

2018

## A Correlational Study into the Effects of Physical Activity on Subjective Well-being Among Transition-Year Students in Ireland

Michael O'Brien

*Caher Consultancy Ltd.*, michael@caherconsultancy.ie

Follow this and additional works at: <https://arrow.tudublin.ie/ijap>

### Recommended Citation

O'Brien, Michael (2018) "A Correlational Study into the Effects of Physical Activity on Subjective Well-being Among Transition-Year Students in Ireland," *Irish Journal of Academic Practice*: Vol. 7: Iss. 1, Article 5.

doi:10.21427/D79Z45

Available at: <https://arrow.tudublin.ie/ijap/vol7/iss1/5>

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

## **A Correlational Study into the Effects of Physical Activity on Subjective Well-being Among Transition-Year Students in Ireland**

Michael A. O' Brien

[michael@caherconsultancy.ie](mailto:michael@caherconsultancy.ie)  
[www.linkedin.com/in/michael-a-o-brien-375909148](https://www.linkedin.com/in/michael-a-o-brien-375909148)

This research was conducted by Michael O'Brien as part of a M.Sc. in Applied Positive Psychology and Coaching Psychology from the University of East London. Michael is a Leadership and Positive Psychology Consultant. In addition to lecturing part time with University College Cork, he runs his own consultancy business and has consulted for numerous clients, including governmental, semi-state and the private sector. Michael has worked with schools and voluntary groups and is passionate about helping people reach their true potential.

## **Abstract**

The Department of Education and Skills in Ireland has introduced well-being as a subject in secondary schools in September 2017. This positive development also serves to highlight the vast amount of research required about student well-being in Ireland. A correlational analysis was conducted to investigate the effects of physical activity on well-being. Transition-year students were recruited on a voluntary basis to take part in this research. Physical activity was found to be positively correlated with the three different measures of well-being used. The strongest correlation was found to be physical activity and the Adolescent Mental Health Continuum Short Form (A/MHC-SF) and had a Pearson product-moment correlation of .340. These research findings form a valuable contribution to our understanding of well-being among adolescent students in Ireland. The findings from this research project may be used to shape the future of well-being in education.

## **Key Words**

Subjective well-being; physical activity; subjective happiness scale; multidimensional students life satisfaction scale; adolescent mental health; positive psychology

## Introduction

This paper sets out to establish if a correlation exists between physical activity and subjective well-being among transition-year students in Irish secondary schools. Subjective well-being is a term used to describe how happy someone feels, and there are several definitions explained later in this paper. The importance of well-being cannot be overstated and in the school context, higher levels of well-being are associated with greater concentration, less anxiety and greater levels of academic achievement (Greenberg et al., 2003). This in turn has a direct impact on access to third-level education and on the success of the student within third level. Physical activity is a more universally understood concept and has never been more important: the statistics about the future health of our youth in the *Childhood Obesity Surveillance Initiative* (COSI), a report undertaken by the National Nutrition Surveillance Centre (NNSC) UCD commissioned by the Health Services Executive (HSE), found that over one fifth of children are overweight or obese in Ireland (HSE, 2015).

The Department of Education and Skills (DES) have attempted to improve the levels of well-being amongst secondary school students by the introduction of well-being as a subject taught in the junior cycle, the programme taken during the first three years of secondary school by students between the ages of 12/13 and 15/16 years of age (DES, 2013). The DES first introduced guidelines for mental health promotion in 2013 to create an awareness of student well-being and to provide guidelines for the improvement of well-being in schools. Recently, the National Council for Curriculum and Assessment has introduced guidelines for the teaching of well-being in the Junior Cycle (NCCA, 2017). This change to the implementation of the Junior Cycle stipulated that a well-being programme would be introduced from September 2017 for those students entering into the first year of the Junior Cycle. An important aspect of this initiative is the fact that it will be recorded on the *Junior Cycle Profile of Achievement* (JCPA) from Autumn 2020. The JCPA is a new type of award

which replaces the Junior Certificate from 2017 as the state assessment of the Junior Cycle. The JCPA is intended to provide a report on the students achievement in a wide range of areas of learning throughout the three years of the Junior Cycle and is intended to give parents/guardians a clear picture of the students learning journey. This is a key aspect to the subject of well-being being taken seriously. The gradual development of well-being, going from a position of being associated with suicide prevention (DES, 2013) to being on the curriculum (NCCA, 2017), is very positive.

Physical activity is a term that covers all aspects of large muscle activity including work, sports, dance, games, activities that fall into the category of “lifestyle activities” as well as exercise for fitness or specific training (Corbin et al., 2011). According to Casperson, Powell and Christianson (1985, p126) fitness, exercise and physical activity are terms that are often confused with each other, and they define physical activity as “any bodily movement produced by skeletal muscles that results in energy expenditure”. This broad definition was the one used for this research, and the questionnaire used to try to measure the physical activity reflects that.

According to Diener (2000) subjective well-being (SWB) is the way people evaluate their lives. SWB could be referred to as happiness, which of course does not sound as scientific (Lyubomirsky, 2007). Hefferon and Boniwell (2011) define SWB in mathematical terms as being the sum of satisfaction with life, high positive affect and low negative affect. According to Pavot and Diener (2014, p.135) the theory of SWB having three parts has been accepted as a “good working model” by a number of researchers. Given the level of complexity around defining SWB, care must be taken not to “over-simplify” the concept in an attempt to make it more “measurable” for research.

According to Patalay et al. (2016), in a survey of ten European countries, only 50% of Irish Schools reported mental health as being given high priority. Of the 171 Irish Schools

surveyed, just over 51% had a school policy and less than 50% said that it was given sufficient priority. Ireland, France and Spain were the countries where the greatest number of schools felt the lack of national policy, availability of specialists, staff capacity and lack of ties to relevant external agencies were preventative factors in mental-health provision. This has a direct impact on the well-being levels of the Irish students presenting for third level. These figures represent an opportunity to develop a robust well-being programme within the education system.

Ireland reports the fourth greatest level of adolescent suicide rates amongst high income countries (UNICEF, Office of Research, 2017). The “Building the Future” report presents figures relating to a number of years and date back to 2011, with only Finland, Lithuania and New Zealand reporting higher levels. There has, however, been a rise in the number of adolescents in Ireland reporting mental health issues between 2006 and 2014 (UNICEF, Office of Research, 2017). According to Lee et al. (2009), mental-health disorders that appear prior to adulthood represent ten times the health cost of disorders that emerge later in life. The statistics quoted by UNICEF are of course national averages and these can at times mask or absorb groups at the bottom of the scale. This study, through targeted sampling, did try to get a representation of the full spectrum of students in Ireland.

The potential to achieve very high levels of well-being through the school system are already in place as Ireland (at 79.3%) ranks fifth in the table for the percentage of 15-year-old students who achieve baseline competency in reading, maths and science (UNICEF, Office of Research, 2017). According to Burke and Stephan (2008), psychologists need to be aware of how complex the school system is, and they advise greater collaboration with teachers and school administrators. While referring to the USA context, the researcher believes the advice is just as relevant in the Irish context. These research findings can be used to help achieve higher levels of well-being among the student population of Ireland. This research will

explain what is understood by the terms physical activity and subjective well-being, and will examine the possible links between physical activity levels and subjective well-being amongst transition-year students in Ireland using a correlational study.

## Literature review

According to Carr (2011) there has been an enormous amount of research into positive psychology in the first ten years of the twenty-first century. Waters (2011) posits that there is now a growing call for schools to provide more than just education in terms of numeracy and literacy. However, there is a requirement for any proposed introduction of positive psychology into the education system to be informed by scientifically based research.

Hefferon and Boniwell (2011, p.46) define SWB as “*satisfaction with life + high positive effect + low negative effect*”. Diener, Scollon and Lucas (2009) have provided a four-component model looking at SWB as a combination of pleasant emotions, unpleasant emotions, global life judgements along with domain satisfaction. According to Diener, Scollon and Lucas (2009) pleasant emotions consist of feelings of joy, contentment, happiness and love while unpleasant emotions are emotions such as sadness, anger, worry and stress. Global life judgements consist of life satisfaction, fulfilment, meaning and success, while domain satisfaction consists of aspects such as marriage, work, health and leisure (Diener et al., 2009). Regardless of the lack of agreement on a definition of SWB, it is incumbent upon the DES to define what it considers to be well-being, as without a clear definition it will be difficult to advance the teaching of well-being. A solution would be to select a working definition with the stated objective of reviewing all aspects of well-being, including the definition chosen, on completion of the first full three-year cycle. With this progress at secondary-school levels in mind, there is an imperative for third-level institutions to continue this development.

When looked at in detail, the suicide rate in Ireland is the fourth highest in the EU and OECD, which in practical terms means that one in 10,000 of 15–19 year olds in Ireland will die by suicide (UNICEF, Office of Information, 2017). On a global scale according to *The World Health Report* (WHO, 2013) male suicide rates are 50 percent higher than those of females, and of the eight classifications under which the world's population is looked at, only in lower and middle income countries in the Western Pacific are female suicide rates higher than their male counterparts. These startling facts highlight the urgency for change in dealing with mental-health issues in Ireland. Further research is required to ensure that the government response to this emergency is scientifically researched and empirically validated, and third-level institutions must play a part

### **Physical health**

The HSE and Department of Health and Children in Ireland have issued guidelines on the amount of physical activity (PA) people should get (Department of Health and Children, 2009). The guidelines emphasise the importance of PA to people's health. A 2006 survey, *The Health Behaviours in School Children*, found that by 15 years of age, almost 90% of girls and 70% of boys fail to get the recommended level of PA (Nic Gabhainn, 2006). The recommended level of activity is that all children and young people should get 60 minutes every day of moderate to vigorous activity. According to Hallal, Victora, Azevedo and Wells (2006) PA in adolescence influences PA in adulthood. The *National Guidelines for Physical Activity for Ireland* state that PA is beneficial in every aspect of your health (HSE, 2015). If the health benefits were not compelling enough, the financial incentives should be. According to *The World Health Report*, Canadian physical inactivity was responsible for approximately 6% of total health care costs (WHO, 2003).



Despite all the compelling and freely available information advocating PA, it is essential to consider the reasons why adolescents may be disinclined to engage in PA. According to Baumeister, Gailliot, DeWall and Oaten (2006) there are several reasons why people have different levels of self-regulation but interestingly, people who are anxious may be more passive in social situations. This “passivity” may extend to participation in PA. In addition to findings in relation to self-regulation and PA there are several psychological determinants regarding participation in PA. According to Cavill, Biddle and Sallis (2001) enjoyment, self-efficacy, autonomy and control all play a part in the psychology of participation in PA. There are several other factors regarding PA participation, such as family and peer support as well as media and cultural factors (Cavill et al., 2001). Among the factors associated with children’s PA are gender, ethnicity and previous PA levels as well as parental and peer support, opportunity and competence (Sallis, Prochaska & Taylor, 2000). The best way to improve the numbers of adolescents getting their minimum recommended amount of exercise is by researching the reasons they do not currently partake and finding ways of making PA more appealing and tangible.

In terms of research into the effects of PA on Well-Being, there are many studies into the effects of PA on specific aspects of mental health such as depression and anxiety but not as many into well-being (Tyson, Wilson, Crone, Brailsford, & Laws, 2010; Norris, Carroll & Cochrane, 1992; Fox, 1999). The scarcity of research into the effects of PA on well-being, as defined and understood by positive psychology, highlights the requirement for further study into this topic.

## **Well-being**

Hefferon and Boniwell (2011) posit that two theoretical views on well-being in positive psychology separate into the hedonic view (which considers high levels of positive affect and

low levels of negative effect) and the eudemonic (which has a greater orientation towards meaning and purpose). According to Pavot and Diener (2004, p.135) there are three key “hallmarks” of subjective well-being in that it is subjective in nature, it reports both positive experiences and the absence of negative factors, and it is a global assessment in that it does not report on one single life domain. The subjective nature means that the individual in question has a range of factors to include. The other main theoretical discussion around SWB is about whether SWB is top-down or bottom-up (Pavot & Diener, 2004). The top-down theory advocates that SWB is more like a stable personality trait whereas bottom-up advocates propose that the experience of pleasant events is what dictates SWB levels. Pavot and Diener (2004) suggest it may be a combination of both. The most comprehensive model of SWB has been divided into four components which are further sub-divided into four sub-sections (Diener et al., 2009). The complex nature of SWB means that several different scales exist endeavouring to assess it. The Scales used in this research are discussed in greater detail in the Methodology section.

According to Noble and McGrath (2014) there is increasing evidence that young people nowadays are less capable of coping and dealing with life’s challenges. Schools contribute much more than imparting knowledge (Peterson, 2006). According to Noble and McGrath (2014, p.569) a draft definition for student well-being was developed using a modified Delpi methodology. Of the 30 who were invited to take part, 26 made a contribution and all were researchers, theorists and writers who had already made significant contributions to the field of “well-being”. They were drawn from a number of different countries such as USA, Italy, Australia, Denmark and the UK. The definition is:

*Optimal student wellbeing is a sustainable emotional state characterised by (predominantly) positive mood and positive relationships at school, resilience, self-optimisation and a high level of satisfaction with learning experiences.*

Empirical validation is what sets positive psychology apart from the many self-help initiatives, and it is that scientific underpinning which must be applied to positive education (Hefferon & Boniwell, 2011). By conducting research such as this project, the results can contribute to positive education programmes in the future. There are several positive education programmes now in existence such as BounceBack, SEAL, Skills for Wellbeing and the Penn Resilience Program (PRP). According to Boniwell (2014) the two main motivating factors for the increased interest in positive education are the increase in depression and anxiety levels among adolescents worldwide and the documented advantages of increased well-being. The PRP has now amassed evidence that it is effective in preventing depression and anxiety amongst 10 to 14 year olds (Boniwell, 2014). The SEAL programme in the UK is taught to K-6 pupils and teaches social and emotional skills. According to Noble and McGrath (2014) the KidsMatter program in Australia is aimed at preventing mental health problems as well as increasing well-being. BounceBack in Australia has impacted positively on the well-being of both pupils and teachers. Interestingly, according to Morris (2014) the lessons that they have been teaching in Wellington College begin by focussing on physical health. There is an often-overlooked difference between programmes educating to prevent mental-health disorder and those that aim to promote well-being. The researcher believes that “new” programmes such as those mentioned can now give structure and substance to future positive education conducted in schools. A healthy mind in a healthy body is not a new educational concept but this most recent research can add a scientific approach to the combination of PA and well-being. The researcher believes that the focus should remain on the development of programmes to promote well-being.

According to Hefferon (2013) PA is associated with creating an increase in both hedonic and eudaimonic well-being. The existing research into the benefits of PA and the

growing research into well-being should now be examined for correlations. This research investigates how PA levels correlate with well-being levels amongst adolescents in Ireland and the findings can inform positive change within the education system.

## **Methodology**

As a research project that set out to quantify how PA correlates with the well-being of Irish secondary school students, a quantitative approach was judged to be the most appropriate. A quantitative design offered the best option as it can be descriptive or experimental (Creswell, 2013). The research project used questionnaires to quantify the PA levels and the well-being levels of the research sample. Three different measures were used to capture data in relation to well-being; the Subjective Happiness Scale (SHS) by Lyubomirsky (Appendix I), the Multidimensional Students Life Satisfaction Scale (MSLSS) (Appendix J) and the Adolescent Mental Health Continuum Short Form (A/MHC-SF) (Appendix K). There are several definitions of well-being but there are three key aspects of subjective well-being that are, it is subjective in nature, it reports the absence of negative and the occurrence of positive experiences and lastly it is a global measure that is not confined to one domain (Pavot & Diener, 2014)

It should be stated that the seriousness of researching sensitive information with adolescents can never be underestimated. This research was conducted as part of a MSc and so an application for research-ethics approval was completed and examined by the appropriate ethics committee. The research was conducted in accordance with the British Psychological Research Society's Code of Human Research Ethics and the University Code of Practice for Research Ethics. Participation was always on a voluntary basis. The schools were invited to attend having been fully briefed on the research proposal, information packs were sent to the students' guardians and the participants themselves were fully briefed. Once

parental/guardian consent was received the research was conducted ensuring all data was collected anonymously in the presence of a school teacher. Participants were given the opportunity to withdraw at any stage and were given the opportunity to report any feelings of upset after participation where there was a system of counselling in place should it be required. The schools and students that did participate were subsequently fully briefed on the research outcome and a copy of the research was provided to them.

## Participants and procedure

The 320 Transition Year (TY) students who volunteered to take part in the research were recruited from three different secondary schools in the Republic of Ireland. The TY is a one-year programme taken after Junior Cycle and before the two-year Leaving Certificate programme. It is designed to act as a bridge between the Junior Certificate and Leaving Certificate programmes. Given the lack of formal exams in TY and the autonomy of programming, giving the schools the freedom to design the programme for the year, schools were more willing to dedicate time to research studies amongst TY students than with other years. A strategic sampling method was used in selecting the schools in order to use a variety of school types (urban, rural, and private). Strategic sampling can give a better chance of a truly representative sample as opposed to random sampling (Flyvbjerg, 2006). The strategic sampling also ensured a mix of different denominational affiliations (Catholic, multi and non-denominational). To get as representative a sample as possible, the research needed to include participants attending a private school as well as rural and community type schools. The schools selected were a catholic fee-paying boys-only school, a large community school serving a rural population and a large community school serving a large urban town that also serves the surrounding rural hinterland. The variety of different schools ensured that it would also be possible to examine results for any discernible differences between school type.

Schools were contacted by email to invite their participation in the study. The email outlined the rationale, importance and requirements for the participating schools (Appendix A). For the schools that indicated an interest and willingness to participate, a liaison teacher was identified to deliver participant invitation forms (Appendix B) and participant consent forms (Appendix C). A verbal briefing was given to all potential participants. At all stages the participants knew that participation was on a voluntary basis. Students who did volunteer to participate were given an information sheet (Appendix A) to show to their guardian and

were asked to get a parental/guardian (Appendix B) consent form signed. All participants regardless of age were asked to get the consent form signed. Once the consent forms were signed and the questionnaires were delivered, they were distributed by the liaison teacher at a time to suit the participating school. They were completed during class time before being collected again, and were administered by teachers using pen and paper at the beginning of the school year.

At the initial school to participate, a short pilot study was conducted to elicit feedback regarding all aspects of participant experience. The pilot revealed that the questionnaires were easily understood, the layout of the questionnaires was appropriate, and the time given was over-generous. A time of one hour had been allotted in the research design which was reduced to 45 minutes following the pilot feedback. The average time to complete the research questionnaires was 20–30 minutes with no participant exceeding 40 minutes.

The data collected were anonymous; however, data from each school were grouped together to allow an initial school-by-school analysis. In all cases participating schools were thanked along with the liaison teachers and participating students.

### **Measures/questionnaires**

The research project selected five different questionnaires to be completed by all research participants in order to collect the data to be used and analysed in the study. The first questionnaire used was a basic form which gathered biographical data (Appendix G) such as age and gender as well as an initial inquiry into physical activity levels and participation in clubs and sports. The purpose of this form was to gather basic information and provide a means to cross reference some of the data collected in the other questionnaires. Questionnaire two was the Physical Activity Questionnaire Adolescents (PAQ-A) (Appendix H) which was selected as the most appropriate means of identifying the amount of physical activity the

respondents engaged in during the seven days leading up to the response date. The PAQ-A is a version of the physical activity questionnaire for older children that has been modified for use with adolescents. Some wording was changed from the original questionnaire to make it more “adolescent” appropriate (Kowalski et al., 2004). It has measured Cronbach alphas between .72 and .88. The PAQ-A is a 7-day recall that is comprised of 8 items. The items are scored 1 to 5 and a mean score is worked out. In this research the Cronbach Alpha score was .80.

The third questionnaire was the Subjective Happiness Scale (Appendix I), which was selected to record the happiness levels of the participants. The Subjective Happiness Scale measures global subjective happiness through four questions. The response scale is a 7-point continuum where the fourth question is reverse coded. When the responses are averaged out, a score of between 1 to 7 will be achieved with the higher scores reflecting higher levels of happiness. The test had shown a high level of reliability in previous research, which included student populations both in Russia and the USA, ranging between .79 to .74 (Lyubomirsky and Lepper, 1999). In this project, the Cronbach alpha score was .77.

The fourth Questionnaire used was the Multidimensional Students Life Satisfaction Scale (MSLSS) (Appendix J) which was selected to provide a profile of the student’s satisfaction with specific domains in their lives. The 40-item scale has a 6-point scoring format suitable for adolescents and was specifically designed for use with student populations. In past research, conducted in the USA amongst students from grade 3 to grade 12, its reliability has been from .75 to .86 (Gilman and Ashby, 2003). In this research project a Cronbach alpha of .66 was measured for the MSLSS.

The fifth questionnaire used was the Adolescent Mental Health Continuum-Short Form (A/MHC-SF) (Appendix K) which has previously measured .82 to .86 for reliability was the final scale used in the research project. The A/MHC-SF is a 14-item scale that was



designed to measure mental health in three distinct categories: the Hedonic Emotional Well-Being, the Eudaimonic Social Well-Being and the Eudaimonic Psychological Well-Being. The A/MHC-SF is comprised of 14 items which are various feelings of well-being where respondents rate on a 6 point Likert scale the frequency of experiencing those feelings. This research found the A/MHC-SF to have a Cronbach alpha score of .90.

## Results

Initial analyses focused on each of the individual scales used by the research to establish their internal consistency. All scales used were found to display high levels of consistency as already outlined. The research found that the data collected was normally distributed (see Table 1).

Table 1. *Mean and Standard Deviation values of variables by gender.*

	Male			Female		
	Mean	SD	N	Mean	SD	N
Age	15.65	0.489	223	15.47	0.542	97
PAQ	2.86	0.591	223	2.521	0.636	97
SHS	4.95	1.123	223	4.892	1.103	97
MSLSS	29.06	3.668	223	29.90	3.583	97
A/MHC-SF	60.58	12.072	223	56.77	12.952	97

The Pearson product-moment correlation was used to examine the correlation between the physical-activity levels and the three different well-being scales (see Table 2). In addition, the correlation between physical activity levels and the constituent parts of the A/MHC-FC and the MSLSS was also examined.

Table 2. *Pearson's Correlation of variables by gender.*

	Male	Female
	PAQ	PAQ
SHS	0.148*	0.239*
MSLSS	0.131	0.287**
A/MHC-SF	0.273**	0.408**

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The relationship between PA and SHS was examined using Pearson product-moment correlation (see Table 1). Here and in the following instances, preliminary analyses were carried out ensuring no violation of the assumptions of normality, linearity and homoscedasticity. There was a weak, positive correlation between the two variables,  $r=.176$ ,  $p<.01$ , with high levels of PA associated with high levels of SHS.

The relationship between PA and MSLSS was examined. There was a weak, positive correlation between the two variables,  $r=.146$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS. A number of sub-headings within the MSLSS were also examined.

The relationship between the MSLSS Family total was examined. There was weak, positive correlation between the two variables,  $r = .050$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS family.

The relationship between PA and MSLSS Friends was examined. There was weak positive correlation between the two variables,  $r=.045$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS Friends.

The relationship between PA and MSLSS School was examined. There was weak positive correlation between the two variables,  $r=.067$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS School.

The relationship between PA and MSLSS Living Environment was examined. There was weak positive correlation between the two variables,  $r=.053$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS Living Environment.

The relationship between PA and MSLSS Self was examined. There was weak positive correlation between the two variables,  $r=.298$ ,  $p<.01$ , with high levels of PA associated with high levels of MSLSS Self.

The relationship between PA and A/MHC-SF was examined. There was weak positive correlation between the two variables,  $r=.340$ ,  $p<.01$ , with high levels of PA associated with high levels of A/MHC-SF.

The relationship between PA and A/MHC-SF Emotional Well-Being was examined. There was weak positive correlation between the two variables,  $r=.210$ ,  $p<.01$ , with high levels of PA associated with high levels of A/MHC-SF Well-Being.

The relationship between PA and A/MHC-SF Social Well-Being was examined. There was weak positive correlation between the two variables,  $r=.312$ ,  $p<.01$ , with high levels of PA associated with high levels of A/MHC-SF Social Well-Being.

The relationship between PA and A/MHC-SF Psychological Well-Being was examined. There was weak positive correlation between the two variables,  $r=.333$ ,  $p<.01$ , with high levels of PA associated with high levels of A/MHC-SF Psychological Well-Being.

In the correlations detailed above the strongest relationship is between, PA and A/MHC-SF. The A/MHC-SF is the only scale used that addresses three aspects of Well-Being and the researcher believes that it is this thorough nature of the scale that may lead to the strong correlation. Within the A/MHC-SF the section of the test which showed the strongest correlation with PA was the psychological well-being. This was not surprising as the skills and tools required to maintain regular PA are the type of skills required to develop the Psychological strengths assessed in section three of the scale.

The relationship which had shown the weakest value was that between PA and SHS (see Table 1). Of the scales used in the research, the SHS was the only scale which the researcher decided to use despite not having been amended or developed for adolescent use. The simple nature and the non-specific-to-adolescent nature of the scale may have been influencing factors in the resulting weak relationship. This may highlight the importance of age appropriate adolescent scales.

### **Discussion and Limitations**

The research revealed that the highest correlation found was between physical activity and the Adolescent Mental Health Continuum Short Form. The positive correlation of .340 is significant and now provides an empirically researched measure of the effect physical activity levels have on the well-being of TY adolescents in Ireland.

The research failed to find other studies which had measured the correlation between PA and SWB amongst TY students. Previous research has shown negative correlations between PA and Anxiety and Depression amongst university students but there is a paucity of findings into the correlation between PA and SWB (Tyson et al., 2010). Further research is required to investigate what PA levels provide positive correlations. There is a need to now measure these correlations at third level in Ireland.

PA was found to correlate most positively with the Psychological Well-being portion of the A/MHC-SF with a correlation of .333. With questions addressing self-acceptance, environmental mastery, positive relations with others, personal growth, autonomy and purpose in life, it was interesting that PA resulted in a higher correlation with this area than emotional or social well-being. Respondents may feel empowered by taking responsibility for their own health; however, future research is required to identify more clearly what aspects of

well-being are most strongly correlated. Again, the scarcity of research in this area makes it difficult to compare these findings with existing data.

When the highest positive correlation values produced by the analysis were examined, the section of the MSLSS dealing with the self had a positive correlation of .298 with PA. This finding would seem to support the previous assertion that through engaging in more PA, individuals experience a sense of empowerment which results in a higher correlation with self, autonomy and purpose in life. Further research could possibly include more categorisation in relation to the type of PA that people engage in to examine if that has a bearing on the strength of correlation with well-being.

It was interesting to observe that the research found that both the SHS scale and MSLSS scale had relatively low correlations with PA. The nature of the question and the intention of the scales may be the reason for this. Further research is required into effects of PA on well-being with a specific interest in the different modules of well-being.

The research project aimed to include 200 respondents and actually had 320 in total. The research should be continued at third-level, making some improvements to the process. A greater number of respondents could provide more significant data. The use of online responses could be compared to the original to assess statistical differences. Future research could run pen and paper responses in tandem with electronic collection means to monitor any data bias. A larger scale version of this research could allow for an even greater or more specific level of strategic sampling. Future research should endeavour to account for every school type and type of third-level institution in the country to ensure a truly representative sample. It should sample from the four provinces of Ireland, to get a more accurate representation of the adolescent student population. By including third-level institutions in the research a fuller picture of the development of the adolescents can be acquired.

The use of self-report Questionnaires to measure PA levels is also a limiting factor. According to Vanhee's et al., (2005) "direct calorimetry" is the best way to measure PA levels. One of the key ways in which the study could be improved upon in the future is by using technology to measure the amount of PA carried out by the participants. The use of wearable technology in the form of a wrist-worn heart rate monitor could facilitate a more accurate measurement of activity levels. This could overcome the problems of accurate recall depending on how far back the respondents are asked to remember (Vanhee's et al., 2005). The wearing of an accelerometer has been utilised in European wide studies (Riddoch et al., 2004). An accurate measurement of PA levels is required for a full investigation of the effectiveness of physical activity as a Positive Psychology Intervention (PPI).

A further question highlighted by the research is "how much is enough?" In the context of looking at PA as a PPI, much greater research must be conducted into what the optimum level of PA to prescribe is with regard to having a positive correlation on SWB. Having established the positive correlation the next step is to quantify what amount of PA makes a suitable PPI. To address the question of "*how much is enough?*" or more specifically, to measure the dose-response amounts connected with specific psychological outcomes, both PA and the psychological outcome in question must be accurately measured. According to Calfas and Taylor (1994) 60 minutes of vigorous aerobic activity approximately three times a week was related to improvements in self-esteem, stress/anxiety, self-concept and depression. These findings were made on reviewing 20 articles about psychological variables and PA. A similar study was conducted more recently, and the findings were similar in that their study also found evidence of links between PA and mental health (Biddle, & Asare, 2011). There may be no one perfect solution about how much PA would be required for an effective PPI but that should not stop the attempt to quantify it in some way.

According to Hefferon and Mutrie (2012) PA is a really good PPI. There is an established practice of scientific measurement in Sports Science and there is an opportunity to capitalise on the wealth of research already conducted. A joint approach could be mutually beneficial for a fuller understanding by both the Sports Science and Positive Psychology disciplines. A further argument for research into the effects of PA on SWB among adolescents is the tangible nature of PA. PA as a PPI could be easily implemented and supervised within the existing structures in the education system. Further research is required into the part intention plays in making it an effective PPI but with very little additional training or resources PA could be one of the easiest implemented PPI's on a large scale.

Body awareness and issues around engaging in PA can be more pronounced among the adolescent student population. Interestingly, the research found that the greatest correlation coefficient was found amongst the female population of the sample. This finding could point future researchers in the direction of researching how this finding could be capitalised upon to tailor a specific PPI for the female population who scored lower on all well-being scales used by this research. There are different opinions on whether females are less happy than men. According to a *Gallup World Poll* (Gallup, 2012) there was little or no difference across the 73 countries surveyed in the report. The validity of the Gallup study could be questioned on the grounds that there are translation issues and also a cultural response bias (Cummins, 2014). PA levels are considerably different in Europe when considered by gender with females being 21% less active at the 9-year-old mark and 26% less active at the 15 year old stage (Riddock et al., 2004). Once again, the research opportunities to address this issue as a potential to collaborate with other academic disciplines.

The potential downsides of PA must also be examined more fully. According to Mooney, Farley and Strugnell (2008) media personalities had a large effect on Irish female

adolescents both in terms of body image and the reported diets of celebrities. Greater research into these issues and others will be required in future studies.

The recent inclusion of well-being as a taught subject would encourage the belief that there is a genuine appetite for change in how a student's well-being is catered for at secondary school level in Ireland. This research opens the possibility of collaboration with third level institutions. According to Hefferon (2013) the role of the body in well-being has been overlooked. There are vast amounts of research into the effects of PA on the body. There is scope for further research on the effects of PA on well-being.

A further recommendation is that consideration be given to researching this same question in the future using a mixed methods design which could combine the best attributes of quantitative and qualitative research methods. The opportunity to clarify issues using qualitative means could add to the research. The sample that participated in this research had not received any education in well-being and therefore some of the concepts and terms may have been confusing for them. By introducing an aspect of qualitative research could examine this issue in future studies. This research project was confined to using scales that were previously used with similar populations. Future research could consider using different scales or designing a scale specifically targeting the Irish Student Population. According to Cummins (2014), many researchers are not aware of the wide array of scales available to them for use.

There is criticism of correlational studies in education (Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005). According to Thompson et al., (2005) true experiments are the only way to provide evidence of causal inferences. A true experiment would be a positive development out of this research and could address several of the issues raised about dose-response amounts and a number of other factors.



The research did attempt to counter any specific contextual factors that may have influenced the outcome of the research by attempting to gather the data at the same time of day, day of the week and month of the year. This was not always possible due to the requirements of the schools in question. Using multiple measures could facilitate a more complete assessment. The reality of gathering data from the school setting was challenging but not insurmountable.

This research provides a valuable insight into the effects of physical activity on well-being amongst TY students. This research must now be expanded and further researched particularly at third level.

## **Conclusion**

Student well-being is of crucial importance. To assist the DES to continue progress following the introduction of well-being into the syllabus it is vital that further research is conducted to provide scientific fact on which to act. The findings of this research must now be further examined. Physical activity has the potential to be one of the most easily used interventions in increasing student well-being. The challenges of researching among the adolescent population must be acknowledged but not allowed to prevent research being carried out. The researcher acknowledges the magnitude of the task but firmly believes that it is of too great an importance to be ignored.

## References

- Åberg, M. A. I., Nyberg, J., Torén, K., Sörberg, A., Kuhn, H. G., & Waern, M. (2014). Cardiovascular fitness in early adulthood and future suicidal behaviour in men followed for up to 42 years. *Psychological medicine*, 44(4), 779-788.
- Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of personality*, 74(6), 1773-1802.
- Biddle, S. J., & Asare, M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. *British journal of sports medicine*, bjsports90185.
- Boniwell, I. (2014). Introduction to Positive Education. In David, S. .A, Boniwell, I & Conley ayers, A (Eds), *The Oxford Handbook of Happiness* (pp. 535-540). Oxford: Oxford University Press.
- Burke, R. W., & Stephan, S. H. (2008). Contextual features of public schools in the United States as settings for mental health promotion. *Advances in School Mental Health Promotion*, 1(1), 52-60.
- Calfas, K. J., & Taylor, W. C. (1994). Effects of physical activity on psychological variables in adolescents. *Pediatric exercise science*, 6(4), 406-423.
- Carr, A. (c2011). *Positive Psychology The Science of Happiness and Human Strengths second edition*. (2 ed.). New York: Routledge.
- Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public health reports*, 100(2), 126.
- Cavill, N., Biddle, S., & Sallis, J. F. (2001). Health enhancing physical activity for young people: Statement of the United Kingdom Expert Consensus Conference. *Pediatric exercise science*, 13(1), 12-25.
- Corbin, C et al. (c2011). *Concepts of Fitness and Wellness A comprehensive Lifestyle Approach*. (9 ed.). New York: McGraw Hill.
- Cummins, R.A. (2014). Measuring Happiness and Subjective Well-Being. In David, S. .A, Boniwell, I & Conley ayers, A (Eds), *The Oxford Handbook of Happiness* (pp. 185-201). Great Britain: Oxford University Press.
- Diener, E., Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well-being: The multifaceted nature of happiness. In *Assessing well-being* (pp. 67-100). Springer, Dordrecht.
- DES – Department of Education and Skills (2013). *Well-being in post-primary schools: Guidelines for mental health promotion and suicide prevention*. Retrieved from: <http://www.hse.ie/eng/services/Publications/Mentalhealth/well-being%20summary.pdf>
- DES - Department of Education and Skills (2015). *Guidelines for mental health promotion: Well-being in primary schools*. Retrieved from <https://www.education.ie/en/Publications/Education-Reports/Well-Being-in-Primary-Schools-Guidelines-for-Mental-Health-Promotion.pdf>
- DES - Department of Education and Skills. (2017). *General Information on Transition Year*. Retrieved 22 March, 2018, from <https://www.education.ie/en/Schools-Colleges/Information/Curriculum-and-Syllabus/Transition-Year-/>
- Department of health and children (2009). *The National Guidelines for Physical Activity for Ireland*. Retrieved 26 March, 2018, from [http://health.gov.ie/wp-content/uploads/2014/03/active\\_guidelines.pdf](http://health.gov.ie/wp-content/uploads/2014/03/active_guidelines.pdf)

- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative inquiry*, 12(2), 219-245.
- Fox, K. R. (1999). The influence of physical activity on mental well-being. *Public health nutrition*, 2(3a), 411-418.
- Gallup. (2012). *Women and Men Worldwide Equally Likely to Be "Thriving"*. Retrieved 20 March, 2018, from <http://news.gallup.com/poll/155462/women-men-worldwide-equally-likely-thriving.aspx>
- Gilman, R., & Ashby, J. S. (2003). A first study of perfectionism and multidimensional life satisfaction among adolescents. *The Journal of Early Adolescence*, 23(2), 218-235.
- Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American psychologist*, 58(6-7), 466.
- Hallal, P. C., Victora, C. G., Azevedo, M. R., & Wells, J. C. (2006). Adolescent physical activity and health. *Sports medicine*, 36(12), 1019-1030.
- Hassmen, P., Koivula, N., & Uutela, A. (2000). Physical exercise and psychological well-being: a population study in Finland. *Preventive medicine*, 30(1), 17-25.
- Hefferon, K., & Boniwell, I. (2011). *Positive psychology: Theory, research and applications*. McGraw-Hill Education (UK).
- Hefferon, K., & Mutrie, N. (2012). Physical activity as a “stellar” positive psychology intervention. *Oxford handbook of exercise psychology*, 117-128.
- HSE. (2015). *WWW.HSE.IE*. Retrieved 21 March, 2018, from <http://www.hse.ie>
- HSE. (2015). *COSI in the republic of Ireland Findings*. Retrieved 25 March, 2018, from <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/heal/heal-docs/cosi-in-the-republic-of-ireland-findings-from-2008-2010-2012-and-2015.pdf>
- Kowalski, K. C., Crocker, P. R., & Donen, R. M. (2004). The physical activity questionnaire for older children (PAQ-C) and adolescents (PAQ-A) manual. *College of Kinesiology, University of Saskatchewan*, 87(1), 1-38.
- Lee, F. S., Heimer, H., Giedd, J. N., Lein, E. S., Šestan, N., Weinberger, D. R., & Casey, B. J. (2014). Adolescent mental health—opportunity and obligation. *Science*, 346(6209), 547-549.
- Lomas, T., Hefferon, K., & Ivztan, I. (2014). *Applied positive psychology: Integrated positive practice*. Sage.
- Lyubomirsky, S. (2007). *The How of Happiness A Practical Guide to Getting The Life You Want*. Great Britain: Piatkus.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social indicators research*, 46(2), 137-155.
- Mooney, E., Farley, H., & Strugnell, C. (2009). A qualitative investigation into the opinions of adolescent females regarding their body image concerns and dieting practices in the Republic of Ireland (ROI). *Appetite*, 52(2), 485-491.
- Morris, I. (2014). Going Beyond the Accidental: Happiness, Education, and the Wellington College Experience. In David, S. .A, Boniwell, I & Conley ayers, A (Eds), *The Oxford Handbook of Happiness* (pp. 644-657). Oxford: Oxford University Press.
- NCCA (2017). *Junior cycle well-being guidelines*. Retrieved from: [http://www.juniorcycle.ie/NCCA\\_JuniorCycle/media/NCCA/Curriculum/Well-being/Well-being-Guidelines-for-Junior-Cycle.pdf](http://www.juniorcycle.ie/NCCA_JuniorCycle/media/NCCA/Curriculum/Well-being/Well-being-Guidelines-for-Junior-Cycle.pdf)

- Nic Gabhainn, S. (2006). *The Irish Health Behaviour of School Aged Children*. Retrieved 21 March, 2018, from [http://www.lenus.ie/hse/bitstream/10147/77660/1/hbhc\\_2006\\_english\\_version.pdf](http://www.lenus.ie/hse/bitstream/10147/77660/1/hbhc_2006_english_version.pdf)
- Noble, T, McGrath, H. (2014). Well-Being and Resilience in Education. In David, S. A., Boniwell, I & Conley Ayers, A (Eds), *The Oxford Handbook of Happiness* (pp. 563-579). Great Britain: Oxford University Press.
- Norris, R., Carroll, D., & Cochrane, R. (1992). The effects of physical activity and exercise training on psychological stress and well-being in an adolescent population. *Journal of psychosomatic research*, 36(1), 55-65.
- Patalay, P., Giese, L., Stanković, M., Curtin, C., Moltrecht, B., & Gondek, D. (2016). Mental health provision in schools: priority, facilitators and barriers in 10 European countries. *Child and Adolescent Mental Health*, 21(3), 139-147.
- Pavot, Diener, W., E. (2014). Happiness Experienced: The Science of Subjective Well-Being. In David, S.A, Boniwell, I & Conley Ayers, A (Eds), *The Oxford Handbook of Happiness* (pp. 134-155). Great Britain: Oxford University Press.
- Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current opinion in psychiatry*, 18(2), 189-193.
- Peterson, C. (2006). *A primer in positive psychology*. Oxford University Press.
- Riddoch, C. J., Andersen, L. B., Wedderkopp, N., Harro, M., Klasson-Heggebø, L., Sardinha, L. B., & Ekelund, U. L. F. (2004). Physical activity levels and patterns of 9-and 15-yr-old European children. *Medicine & Science in Sports & Exercise*, 36(1), 86-92.
- Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine & science in sports & exercise*, 32(5), 963-975.
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford review of education*, 35(3), 293-311.
- Tyson, P., Wilson, K., Crone, D., Brailsford, R., & Laws, K. (2010). Physical activity and mental health in a student population. *Journal of mental health*, 19(6), 492-499.
- UNICEF. (2017). *Building the Future: Children and the Sustainable Development Goals in Rich Countries*.
- UNICEF Office of Research (2017). *Building the Future: Children and the Sustainable Development Goals in Rich Countries* (Innocenti Report Card 14). Innocenti, Florence: UNICEF Office of Research.
- Thompson, B., Diamond, K. E., McWilliam, R., Snyder, P., & Snyder, S. W. (2005). Evaluating the quality of evidence from correlational research for evidence-based practice. *Exceptional Children*, 71(2), 181-194.
- Vanhees, L., Lefevre, J., Philippaerts, R., Martens, M., Huygens, W., Troosters, T., & Beunen, G. (2005). How to assess physical activity? How to assess physical fitness?. *European Journal of Cardiovascular Prevention & Rehabilitation*, 12(2), 102-114.
- Waters, L. (2011). A review of school-based positive psychology interventions. *The Educational and Developmental Psychologist*, 28(2), 75-90.
- Who. (2013). *World Health Report 2013*. Retrieved 21 March, 2018, from <http://www.who.int/whr/en/>

Who. (2003).

*Http://apps.who.int/iris/bitstream/10665/67796/1/WHO\_NMH\_NPH\_PAH\_032pdf*. Retrieved 21 March, 2018, from

[http://apps.who.int/iris/bitstream/10665/67796/1/WHO\\_NMH\\_NPH\\_PAH\\_03.2.pdf](http://apps.who.int/iris/bitstream/10665/67796/1/WHO_NMH_NPH_PAH_03.2.pdf)

## Appendices

Appendix A	Participation Invitation Letter for Principals.
Appendix B	Participant Invitation Letter.
Appendix C	Consent Form for Parents/Guardian's.
Appendix D	Consent form for Principal acting in locus parentis.
Appendix E	Student Consent Form.
Appendix F	Participant Debrief form.
Appendix G	Biographical data Questionnaire
Appendix H	Physical Activity Questionnaire – Adolescents
Appendix I	Subjective Happiness Scale
Appendix J	Multidimensional Students Life Satisfaction Scale
Appendix K	Adolescent Mental Health Continuum Short Form
Appendix L	Participation Invitation Letter for Parents

## **Appendix A: Invitation Letter for Principals.**

UNIVERSITY OF EAST LONDON

School of Psychology  
Stratford Campus  
Water Lane  
London E15 4LZ

### Invitation to Participate in a Research Study

Dear \_\_\_\_\_,

My name is AUTHOR and I am a Leadership Development Consultant living with my wife and two children in West Cork. I am planning to conduct a research study and would really appreciate the assistance of your school. I am going to conduct a research project into the relationship between physical activity and Wellbeing in Transition Year students.

The study is being conducted as part of my MSc in Applied Positive Psychology and Coaching Psychology degree at the University of East London.

The purpose of this letter is to provide you with the information that you need to consider in deciding whether to allow your transition year students to participate in this research study that I am planning to carry out.

The research will be conducted by asking transition year students to volunteer to complete a number of questionnaires. These will take no longer than an hour to complete. I will provide all the questionnaires to the class teacher or transition year coordinator and will collect the completed forms afterwards.

I am available to discuss the project in greater detail by phone or in person at a time to suit your schedule. I am also available to discuss the project with the Transition Year coordinator should you grant your approval for participation.

I have included some more detail on the project below. Please feel free to contact me at any stage if you have any queries.

### Project Title

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

### Project Description

This research project aims to scientifically evaluate whether there is any link between the amount of Physical Activity School Students undertake and the levels of their Wellbeing. Physical Activity includes all types of activity during the day. Wellbeing includes Students happiness and Psychological health.

By using Questionnaire's, I intend to try to assess how physically active the students who take part in the study are. Using other questionnaire's, the students will be asked questions to assess how happy they are. The research project will then examine whether there is a link between how physically active the students are and how happy they are.

The students who volunteer to take part in the study will be asked to fill in some questionnaires in the classroom. The questionnaires will be anonymous, and people will not be asked anything that could identify them. It is essential that participation in the project is on a voluntary basis.

I do not expect students to find the study in any way upsetting but they will have the option to stop taking part at any stage. All students who take part will be asked when finished if they feel any way upset and if so the school counselling service will be asked to help out. In the absence of a school counselling service the school guidelines for seeking assistance will be followed.

The students that volunteer to help out with this study will hopefully be helping provide new scientifically proven information about how Physical Activity has a positive effect on the Wellbeing of students. This information can then in turn be used to help all students in the future by giving the Department of Education information to improve the curriculum.

### Confidentiality of the Data

All the information gathered throughout this study will be entirely confidential. The information gathered will be used for this study only. The results of this study may be published in academic journals or magazines afterwards.

The questionnaires are anonymous but will be destroyed after the project results have been written up. The data and results will be kept electronically for two years to allow for further study and follow up.

#### Location

The study will be carried out in the classroom during school hours with the assistance of the class teacher.

#### Remuneration

There will be no payment for participation and taking part is on a completely voluntary basis.

#### Disclaimer

Students are not obliged to take part in this study and should not feel coerced. Students are free to withdraw at any time. Should students choose to withdraw from the study they may do so without disadvantage and without any obligation to give a reason. Should a student withdraw, the researcher reserves the right to use the anonymized data in the write-up of the study and any further analysis that may be conducted by the researcher.

If you are happy to grant permission for your school to participate I will send a further information letter for parents and participants along with consent forms for parents to sign should they be willing to allow their children to participate.

If you have any questions or concerns about how the study has been conducted, please contact the study's supervisor:

or

Chair of the School of Psychology Research Ethics Sub-committee  
Thank you in anticipation.

Yours sincerely,

AUTHOR

April 2017



## **Appendix B: Participant Invitation Letter**

UNIVERSITY OF EAST LONDON

School of Psychology  
Stratford Campus  
Water Lane  
London E15 4LZ

AUTHOR

Invitation to Participate in a Research Study

Hi there,

I am looking for your help with a research project that I would like to carry out.

My name is AUTHOR and I am a Leadership Development Consultant living with my wife and two children in West Cork. The purpose of this letter is to provide you with the information that you need to consider in deciding whether to participate in this research study that I am planning to carry out. The study is being conducted as part of my MSc in Applied Positive Psychology and Coaching Psychology degree at the University of East London.

Project Title

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

Project Description

This research project aims to scientifically evaluate whether there is any link between the amount of Physical Activity School Students undertake and the levels of their Wellbeing. Physical Activity includes all types of activity during the day. Wellbeing includes Students happiness and Psychological health.

By using Questionnaire's, I intend to try to assess how physically active the students who take part in the study are. Using other questionnaire's, the students will be asked questions to assess how happy they are. The research project will then examine whether there is a link between how physically active the students are and how happy they are.

The students who volunteer to take part in the study will be asked to fill in some questionnaires in the classroom. The questionnaires will be anonymous and people will not be asked anything that could identify them.

I do not expect students to find the study in any way upsetting but they will have the option to stop taking part at any stage. All students who take part will be asked when finished if they feel any way upset and if so the school counselling service will be asked to help out. In the absence of a school counselling service the school guidelines for seeking assistance will be followed.

The students that volunteer to help out with this study will hopefully be helping provide new scientifically proven information about how Physical Activity has a positive effect on the Wellbeing of students. This information can then in turn be used to help all students in the future by giving the Department of Education information to improve the curriculum.

Confidentiality of the Data

All the information gathered throughout this study will be entirely confidential. The information gathered will be used for this study only. The results of this study may be published in academic journals or magazines afterwards.

The questionnaires are anonymous but will be destroyed after the project results have been written up. The data and results will be kept electronically for two years to allow for further study and follow up.

Location

The study will be carried out in the classroom during school hours with the assistance of the class teacher.

Remuneration

There will be no payment for participation and taking part is on a completely voluntary basis.

Disclaimer

You are not obliged to take part in this study and should not feel coerced. You are free to withdraw at any time. Should you choose to withdraw from the study you may do so without disadvantage to yourself and without any obligation to give a reason. Should you withdraw, the researcher reserves the right to use your anonymized data in the write-up of the study and any further analysis that may be conducted by the researcher.

Please feel free to ask me any questions. If you are happy to continue you will be asked to sign a consent form prior to your participation. Please retain this invitation letter for reference.

If you have any questions or concerns about how the study has been conducted, please contact the study's supervisor:

or

Chair of the School of Psychology Research Ethics Sub-committee

Thank you in anticipation.

Yours sincerely,

AUTHOR

April 2017

## Appendix C: Consent form for Parents/Guardian's

Consent Form for Parents/Guardians:

UNIVERSITY OF EAST LONDON

Consent to participate in a research study

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

I have the read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures involved.

I understand that all data from this research, will remain strictly confidential. The questionnaires are filled out anonymously. The only information about each questionnaire will be the school of origin. Only the researcher involved in the study will have access to identifying data. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully give consent for participation in the study which has been fully explained to me. Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason. I also understand that should I withdraw, the researcher reserves the right to use my anonymous data in the write-up of the study and in any further analysis that may be conducted by the researcher].

I understand that in the case of students under 16 years of age at time of this study I will need to give my parental or guardian permission to take part.  
The parent or guardian granting permission can do so by signing the consent form below.

Participant's Name (BLOCK CAPITALS)

.....

Participant's Signature

.....

For Students LESS THAN 16 YEARS OLD

Parent/ Guardian's Name (BLOCK CAPITALS)

Parent/Guardian Signature

.....

Researcher's Name (BLOCK CAPITALS)

.....

Researcher's Signature

.....

Date: .....

## Appendix D: Consent form for Principals acting in locus parentis

Consent Form for Principals

UNIVERSITY OF EAST LONDON

Consent to participate in a research study

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

I have the read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures involved.

I understand that all data from this research, will remain strictly confidential. The questionnaires are filled out anonymously. The only information about each questionnaire will be the school of origin. Only the researcher involved in the study will have access to identifying data. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully give consent for participation in the study which has been fully explained to me acting in Locus Parentis Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason. I further understand that any individual student may withdraw at any stage if he or she decides not to participate. I also understand that should I withdraw after the data is collected, the researcher reserves the right to use the anonymous data in the write-up of the study and in any further analysis that may be conducted by the researcher.

I understand that in the case of students under 16 years of age at time of this study I will need to give my permission to take part acting in locus parentis.  
The principal granting permission can do so by signing the consent form below.

Participant's Name (BLOCK CAPITALS)

.....

Participant's Signature

.....

For Students LESS THAN 16 YEARS OLD

Principal's Name (BLOCK CAPITALS)

Principal's Signature

.....

Researcher's Name (BLOCK CAPITALS)

.....

Researcher's Signature

.....

Date: .....



## Appendix E: Student Consent Form

Consent Form

UNIVERSITY OF EAST LONDON

Consent to participate in a research study

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

I have read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.

I understand that my involvement in this study, and particular data from this research, will remain strictly confidential. Only the researcher(s) involved in the study will have access to identifying data. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully consent to participate in the study which has been fully explained to me. Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason. I also understand that should I withdraw after the data is collected, the researcher reserves the right to use my anonymous data in the write-up of the study and in any further analysis that may be conducted by the researcher.

I understand that because I am over 16 years of age at time of this study I can give my permission to take part. The student granting permission can do so by signing the consent form below.

Participant's Name (BLOCK CAPITALS)

.....

Participant's Signature

.....

Researcher's Name (BLOCK CAPITALS)

.....

Researcher's Signature

.....

Date: .....

## **Appendix F: Participant Debrief Sheet**

Participant Debrief Sheet:

Hi there,

First and foremost, I want to say a big THANK YOU to everyone that participated in this research project. With your help I was able to conduct this research which I felt was badly needed.

I hope the results of this research project might influence the school curriculum and therefore by your participation you may have helped introduce positive change in the school system in Ireland.

The results of this research will now take me some time to work out. I will be spending the next two months working on all the data that you so kindly provided. I will be getting all the results from the various schools and putting them together to work on.

It will take some time to work out what the implications of the results are but I am sure that the information that you have provided will be a great help.

If you found any part of participation in this study upsetting I would like you to speak to your transition year co-ordinator about this. If you do not want to talk to a teacher but are upset, please use [www.spunout.ie](http://www.spunout.ie) or [www.teenlineonline.org](http://www.teenlineonline.org) to talk to someone or access help in dealing with any issues that have arisen for you.

Thank you again for your participation in this really import study,

Regards,

AUTHOR

## Appendix G: Biographical Data Questionnaire

AGE

GENDER

Do you belong to a club, society or organisation, e.g. GAA, Scouts etc.?

Does your club involve physical activity?

How many hours per week do you spend in you club, society?

How often do you exercise physically in your spare time for at least 20 – 30 minutes to the extent that you at least slightly lose your breath and perspire?

- |                         |                       |
|-------------------------|-----------------------|
| Daily                   | <input type="radio"/> |
| 2 – 3 times a week      | <input type="radio"/> |
| 1 time a week           | <input type="radio"/> |
| 2 – 3 times a month     | <input type="radio"/> |
| A few times a year      | <input type="radio"/> |
| Cannot perform exercise | <input type="radio"/> |



**Appendix H: Physical Activity Questionnaire Adolescents**

## Physical Activity Questionnaire

Age: \_\_\_\_\_

Sex: M \_\_\_\_\_ F \_\_\_\_\_

We are trying to find out about your level of physical activity from the last 7 days (in the last week). This includes sports or dance that make you sweat or make your legs feel tired, or games that make you breathe hard, like tag, skipping, running, climbing, and others.

Remember:

There are no right and wrong answers — this is not a test.

Please answer all the questions as honestly and accurately as you can — this is very important.

1. Physical activity in your spare time: Have you done any of the following activities in the past 7 days (last week)? If yes, how many times? (Mark only one circle per row.)

	No	1-2	3-4	5-6	7 times or more
Skipping .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rowing/canoeing .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In-line skating .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walking for exercise .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bicycling .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jogging or running .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aerobics .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swimming .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Baseball, softball .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dance .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Football .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Badminton .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skateboarding .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	No	1-2	3-4	5-6	7 times or more
Soccer .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Street hockey .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volleyball .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floor hockey .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basketball .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ice skating .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cross-country skiing .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ice hockey/ringette .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. In the last 7 days, during your physical education (PE) classes, how often were you very active (playing hard, running, jumping, throwing)? (Check one only.)

I don't do PE ..... ☐

Hardly ever ..... ☐

Sometimes ..... ☐

Quite often ..... ☐

Always ..... ☐

3. In the last 7 days, what did you normally do at lunch (besides eating lunch)? (Check one only.)

Sat down (talking, reading, doing schoolwork) ..... ☐

Stood around or walked around ..... ☐

Ran or played a little bit ..... ☐

Ran around and played quite a bit ..... ☐

Ran and played hard most of the time ..... ☐

4. In the last 7 days, on how many days right after school, did you do sports, dance, or play games in which you were very active? (Check one only.)

- None ..... ☐
- 1 time last week ..... ☐
- 2 or 3 times last week ..... ☐
- 4 times last week ..... ☐
- 5 times last week ..... ☐

5. In the last 7 days, on how many evenings did you do sports, dance, or play games in which you were very active? (Check one only.)

- None ..... ☐
- 1 time last week ..... ☐
- 2 or 3 times last week ..... ☐
- 4 or 5 times last week ..... ☐
- 6 or 7 times last week ..... ☐

6. On the last weekend, how many times did you do sports, dance, or play games in which you were very active? (Check one only.)

- None ..... ☐
- 1 time ..... ☐
- 2 or 3 times ..... ☐
- 4 or 5 times ..... ☐
- 6 or more times ..... ☐

7. Which one of the following describes you best for the last 7 days? Read all five statements before deciding on the one answer that describes you.

- All or most of my free time was spent doing things that involve little physical effort ..... ☐
- I sometimes (1 — 2 times last week) did physical things in my free time (e.g. played sports, went running, swimming, bike riding, did aerobics) ..... ☐
- I often (3 — 4 times last week) did physical things in my free time ..... ☐
- I quite often (5 — 6 times last week) did physical things in my free time ..... ☐
- I very often (7 or more times last week) did physical things in my free time..... ☐

8. Mark how often you did physical activity (like playing sports, games, doing dance, or any other physical activity) for each day last week.

None	Little Bit	Medium	Often	Very Often
------	---------------	--------	-------	---------------

Monday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Tuesday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Wednesday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Thursday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Friday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Saturday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					
Sunday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
.....					

9. Were you sick last week, or did anything prevent you from doing your normal physical activities?

(Check one.)

Yes ..... ☐

No ..... ☐

If Yes, what prevented you? \_\_\_\_\_

## Appendix I: Subjective Happiness Scale

### Subjective Happiness Scale (SHS)

By Sonja Lyubomirsky, Ph.D.

For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:

not a very happy person	1	2	3	4	5	6	7	a very happy person
-------------------------------	---	---	---	---	---	---	---	---------------------------

2. Compared to most of my peers, I consider myself:

less happy	1	2	3	4	5	6	7	more happy
---------------	---	---	---	---	---	---	---	---------------

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

not at all	1	2	3	4	5	6	7	a great deal
---------------	---	---	---	---	---	---	---	-----------------

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

not at all	1	2	3	4	5	6	7	a great deal
---------------	---	---	---	---	---	---	---	-----------------

Note: Item #4 is reverse coded.

**Appendix J: Multidimensional Students' Life Satisfaction Scale (MSLSS)**

Scale Structure MSLSS Items	Strongly Disagree	Moderately Disagree	Disagree	Agree	Moderately Agree	Strongly Agree
<u>Family</u>						
I enjoy being at home with my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family gets along well together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like spending time with my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents and I do fun things together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is better than most.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Members of my family talk nicely to one another	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents treat me fairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Friends</u>						
My friends treat me well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends are nice to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I had different friends*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends are mean to me*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends are great	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a bad time with my friends*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have enough friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends will help me if I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>School</u>						
I look forward to going to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like being in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School is interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I didn't have to go to school*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are many things about school I don't like*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy school activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learn a lot at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel bad at school*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Moderately Disagree	Disagree	Agree	Moderately Agree	Strongly Agree

Living Environment

I like where I live	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish there were different people in my neighbourhood*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I lived in a different house*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I lived somewhere else*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like my neighbourhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like my neighbours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This town is filled with mean people*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family's house is nice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are lots of fun things to do where I live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Self

I think I am good looking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am fun to be around.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a nice person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are lots of things I can do well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to try new things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This town is filled with mean people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\*reverse keyed items  
Administration and Scoring

**Appendix K: Adolescent MHC-SF (ages 12 to 18)**

Please answer the following questions are about how you have been feeling during the past month. Place a check mark in the box that best represents how often you have experienced or felt the following:

During the past month, how often did you feel ...	NEVER	ONCE OR TWICE	ABOUT ONCE A WEEK	ABOUT 2 OR 3 TIMES A WEEK	ALMOST EVERY DAY	EVERY DAY
1. happy						
2. interested in life						
3. satisfied with life						
4. that you had something important to contribute to society						
5. that you belonged to a community (like a social group, your school, or your neighbourhood)						
6. that our society is a good place, or is becoming a better place, for all people						
7. that people are basically good						
8. that the way our society works made sense to you						
9. that you liked most parts of your personality						
10. good at managing the responsibilities of your daily life						
11. that you had warm and trusting relationships with others						
12. that you had experiences that challenged you to grow and become a better person						
13. confident to think or express your own ideas and opinions						
14. that your life has a sense of direction or meaning to it						



## **Appendix L: Participation Invitation Letter for Parents/Guardians**

UNIVERSITY OF EAST LONDON

School of Psychology  
Stratford Campus  
Water Lane  
London E15 4LZ

AUTHOR

Invitation to Participate in a Research Study

Dear Parent/Guardian,

My name is AUTHOR. I am conducting research as part of a college course that I am doing. To conduct my research, I would like to distribute a number of questionnaires to Transition year students and this is where I hope you might be able to assist. The purpose of this letter is to provide you with the information that you need to consider in deciding whether to allow your son/daughter take part in this research study that I am planning to carry out. The study is being conducted as part of my MSc in Applied Positive Psychology and Coaching Psychology degree at the University of East London.

Project Title

How Does Physical Activity effect the Wellbeing of Irish Secondary School Students?

Project Description

This research project aims to scientifically evaluate whether there is any link between the amount of Physical Activity School Students undertake and the levels of their Wellbeing. Physical Activity includes all types of activity during the day. Wellbeing includes Students happiness and Psychological health.

By using Questionnaires, I intend to try to assess how physically active the students who take part in the study are. Using other questionnaires, the students will be asked questions to assess how happy they are. The research project will then examine whether there is a link between how physically active the students are and how happy they are.

The students who volunteer to take part in the study will be asked to fill in some questionnaires in the classroom. The questionnaires will be anonymous and people will not be asked anything that could identify them.

I do not expect students to find the study in any way upsetting but they will have the option to stop taking part at any stage. All students who take part will be asked when finished if they feel any way upset and if so the school counselling service will be asked to help out.

In the very unlikely case that any student finds participation in the study upsetting I will follow all school guidelines in helping the student in question.

The students that volunteer to help out with this study will hopefully be helping provide new scientifically proven information about how Physical Activity has a positive effect on the Wellbeing of students. This information can then in turn be used to help all students in the future by giving the Department of Education this type of data to improve the curriculum.

Confidentiality of the Data

All the information gathered throughout this study will be entirely confidential. The information gathered will be used for this study only. The results of this study may be published in academic journals or magazines afterwards.

The questionnaires are anonymous but will be destroyed after the project results have been written up. The data and results will be kept electronically for two years to allow for further study and follow up.

Location

The study will be carried out in the classroom during school hours with the assistance of the class teacher.

Remuneration

There will be no payment for participation and taking part is on a completely voluntary basis.

Disclaimer

You are not obliged to take part in this study and should not feel coerced. The students are free to withdraw at any time. Should they choose to withdraw from the study they may do so without disadvantage and without any obligation to give a reason. Should they withdraw, the researcher reserves the right to use your anonymized data in the write-up of the study and any further analysis that may be conducted by the researcher.

If you feel that you would be willing to allow your son/daughter to participate I would be really grateful and I would hope that the results will make a big contribution to the future of schooling in Ireland.

If you have any questions or concerns about how the study is to be conducted, please contact the study's supervisor:

or

Chair of the School of Psychology Research Ethics Sub-committee:

Thank you in anticipation.

Yours sincerely,

AUTHOR

April 2017