

**Self Esteem and its Relationship with Academic Self-Efficacy Beliefs and
Perceived Stress in Adolescents**

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

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March 2016

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Contents

Acknowledgements

Abstract

Chapter 1: Introduction

- 1.1 What is adolescence?
- 1.2 What is Self-Esteem?
- 1.3 The Development of Self-Esteem
- 1.4 Effects of High/Low Self-Esteem
- 1.5 What is Academic Self-Efficacy?
- 1.6 Perceived Stress
- 1.7 Gender Differences
- 1.8 Previous Research
- 1.9 Rationale
- 1.10 Aim

Chapter 2: Methodology

- 2.1 Participants
- 2.2 Design
- 2.3 Materials
- 2.4 Procedure

Chapter 3: Results

[3.1 Reliability Statistics](#)

[3.2 Descriptive Statistics](#)

[3.3 Inferential Statistics](#)

[3.4 Hypothesis 1](#)

[3.5 Hypothesis 2](#)

[3.6 Hypothesis 3](#)

Chapter 4: Discussion

[4.1 Strengths and Limitations](#)

[4.2 Future Research](#)

[4.3 Conclusion](#)

References

Appendices

Acknowledgements

In completing this final year project, I owe a debt of gratitude to many people. To my supervisor, Dr. Patricia Orr, for mentoring and guiding me throughout the process.

I would like to pay tribute to Portmarnock Community School for allowing the research to take place and allowing the 5th year students to take part, without them this project would not have been possible.

Thanks to my extended family and friends for their constant support, guidance and encouragement, in particular, Margaret McGoldrick who has helped me throughout this study.

Last but not least, I would like to thank my family, especially my Dad. They provided endless support throughout my degree and this is to acknowledge my appreciation of their support, love, encouragement and patience.

Thank you,

Jenny

Abstract

The aim of this study was to investigate self-esteem and its' relationship with academic self-efficacy, beliefs and perceived stress levels in adolescents. Data from 113 fifth year secondary school students (male=65, female=48) were used in this correlational study which required each participant to complete three questionnaires: The Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2002), The Perceived Stress Scale (PSS) (Cohen et al, 1983) and The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965). Results found a significant negative correlation between self-esteem and perceived stress levels, with an increase in self-esteem related to lower stress levels. Results also showed a positive significant correlation between self-esteem and academic self-efficacy beliefs, with an increase in self-esteem being associated with higher scores on academic self-efficacy beliefs. Significant gender differences were found. Female participants scored lower on self-esteem compared to male participants. Male participants reported lower levels of perceived stress than female participants. Scores for academic self-efficacy beliefs were slightly higher for female participants compared with male participants but the difference was not statistically significant.

Implications of the findings are discussed.

Chapter 1: Introduction

The main aim of this study was to examine self-esteem and the relationship it has with academic self-efficacy beliefs and perceived stress levels within adolescents. The following introduction will examine research in the areas of self-esteem, academic self-efficacy beliefs and perceived stress.

1.1 What is adolescence?

The adolescence age range is considered to be from 12-18 years of age. It is a fundamental stage in an individual's life. Changes that occur in adolescence may cause new psychological adaptations to occur, resulting in changes in beliefs about one's self; these changes influence one's self-esteem, stress, and how one perceives their life events (Moksnes & Espnes, 2012). "Adolescence is inherently a time of storm and stress" (Arnett, 2006). The term 'storm and stress' was coined by G. Stanley Hall in *Adolescence*, written in 1904. Hall used this term because he viewed adolescence as a period of inevitable turmoil that takes place during the transition from childhood to adulthood. 'Storm' refers to a decreased level of self-control, and 'stress' refers to an increased level of sensitivity. Hall's perception of adolescence continues to influence our view of this period of development.

Erik Erikson puts a great deal of emphasis on the adolescent period, feeling it is a crucial stage for developing an individual's identity (Erikson, 1959). Erikson's (1959) theory of psychosocial development stated that during adolescence (age 12 to 18 yrs), the transition from childhood to adulthood is very important. Children are becoming more independent and begin to look at the future in terms of career, relationships, families, housing, etc. The individual wants to belong to a society and fit in; therefore, their self-esteem is constantly developing.

1.2 What is Self-Esteem?

In psychology, the term self-esteem is used to “describe a person's overall sense of self-worth or personal value” (Branden, 1969). Self-esteem is often seen as a personality trait, which means that it tends to be stable and enduring. Self-esteem can involve a variety of beliefs about the individual, for example, the appraisal of one's own appearance, beliefs, emotions, and behaviours.

According to Branden (1969), there are three key components of self-esteem:

1. It is an essential human need that is vital for survival and normal, healthy development.

2. It arises automatically from within based upon an individual's beliefs and consciousness.
3. It occurs in conjunction with an individual's thoughts, behaviours, feelings and actions.

A realistic yet positive view of the self is often considered the ideal because it can be an important part of success. People with high self-esteem tend to portray a variety of characteristics including, resilience when faced with failure, emotional stability, not easily swayed or influenced by opinions, a positive reaction to success, and a thorough stable self-concept. Positive self-esteem makes us feel good about ourselves and sheds a positive light on our lives. Therefore, it is helpful in monitoring the level of social acceptance and belonging felt by an individual. Humans are social creatures by nature. When they form relationships with others, it has a positive effect on how they feel about themselves (Hogg & Vaughan, 2011). Low self-esteem can leave an individual feeling defeated or depressed, and can lead them to make bad choices and fail to live up to their full potential. People with low self-esteem tend to be easily persuaded and influenced, be sceptical of success and approval, and have an unstable self-concept (McLeod 2012). Self-esteem levels can be at the extreme high or low ends of the spectrum. Thus, it is important to have a balance somewhere in the middle (Branden, 1969).

1.3 The Development of Self-Esteem

As we go through life, our self-esteem inevitably waxes and wanes. These fluctuations in self-esteem reflect changes in our social environment as well as maturational changes such as puberty and cognitive declines in old age. These changes are experienced by most individuals at about the same age and influence them in a similar manner. This will produce normative shifts in self-esteem across developmental periods (Trzesniewski, K.H., Donnellan, M.B., & Robins, R.W. 2001). Young children have relatively high self-esteem, which gradually declines over the course of childhood. Researchers have speculated that children have high self-esteem because their self-views are unrealistically positive. As children develop cognitively, they begin to base their self-evaluations on external feedback and social comparisons, and thus form a more balanced and accurate appraisal of their academic competence, social skills, attractiveness, and other personal characteristics. The transition from primary school to the more academically challenging and socially complex context of secondary school has a significant effect on an individual's self-esteem (O'Donnell, 1976). For example, the individual could potentially receive more negative feedback from teachers, parents and peers. Therefore, their self-evaluations correspondingly become more negative (Trzesniewski et al, 2001).

Self-esteem continues to decline during adolescence. Researchers have attributed the adolescent self-esteem decline to body image and other problems associated with puberty, the emerging capacity to think abstractly about one's self and one's future, and the ability to acknowledge missed opportunities and failed expectations (Trzesniewski et al, 2001).

1.4 Effects of High/Low Self-Esteem

Our level of self-esteem plays a big role on every aspect of our life, from how much professional success we enjoy to whom we are likely to fall in love with. In fact, there are positive correlations between healthy self-esteem and a variety of other traits that bear directly on our capacity for achievement and happiness. Healthy self-esteem correlates with realism, intuitiveness, rationality, creativity, independence, flexibility, the ability to manage change, a willingness to admit (and correct) mistakes, benevolence and cooperativeness (Branden, 1969).

Branden (1969), stated that poor self-esteem correlates with irrationality, blindness to reality, rigidity, fear of the new and unfamiliar, inappropriate conformity or inappropriate rebelliousness, defensiveness, overly compliant or controlling behaviour, and fear of or hostility toward others. It can be natural to feel down about yourself every now and then, but

when these feelings persist, they can have huge effects on an individual's life.

Some of these include:

- Relationship problems - interacting and communicating with your peers can be difficult when you are in the frame of mind that you do not deserve good relationships.
- Low resilience - dealing with problems can seem tougher than usual and you may feel like things cannot improve.
- Neglecting yourself – Maintaining a healthy lifestyle is difficult you are not eating or sleeping properly and getting the correct exercise.
- Negative feelings - low self-esteem has been proven to affect your mood therefore feelings of anxiety, sadness and anger are quite common in an individual with low self-esteem.
- Lack of motivation - denotes absence or deficiency in desire, interest and driving force.

There are a lot of benefits to having high self-esteem. An individual who has high self-esteem has a positive opinion of themselves and believe they are “worthy partners and capable problem solvers“ (Oswalt, n.d). The individual develops a healthy opinion of who they are, but also recognises there are ways they can continue to grow and develop. A healthy self-esteem gives an individual the belief that they possess positive characteristics and skills that they can share with others. They also feel they are worthy of being loved and accepted by others including family and friends. (Oswalt, (n.d)).

1.5 What is Academic Self-Efficacy?

Academic self-efficacy refers to an individual's belief that they can successfully achieve at a designated level on an academic task or attain a specific academic goal (Bandura, 1997; Eccles & Wigfield, 2002; Linnenbrink & Pintrich, 2002a). Research suggests that having high self-efficacy when attempting difficult tasks creates feelings of calmness or serenity while low self-efficacy may result in a student perceiving a task as more difficult than reality. This in turn may create anxiety, stress and a narrower idea on how best to approach the solving of a problem or activity (Downey, Eccles, & Chatman, 2005).

It is believed that an individual's interpretation of a successfully completed mastery experience is important to the development of high academic self-efficacy as individuals use these interpretations to develop perceptions that they then act in concert with. Research also suggests that observing others perform tasks can facilitate the development of academic self-efficacy, particularly when individuals are uncertain regarding their abilities or specific tasks, and they perceive similar attributes with the observed model. More generally, self-efficacy is how much control they believe they have in their ability to reach a goal or accomplish a task. This

sense of control is of fundamental importance in everyday life because, theoretically, individuals who lack the control in their lives to produce a desired effect are individuals who will have little incentive to put forth any effort towards achievement.

In the academic context, an individual's belief of their own self-efficacy to control their educational processes and outcomes, likely has a great impact on their scholastic impetus, interest, and achievement (Bandura et al, 1996). Such a theory would predict that adolescents with high levels of academic self-efficacy are generally higher achievers than those who have lower levels of academic self-efficacy. Indeed, high self-efficacy levels are robust predictors of academic achievement, positive social relationships and pro social behaviours (Bandura, Barbaranelli, Caprara & Pastorelli, 1996). Bandura et al. (1996) also found that low self-efficacy levels frequently lead to feelings of futility and melancholy. However, as put forth in the idea of Bandura's Social Learning Theory, this is not inevitable. In fact, through socialization and modelling, people often learn to manage themselves and embrace standards that serve as personal regulators for courses of action in many situations (Grusec, 1992). The term self-efficacy should not be confused with self-esteem or self-concept. Self-efficacy is a task-specific evaluation while self-esteem and self-concept reflect more general affective evaluations of the self (Linnenbrink & Pintrich, 2002a).

1.6 Perceived Stress

McLeod 2010, defined stress as a reaction to a stimulus that disturbs our physical or mental equilibrium. It is an omnipresent part of life. A little bit of stress, known as “acute stress,” can be exciting and keeps us active and alert whereas long-term stress which is known as “chronic stress,” can have harmful effects on health. An individual may not be able to control the stressors in their life, but they can alter their reactions to them.

Stress is a major issue in today’s society even though it is a natural and dynamic process that has evolved to benefit survival. Canon’s “fight or flight” concept (Canon, 1932) first described the sympathetic-adrenomedullary (SAM) chain reaction, which is first triggered by the hypothalamus, and stimulates the adrenal glands to release adrenalin and noradrenalin in response to an acute stress event. This leads to increased heart rate, raised blood pressure and sweating, among other effects. The effects of stress can be detrimental to psychological health, contributing to depressive symptoms or other difficulties in social life (Myers et al, 2012). Any given stressor is the stimulus that triggers a response from the body yet the perception of stress is individual and the response to the stressor is unique therefore stress is experienced differently by each individual.

What varies is the way an individual copes with stress. According to the transactional model described by Lazarus and Folkman (1984), coping involves making appraisals of situations. These may be “problem-focused” or “emotion-focused”. Problem-focused coping targets the causes of stress in practical ways which tackles the problem or stressful situation that is causing stress, consequently directly reducing the stress. Another coping strategy for stress is the emotion-focused approach. It involves trying to reduce the negative emotional responses associated with stress such as fear, anxiety, embarrassment, depression, excitement and frustration. This may be the only realistic option when the source of stress is outside the person’s control.

Between both strategies, problem-focused coping is known to be the best, as it removes the stressor, therefore it deals with the root cause of the problem, providing a long term solution. Problem focused approaches will not work in any situation where it is beyond the individual’s control to remove the source of stress. They work best when the individual can control the source of stress (e.g. exams, work based stressors etc.). However, it is not always possible to use problem-focused strategies. For example, when someone is grieving for the loss of someone close to them, problem-focused strategies may not be very helpful. When dealing with the feeling of loss, an individual requires emotion-focused coping.

1.7 Gender Differences

Adolescents are socialised according to their gender from an early age. While boys are encouraged to be competitive and independent, girls are encouraged to be cooperative and interdependent, and to attend to their intuition and feelings. Studies suggest that there are gender differences in some aspects of self-esteem: compared with males who have higher levels of global self-esteem (“I am a smart man”), females develop self-worth based on feedback from others (“they like my cooking so I must be a good cook”). Also, females tend to lose what psychologists dub the “positivity bias” compared with males when they reach adolescence. This bias states that most people generally think of themselves in a pretty good light. Moreover, females are more susceptible to depression and eating disorders – conditions linked to lower self-esteem. They tend to ruminate more than males, which could lead to longer-lasting negative emotions and this rumination can be a vicious cycle. Depressed patients have a tendency to ruminate on negative information about themselves, which leads to more depressive thoughts (Larson, 2000).

Males and females report different reactions to stress, both physically and mentally. They attempt to manage stress in very different ways and also

perceive their ability to do so. Males report being less concerned about managing stress and are more likely to say they are doing enough in this area, whereas females place more emphasis on the need to do so but feel they are not doing well enough. Findings suggest that while females are more likely to report physical symptoms associated with stress, they are doing a better job connecting with others in their lives and, at times, these connections are important to their stress management strategies.

1.8 Previous Research

The number of previous studies combining self-esteem, academic self-efficacy and perceived stress is limited. There can be a strong relationship between self-esteem and stress because stress is known to worsen the symptoms of almost all medical and emotional conditions. The extent of an individual's support system corresponds strongly with their perceptions and experience of stress. When the body is physically and emotionally healthy, it is much easier to live with stress. It is believed that low self-efficacy compromises our emotional readiness to handle the challenges that come with daily living and therefore increases stress.

Previous studies have found a significant negative relationship between stress and academic self-efficacy among college students. Comparatively, results from a recent study showed that high self-efficacy

reduced stress. Stressful life issues were significantly reduced among adolescents with high self-esteem. (Dixon et al, 2008)

Self-esteem has been proven to act as a buffer in times of stress by lessening any negative impact on life satisfaction. A previous study (Neely et al. 2009) on the mediating effect of general well-being in coping with stressful events found that levels of optimism in students early in the semester were found to be predictive of semester levels of stress. There have been different types of results from research regarding the relationship between stress and self-esteem with some reporting a significant relationship (Hudd et al. 2000) and others denying the existence of a significant relationship (Caruthers, 2009). Although Caruthers (2009) found no significant relationship between stress and self-esteem, the low number of participants (n=15) weakens the reasoning of the study.

A study done by Youngs et al. (1990) into adolescence stress and its effect on self-esteem found that stress caused by negative events had a greater impact on self-esteem while positive events had only slight effects. It is worth noting though that the participants (n=2,154) were adolescents, and it is possible that the coping mechanisms for dealing effectively with negative affect of stress were weak; as according to Charles (2010) age brings both strength and vulnerability when dealing with stress.

Research in the area of academic self-efficacy is limited, but it is important to note that the difference between self-esteem and academic self-efficacy relate to the conviction that one can perform the behaviour necessary to produce a desired outcome while self-esteem demonstrates how positively one feels about himself Passer & Smith (2008). Bandura (1997) noted that a sense of power and control over one's environment affects a person's academic self-efficacy, and this may be negative or positive. Bandura suggested that earlier negative academic performance is likely to lesson a student's belief in their ability to achieve academically, this will in turn affect the self-esteem conversely.

A study was done by Karen M. Thwaites MPhil/PhD student UWI, Mona to examine whether there was a difference between gender when it comes to self-efficacy. These results showed that female students had significantly greater academic self-efficacy than their male peers. This finding is inconsistent with some overseas studies which had shown that boys were often found to have higher efficacy beliefs than girls. (e.g., Pajares & Miller, 1994; Schunk & Pajares, 2002).

1.9 Rationale

In examining the research on self-esteem, and particularly involving adolescents, a number of research questions arose. Most research indicated that adolescents experience a steady decline in self-esteem as they move through the developmental stage seen as the transition between childhood and adulthood. However, research indicated that this is not the case. Some researchers reported no change in self-esteem levels during adolescence while others reported increases in self-esteem during this time. This research aimed to explore this situation further and to establish the effects self-esteem has on certain aspects of an adolescent's life.

1.10 Aim

The aim of this study was to investigate self-esteem and to identify if there is a relationship between it and academic self-efficacy and perceived stress. Given that an individual's self-esteem is contingent on achievement, disengagement may occur if difficulties are encountered, in order to prevent loss of self-esteem (Crocker & Knight, 2005). The possible effects of self-esteem on academic perception and perceived stress will be examined in order to augment understanding of their relationships. Three hypotheses are examined in this study.

Hypothesis 1: *There will be a negative correlation between self-esteem and*

stress levels.

Hypothesis 2: *There will be a positive correlation between self-esteem and academic self-efficacy.*

Hypothesis 3: *There will be a significant difference in self-esteem, academic self-efficacy and perceived stress between male and female participants.*

Chapter 2: Methodology

2.1 Participants

The participants (n=113) were fifth year students from Portmarnock Community School. They took part in three questionnaires. All anonymity of participant was assured. All participants had the option of withdrawing from completing the questionnaires at any time. Participation was completely voluntary. Nothing was given to them to reinforce participation. The total number of participants was 113, of which 65 were males and 48 were females.

2.2 Design

The present study was a correlational design. Pearson's correlation and Spearman's Ranked orders test was carried out to investigate the relationship between variables. The predictor variables were academic self-efficacy and perceived stress. The criterion variable was self-esteem. An independent sample t-test was utilised to look for differences in gender within the sample. As this was a correlational design there was no requirement for experimental or control groups. The study was approved by the research

panel of DBS Ethical Committee.

2.3 Materials

The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965) was used as a measure of global self-esteem. Participants rated their self-esteem on a 4-point Likert scale ranging from strongly agree to strongly disagree. The 10-item scale included statements such as “On the whole, I am satisfied with myself” and “I feel that I have a number of good qualities.” After reversing of relevant scores, the scores are summed. Possible self-esteem scores range from 0-30. Individuals who score at 22 or over are considered to have a high self-esteem. Those who score at 21 or less are considered to have a low self-esteem. Cronbach’s alpha for this scale was reported at a high $\alpha=.89$ which means it is highly reliable. A copy of Rosenberg’s Self Esteem Scale is enclosed in the Appendix section.

The Perceived Stress Scale (PSS) (Cohen et al, 1983) was designed as a measure to determine which situations in one’s life are stressful; it has the added benefit of addressing daily hassles and how one copes with them. The consistency of the scale, assessed by Cronbach’s alpha was in the range of 0.85; additionally, short term reliability was high at 0.85 dropping to 0.55 after six weeks (Cohen et al, 1983). While the validity of the scale varied between low to 24 moderate (0.17-0.49) in respect to life events and their

impact on the respondent, the PSS showed adequate reliability. Cohen et al, 1983 noted that the PSS fourteen question scale was a better predictor of future physical symptoms with a validity of 0.52 to 0.76 (1983, p. 393). The Perceived Stress Scale is a Likert scale where items are scored from 0 to 4, with the numbers representing the following; 0= never, 1= almost never, 2= sometimes, 3= fairly often and 4= very often. Questions such as “in the last month, how often have you felt nervous or stressed”, would require the participant to place a value from the 0 to 4 score in the space provided, and it is recommended that this is done fairly quickly. For the purposes of analysis items 4, 5, 6, 7, 9, 10 and 13 are scored in the reverse direction (0= 4, 1= 3, 2= 2, 3=1, and 4= 0) and summed with the other negatively worded items. Scores range from 0 to 56, with lower scores (less than 28) suggesting lower stress and higher scores (above 28) representing higher levels of stress.

The Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2002)

includes three 8 item scales that measure academic, social, and emotional self-efficacy. This scale is a measure of an individual’s belief in whether problems or barriers can be confronted and addressed with a successful outcome. The academic self-efficacy includes questions about the person’s perception of achieving academic goals. The social self-efficacy scale addresses social challenges and the emotional self-efficacy scale includes

questions about coping with unpleasant problems or events. Reliability of the scale is good, with Cronbach's alphas of 0.90. A total self-efficacy score can be obtained by summing across all items. Items 1, 4, 7, 10, 13, 16, 19, and 22 = Academic self-efficacy.

2.4 Procedure

Portmarnock Community School was chosen to approach as it is the researcher's old school. A letter of introduction was sent to the Principal (See Appendices) where permission was sought and subsequently granted and a date was arranged for the researcher to go to the school and present the questionnaires for the study to the fifth year students.

Students were gathered in the assembly hall. Participants were given a briefing for five minutes explaining the study and its implications. The withdrawal options were explained and every participant was informed that they were free to withdraw from the study at any moment. They were also informed that the questionnaires were anonymous and that by submitting and completing the questionnaire they were consenting to participation. The filling out of the questionnaires was supervised to ensure that it was completed in a serious manner and with thought. There was a cover sheet informing the participants of the study and any pertinent information should

they have further questions after the study and a detachable sheet at the end of the questionnaire that contained information on various psychological help-lines in the incidence that the material of the study was found to be upsetting. They were given the questionnaire to fill out and were permitted to take as much time as was needed. The questionnaires were collected when finished and a debriefing was given to answer any questions the participants had. All ethical guidelines as prescribed by the Psychological Society of Ireland and the ethics committee of the third level institution were adhered to. Each participant could withdraw from the study at any time.

Chapter 3: Results

3.1 Reliability Statistics

The self-esteem, academic self-efficacy and perceived stress items were all checked for reliability using Cronbach's Alpha analysis. It was found that self-esteem was highly reliable upon checking the 10 items for reliability ($\alpha = .862$). The perceived stress scale also displayed an adequate level of internal consistency across the 10 perceived stress scale ($\alpha = .860$). Finally, the self-efficacy items were also highly reliable ($\alpha = .878$) (See Table 1). All the three main variables in the study were found to be reliable and they were computed in SPSS to create an overall variable for each scale that will be used in the following section for descriptive and inferential statistics analysis.

Table 1: Reliability Statistics for Independent and Dependent Variables

Variables	No. Of Items	Cronbach's Alpha
Self Esteem	10	.862

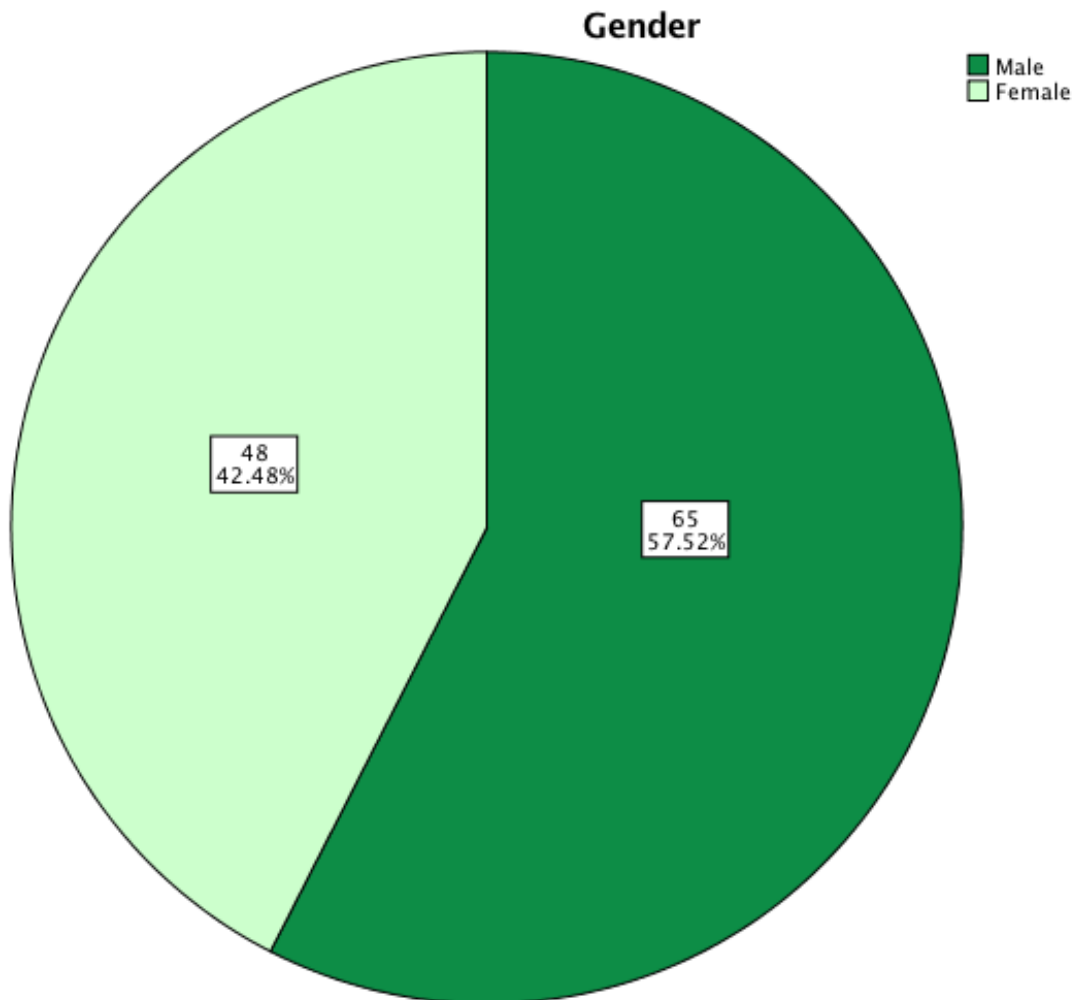
Perceived	10	.860
Stress		
Scale		
Academic	8	.878
Self-		
Efficacy		

3.2 Descriptive Statistics

Participants

As Figure 1 demonstrates, 113 participants took part in the study and there were more male participants 57.52% (n = 65) than female participants 42.48% (n = 48).

Figure 1: Gender Distribution Pie Chart



Self-Esteem, Perceived Stress and Academic Self-Efficacy

The measures of central tendency and dispersion were carried out for self-esteem, perceived stress and academic self-efficacy. As shown in table 2 below, the female participants ($M = 17.77$, $SD = 4.57$) had a lower self-esteem compared to the male participants who had high self-esteem scores ($M = 20.03$, $SD = 4.34$). Interestingly, the male participants ($M = 16.46$, $SD = 6.52$) reported lower level of perceived stress than the female participants (M

= 21.02, SD = 6.38). Academic self-efficacy was slightly higher in female participants (M = 25.77, SD = 7.01) compared to male participants (M = 25.32, SD = 5.90). In the next section the study hypothesis will be tested in order to fulfill the study objectives.

Table 2: Descriptive Statistics for Self-Esteem, Perceived Stress and Academic Self-Efficacy

		N	Mean	Std. Deviation	Std. Error Mean
Self Esteem	Male	65	20.0308	4.33723	.53797
	Female	48	17.7708	4.57207	.65992
Perceived Stress	Male	65	16.4615	6.52418	.80922
	Female	48	21.0208	6.38312	.92132
Academic Self-Efficacy	Male	65	25.3231	5.90314	.73219
	Female	48	25.7708	7.01136	1.01200

3.3 Inferential Statistics

Test of Normality

Self-esteem, perceived stress and academic self-efficacy were checked for normality and the result of the Shapiro Wilk's test shows that academic self-efficacy did not meet the assumption of normality ($P < .05$). Self-esteem and perceived stress scale were both normally distributed and the relationship between them will be examined using a Pearson Correlation.

Table 3: Tests of Normality for Self-Esteem, Perceived Stress and Academic Self-Efficacy

V ar ia bl es	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Self Esteem	.097	113	.011	.984	113	.180
Perceived Stress	.081	113	.067	.984	113	.194
Academic Self- Efficacy	.114	113	.001	.973	113	.020

Check for Outliers

Boxplots were employed to check for outliers. Self-esteem had 7 outliers and the other variables had no outliers (see output). The outliers were included for the purpose of the analysis.

3.4 Hypothesis 1

H1: There will be a negative correlation between self-esteem and stress levels.

To test the hypothesis that there will be a negative correlation between self-esteem and stress level, a one-tailed Pearson correlation analysis was performed in SPSS.

The result of the correlation analysis below indicates that there is a significant negative correlation between self-esteem and perceived stress level ($r(113) = -.732, p < .001$) one tailed (See Table 4). This shows that an increase in self-esteem is related with lower stress level and low self-esteem is associated with high stress level. Correlation measures the strength and direction of a relationship and it can be seen that the relationship between the two variables is strong and negative. Therefore, the null hypothesis was rejected.

Table 4: Pearson Correlation Between Self-Esteem and Perceived Stress

		Self Esteem	Perceived Stress
Self Esteem	Pearson Correlation	1	-.732
	Sig. (1-tailed)		.000
	N	113	113
Perceived Stress	Pearson Correlation	-.732	1
	Sig. (1-tailed)	.000	
	N	113	113

** . Correlation is significant at the 0.01 level (1-tailed).

3.5 Hypothesis 2

H₂: There will be a positive correlation between self-esteem and academic self-efficacy

To test the hypothesis that there will be a positive correlation between self-esteem and academic self-efficacy, spearman ranked order correlation analysis was performed in SPSS because self-efficacy did not meet the assumption of normality as tested in the previous section. The spearman ranked order correlation result presented in table 5 below shows that there was a positive significant correlation between self-esteem and academic self-efficacy ($\rho(113) = .387, p < .001$). The relationship between the two variables was low and it shows that an increase in self-esteem is associated with higher academic self-efficacy scores. Therefore, the alternative hypothesis was accepted and the null rejected.

Table 5: Spearman Ranked Order Correlation Between Self-Esteem and Academic Self-Efficacy

			Self Esteem	Academic Self-Efficacy
Spearman's rho	Self Esteem	Correlation Coefficient	1.000	.387

		Sig. (1-tailed)	.	.000
		N	113	113
Academic	Self-	Correlation	.387	1.000
Efficacy		Coefficient		
		Sig. (1-tailed)	.000	.
		N	113	113

** . Correlation is significant at the 0.01 level (1-tailed).

3.6 Hypothesis 3

H₃: There will be a significant difference in self-esteem, academic self-efficacy and perceived stress between male and female participants.

To test the hypothesis that there will be a significant difference in self-esteem, academic self-efficacy and perceived stress between gender, preliminary check for normality and outliers was carried out. The result of the analysis shows that the variables were normally distributed ($p > .05$) and only female academic self-efficacy did not meet the assumption of normality ($p < .05$) (See Table 6). There was less than 5 outliers in all of the cases, which is quite small (See output).

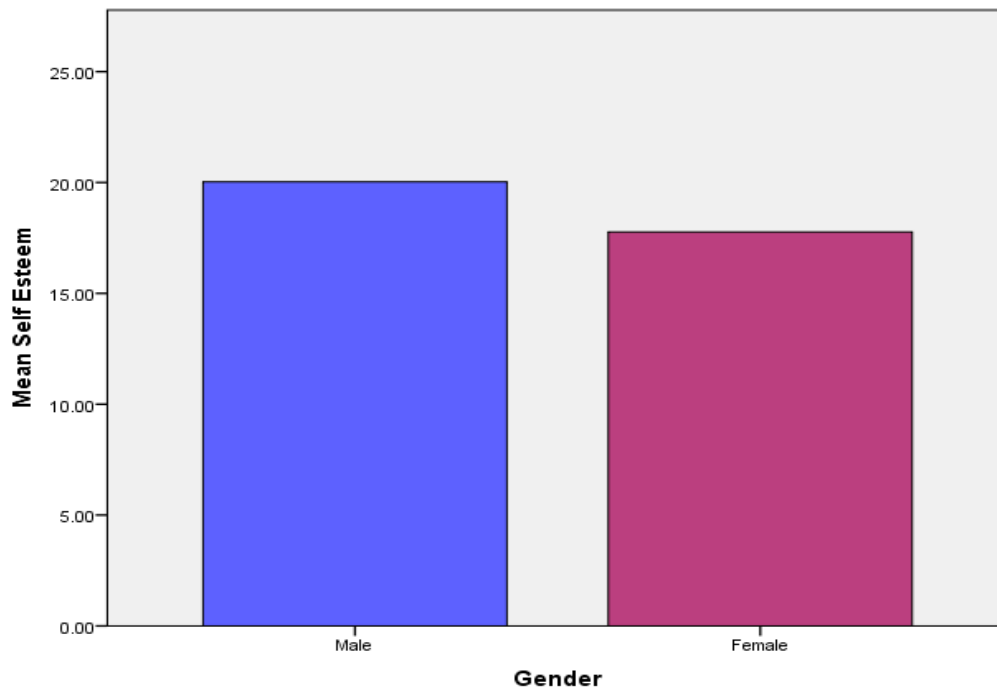
Table 6: Tests of Normality for Males and Females Self-Esteem, Perceived Stress and Academic Self-Efficacy

Gender	Kolmogorov-Smirnov	Shapiro-Wilk
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		Statistic	df	Sig.	Statistic	df	Sig.
Self Esteem	Male	.119	65	.022	.983	65	.497
	Female	.100	48	.200	.976	48	.409
Perceived Stress	Male	.102	65	.087	.964	65	.053
	Female	.059	48	.200	.991	48	.974
Academic Self-Efficacy	Male	.104	65	.077	.979	65	.318
	Female	.132	48	.035	.948	48	.034

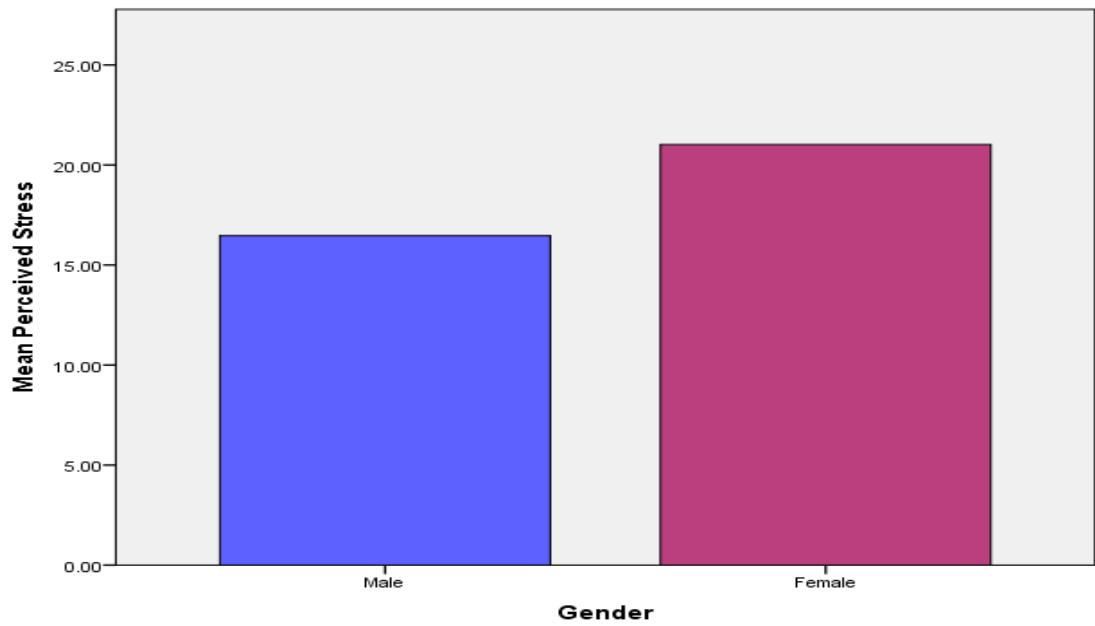
Independent samples t-tests were carried out to test hypothesis 3 and the result of the t-test showed that self-esteem was statistically significantly difference between the gender groups ($t(111) = 2.676, p = .009$) with the male participants ($M = 20.03, SD = 4.34$) having a higher level of self-esteem than the female participants ($M = 17.77, SD = 4.57$) (See figure 2 below).

Figure 2: Gender Differences Between Self-Esteem



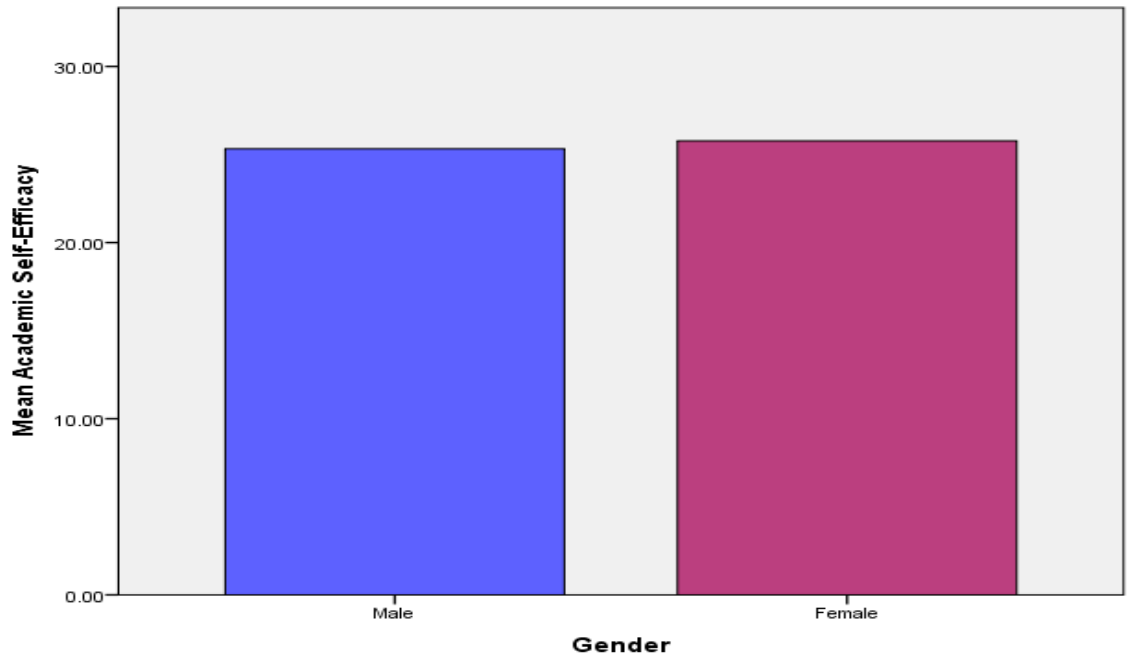
It was also found that the male participants ($M = 16.46$, $SD = 6.52$) have a statistically significantly lower perceived stress than the female participants ($M = 21.02$, $SD = 6.38$), $t(111) = -3.706$, $p < .001$ (See figure 3 below).

Figure 3: Gender Differences Between Perceived Stress Levels



However, as you can see in figure 4 below, there was no significant difference in academic self-efficacy between the male and female participants ($t(111) = -.368, p = .721$).

Figure 4: Gender Differences between Academic Self-Efficacy Beliefs



Chapter 4: Discussion

The purpose of this study was to look at self-esteem and its relationship with academic self-efficacy and perceived stress in adolescents. It was hypothesised that there would be a negative correlation between self-esteem and perceived stress. The results of this study showed that there is a significant negative correlation between self-esteem and perceived stress. It showed that an increase in self-esteem is related with lower stress levels and low self-esteem is associated with higher stress levels.

It was hypothesised that there would be a positive correlation between self-esteem and academic self-efficacy, and the findings showed that there was a positive significant correlation between self-esteem and academic self-efficacy. The relationship between the two variables was low and it showed that an increase in self-esteem is associated with higher academic self-efficacy scores. Therefore, the alternative hypothesis was accepted and the null was rejected. Finally, it was hypothesised that there would be a significant difference in self-esteem, academic self-efficacy and perceived stress between male and female participants. Results showed that self-esteem was statistically significantly different between the gender groups with the male participants having a higher level of self-esteem than the female participants. It was also found that the male participants have a statistically

significantly lower perceived stress than the female participants. However, there was no significant difference in academic self-efficacy between the male and female participants.

In agreement with existing literature (e.g. Hudd et al. 2010), self-esteem was found to have a negative correlation with perceived stress in this study. Variability in self-esteem scores leads us to suggest that some students have low levels of self-esteem. This combined with moderate to high levels of academic stress would suggest that early intervention with these students would be useful in reducing stress and perhaps highlighting how they are able to approach new tasks and assessment in a competent way because high levels of stress can be detrimental. High levels of stress have been linked to symptomatic experiences such as headaches, hyperventilation, insomnia, fatigue, and nervousness and may also put students at risk of developing serious health conditions such as depression, anxiety and, in the long run, cardio-vascular conditions. These high levels of student stress are a particularly worrying revelation when combined with further findings of the study which revealed perceived stress to have a significant negative correlation with self-esteem.

Bandura (1997) noted that a sense of power and control over one's environment affects a person's academic self-efficacy, and this may be

negative or positive. Bandura suggested that earlier negative academic performance is likely to lesson a student's belief in their ability to achieve academically, this will in turn affect the self-esteem conversely. This study showed that there was a positive significant correlation between self-esteem and academic self-efficacy. These results are in agreement with Bandura's statement, as the relationship between the two variables was low and it shows that an increase in self-esteem is associated with higher academic self-efficacy scores.

As previously stated, a study was done by Karen M. Thwaites MPhil/PhD student UWI, Mona to examine whether there was a difference between gender when it comes to self-efficacy. These results showed that female students had significantly greater academic self-efficacy than their male peers. This finding is inconsistent with this current study as there was no significant difference academic self-efficacy between the male and female participants.

4.1 Strengths and Limitations

Some of the strengths, weaknesses and future directions of this research must now be discussed. In terms of strengths, the sample size used in this research was substantial which adds to the weight of the results. The

questionnaire used was relatively short, straight forward, easy to understand and complete. All of which contributed to the relatively short time it took to complete. If this questionnaire was to be used on a larger scale, it would be cheap to reproduce and the relatively short time it took to complete may result in greater willingness on the part of schools, etc., to allow adolescents take part in the research.

In relation to weaknesses of the research, the fact that participants took part in the research in a school setting may have influenced their responses. Even though the participants were assured that nobody in their school would read their answers, the fact that an employee of the school was in attendance and helped hand out the questionnaires and collect them from the students on completion, may have influenced responses. If this study was repeated, an envelope could be provided with each questionnaire in which the participant could seal the completed questionnaire to ensure nobody would see their responses. There is also a question as to the appropriateness of the way the questions in the questionnaire were phrased. One question refers to participants as children, and one participant wrote this on their questionnaire stating that they are an adolescent not a child therefore if the study was to be repeated, the researcher should think about rephrasing some of the questions used.

4.2 Future Research

Undoubtedly, the host of limitations mentioned above could be considered and would improve the overall outcome of the current study. An area that could be considered for future research is sample size. This current study had 113 participants. Future studies could look into having a larger sample size to gain a more variety of results. In this study, a group of fifth year students took part therefore they were all in the same age range. Future studies could involve a variation of age ranges of participants to investigate a continuous or possible discontinued trend which would exhibit a different outlook on how self-esteem affects an individual, at different stages of their life.

4.3 Conclusion

Self-esteem can have an array of implications on a student's physical and mental health and well-being as well as academic self-efficacy and perceived stress. In summary, this study provides a brief snapshot of self-esteem and its relationship with academic self-efficacy and perceived stress within adolescents. The results of the current study suggest that those who have high self-esteem, showed lower stress levels and those with lower self-esteem showed higher stress levels. They also suggest that students with higher self-esteem scored higher on the academic self-efficacy scale and vice

versa. It was interesting to find that there was also gender differences within the variables, with male participants scoring a higher level of self-esteem than the female participants and the male participants having a statistically significantly lower perceived stress than the female participants. However, there was no significant difference in academic self-efficacy between the male and female participants. It is important for adolescents to understand what factors relate to these variables as these may be precursors to future psychological well-being and educational enjoyment.

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Appendices

Appendix 1: The Perceived Stress Scale (PSS) (Cohen et al, 1983)

0 = never 1 = almost never 2 = sometimes 3 = fairly often 4 = very often

Instructions

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. For each question circle one of the following options:

In the last month, how often have you been upset because of something that happened unexpectedly?					
In the last month, how often have you felt that you were unable to control the important things in your life?					
In the last month, how often have you felt nervous and stressed?					
In the last month, how often have you felt confident about your ability to handle your personal problems?					
In the last month, how often have you felt that things were going your way?					
In the last month, how often have you found that you could not cope with all the things you had to do?					
In the last month, how often have you been able to control irritations in your life?					
In the last month, how often have you felt that you were on top of things?					
In the last month, how often have you been angered because of things that happened that were outside of your control?					
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Appendix 2: The Self-Efficacy Questionnaire for Children (SEQ-C)
(Muris, 2002) Academic Self-Efficacy Subscale from Self-Efficacy
Questionnaire for Children (SEQ-C) Muris, 2001

	Not at all 1				Very well 5
1. How well can you get teachers to help you when you					

get stuck on schoolwork?					
2. How well can you study when there are other interesting things to do?					
3. How well can you study a chapter for a test?					
4. How well do you succeed in finishing all your homework every day?					
5. How well can you pay attention during every class?					
6. How well do you succeed in understanding all subjects in school?					
7. How well do you succeed in satisfying your parents with your schoolwork?					
8. How well do you succeed in passing a test?					

Appendix 3: The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965)

Below is a list of statements dealing with your general feelings about yourself.

If you **strongly agree** with the statement circle **SA**.
 If you **agree** with the statement circle **A**.
 If you **disagree** with the statement circle **D**.
 If you **strongly disagree** with the statement circle **SD**.

	On the whole, I am satisfied with myself.				
	At times, I think I am no good at all.				
	I feel that I have a number of good qualities.				
	I am able to do things as well as most other people.				
	I feel I do not have much to be proud of.				
	I certainly feel useless at times.				
	I feel that I'm a person of worth, at least on an equal plane with others.				
	I wish I could have more respect for myself.				

	All in all, I am inclined to feel that I am a failure.				
	I take a positive attitude toward myself.				

Appendix 5: Letter of Consent to Principal of Portmarnock Community School

Jennifer Creaby
6 Onward Close
Portmarnock
Co. Dublin

Ms Eithne Deeney
Principal
Portmarnock Community School
Upper Carrickhill Road
Portmarnock
Co. Dublin

Dear Ms. Deeney,

I am writing this letter requesting permission to conduct research on 5th year students in Portmarnock Community School for my Final Year Project. The purpose of my study is to investigate the effect of self-esteem on stress levels and academic perception. The students will be asked to complete three questionnaires. I attach my phone number and email address.

I look forward to hearing from you,

Yours sincerely,

Jennifer Creaby
0863336746
Jencreaby@hotmail.com

Appendix 6: Participant Information Sheet

Hi Students!

My name is Jennifer Creaby and I am a final year student studying Psychology in Dublin Business School.

As part of my final year project, I am required to carry out research in an area that I am interested. The purpose of my study is to investigate self-esteem and its relationship with academic self-efficacy beliefs and stress levels in adolescents, therefore I am inviting you to participate in this research study by completing the attached questionnaires. In order to ensure that all information will remain confidential, please *do not* include your name. If you choose to participate in this project, please tick the box stating your gender and answer all questions as honestly as possible and return the completed questionnaires promptly to myself. I have attached all the necessary information about this study so please take the time to read through it before completing the questionnaires.

Thank you again,

Jennifer Creaby
jencreaby@hotmail.com
0863336746

Appendix 7: Introductory Statement/Invitation to Participate

I invite you to participate in a research study. It is important for you to understand why the study is being done and what it involves. This “Information Sheet” will tell you about the purpose, risks, and benefits of the study. If you agree to participate, I will ask for your consent. You should only consent to participate in this study when you feel that you understand what is being asked of you and if you are happy with it.

Principal Investigator

Jennifer Creaby

Title of Study

Self-esteem and its relationship with academic self-efficacy beliefs and perceived stress in adolescents.

What is the research about?

The aim of this research is to identify the impact an individual’s self-esteem has on their academic self-efficacy beliefs and perceived stress.

Data collection/ What will happen if you decide to take part in this research study?

Participation involves filling out the provided questionnaires. The questionnaires will then be inputted into a software called SPSS. This software is for statistical analysis. Several tests will be carried out on the data to provide results.

Confidentiality and anonymity

It is not necessary to provide your name therefore the study is entirely anonymous and only the researcher will have access to the data.

What are the benefits of taking part in this research study?

There are no direct benefits to your participation. However, your participation will provide insight into how self-esteem can effect students in these areas.

What are the risks of taking part in this research study?

Sometimes people can find the subject matter of these questionnaires upsetting. In the event that you feel distressed by participation in this study, please do not hesitate to contact me at [redacted] or [redacted].

Can you change your mind at any stage and withdraw from the study?

Your participation is strictly voluntary. If you feel uncomfortable due to any part of the study (e.g., questions making you feel awkward) you can withdraw your consent at any time.

How will you find out what happens with this project?

The researcher would be happy to talk to you about either your own specific participation or the findings from the general study.

Contact details of the researcher for further information

If you have any questions about this study, please contact Jennifer Creaby or.

Appendix 8: Consent Form

Please state Yes/No in the boxes after each statement:

Please state gender: (tick box)

Male []

Female []

1. I have read the information sheet entitled “The influence of self-esteem on academic perception and stress levels.
[]
2. I understand that my participation is totally voluntary []
3. I understand that I am free to withdraw from the study at any stage. []
4. I understand that I am not obliged to answer any questions if I don’t want to, or if the subject makes me uncomfortable.
[]
5. I have had the opportunity to ask questions and all my questions have been answered. []
6. I consent to participating in this study. []

Thank you so much for your participation. It is greatly appreciated!

Jennifer Creaby