even if some are hard to decide. **Do not circle both yes and no** for the same sentence. If you want to change your answer, cross it out with an X and circle the new answer.

Remember that **there are no right or wrong answers.** Only you can tell us how you feel about yourself, so we hope you will mark each sentence the way you really feel inside.

1. My classmates make fun of meyes no
2. I am a happy person.....yes no
3. It is hard for me to make friends.....yes no
4. I am often sad.....yes no
5. I am smart.....yes no
6. I am shy.....yes no
7. I get nervous when the teacher calls on me.....yes no
8. My looks bother me.....yes no
9. I am a leader in games and sports.....yes no
10. I get worried when we have tests in school.....yes no
11. I am unpopular yes no
12. I am well behaved in school yes no
13. It is usually my fault when something goes wrong.....yes no
14. I cause trouble to my family yes no
15. I am strong yes no
16. I am an important member of my family yes no
17. I give up easily.....yes no
18. I am good at my school work..... yes no
19. I do many bad things..... yes no
20. I behave badly at home..... yes no
21. I am slow in finishing my schoolwork yes no
22. I am an important member of my class..... yes no
23. I am nervous.....yes no
24. I can give a good report in front of the class..... yes no
25. In school I am a dreamer.....yes no
26. My friends like my ideas.....yes no
27. I often get into trouble.....yes no
28. I am lucky.....yes no
29. I worry a lot.....yes no
30. My parents expect too much of me.....yes no
31. I like being the way I am.....yes no
32. I feel left out of things..... yes no

33. I have nice hair..... yes no
 34. I often volunteer in school.....yes no
 35. I wish I were different..... yes no
 36. I hate school..... yes no
 37. I am among the last to be chosen for games and sports..... yes no
 38. I am often mean to other people.....yes no
 39. My classmates in school think I have good ideas..... yes no
 40. I am unhappy..... yes no
 41. I have many friends.....yes no
 42. I am cheerful..... yes no
 43. I am dumb about most things..... yes no
 44. I am good-looking..... yes no
 45. I get into a lot of fights.....yes no
 46. I am popular with boys.....yes no
 47. People pick on me..... yes no
 48. My family is disappointed in me.....yes no
 49. I have a pleasant face..... yes no
 50. When I grow up, I will be an important person..... yes no
 51. In games and sports, I watch instead of play..... yes no
 52. I forget what I learn..... yes no
 53. I am easy to get along with..... yes no
 54. I am popular with girls..... yes no
 55. I am a good reader.....yes no
 56. I am often afraid.....yes no
 57. I am different from other people..... yes no
 58. I think bad thoughts..... yes no
 59. I cry easily.....yes no
 60. I am a good person..... yes no

Below we have described **3** activities related to school. For each activity, we have given **4** reasons you would do it. For each of these reasons, **circle the answer which best suits you**, using the choice of answer **on a scale of 1 to 5**.

Almost never for this reason	Rarely for this reason	Generally for this reason	Often for this reason	Almost always for this reason
1	2	3	4	5

Here is an example: Usually, I brush my teeth...

1. ... because I have chosen it myself..... 1 2 3 4 ⑤

Meaning that you brush your teeth because you want to (nobody makes you do it) and it is important to you that you

have healthy teeth.

2. ... I don't know why, I really don't see what difference it makes 1 ② 3 4 5

Meaning that you don't know why you brush your teeth and, in fact, you don't think it makes any difference if you brush them or not.

3. ... because it is what I am supposed to do 1 2 ③ 4 5

Meaning that you brush your teeth because you are expected to or because you do not have the choice (example: if you didn't, you'd get in trouble with your parents.)

4. ... for the pleasure of doing it 1 2 3 ④ 5

Meaning that you brush your teeth because you like brushing your teeth for the activity itself, for the fun of it

For each of the following reasons, **circle the answer which suits you best**, using the choice of answer on a scale of 1 to 5.

Almost never for this reason	Rarely for this reason	Generally for this reason	Often for this reason	Almost always for this reason
1	2	3	4	5

A) **Usually, I do my homework or school work ...**

1. ... because I have chosen it myself 1 2 3 4 5
2. ... I don't know why, I really don't see what difference it makes 1 2 3 4 5
3. ... because it is what I am supposed to do 1 2 3 4 5
4. ... for the pleasure of doing it 1 2 3 4 5

B) **Usually, I go to school ...**

1. ... because I have chosen it myself 1 2 3 4 5
2. ... I don't know why, I really don't see what difference it makes 1 2 3 4 5
3. ... because it is what I am supposed to do 1 2 3 4 5
4. ... for the pleasure of doing it 1 2 3 4 5

C) **Usually, I listen to the teacher ...**

1. ... because I have chosen it myself 1 2 3 4 5
2. ... I don't know why, I really don't see what difference it makes 1 2 3 4 5
3. ... because it is what I am supposed to do 1 2 3 4 5

4. ... for the pleasure of doing it 1 2 3 4 5

Thank you very much for participating in my research.

Lauren.