Self-Esteem Stress and Locus of Control
amongst adolescence in
relation to age and gender

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Abstract

The purpose of the study was to determine the effects of self-esteem on stress and locus of control with the consideration of gender and age. 73 participants were surveyed with the use of convenience sampling, through a correlational design. Data was collected in a school amongst adolescence. Rosenberg’s (1965) Self-Esteem Scale, Rotter’s (1966) Children’s Locus of Control Scale, Cohen’s (1984) Perceived Stress Scale and two demographic questions were used to determine the main research question. There was no significant difference between gender and self-esteem. However, a significant relationship between stress and self-esteem was found. A negative correlation was found between age and self-esteem. Stress and self-esteem were found to be a weak predictor for age groups. A multiple regression determined a positive relationship between self-esteem and stress and self-esteem and gender.
Introduction

Adolescence indicates the period of time when an individual changes from childhood to adulthood, the age range 12-25 years is considered adolescence, young people, or youths. It is a fundamental stage in an individual’s life; recent years the role of adolescence have adapted dramatically, former to the 20th century, children developed into an adult life fairly rapidly, adapting adult roles, examples, earning a wage, and child-rearing, which is common in numerous countries in Europe (Dooley & Fitzgerald, 2012). These changes may cause new psychological adaptations to occur, resulting in changes and beliefs in one’s self; emerging in a difference in ones self-esteem, stress and how one perceives the causation of their life events (Moksnes & Espnes, 2012).

Irish survey found a decrease in self-esteem during adolescence, males have increasingly higher self-esteem than females, and likewise younger adolescence have higher self-esteem than older adolescence (Dooley et al., 2012; Gabhainn & Mullan, 2003). A national survey conducted on Irish adolescence found 80% of adolescence were in the normal range of stress, while 14% experienced mild stress, 7% within moderate, and 5% were experiencing severe stress. There was a small increase in severe stress as age progressed, stress has been considered to cause both cognitive and physical changes within the body (Dooley et al., 2012).

These social, cognitive, physical and emotional changes may have extensive effects on later life, such as lowered self-esteem, anxiety and depression (Rickwood, Deane, Wilson & Ciarrochi, 2005). Resulting in mood changes and antisocial behaviour, young individuals may find these rapid mood changes difficult to control, enabling their emotions to drop
causing stressful events and a decrease in self-esteem, there has been a drop in adolescence self-esteem from as early as 12 (Dooley et al., 2012).

A rapid fluctuation in adolescence hormone may result in recklessness, irritability, depression, stress and aggression, this could consequence in a behavioural shift to antisocial practices. The rapid development in physical appearance may cause an increase in self-consciousness and a decline in self-esteem (BBC Science, 2014).

From a developmental perspective adolescence are introduced to a new system of education, decision making, and establishing relationships, this may contribute to an increase in stress. Adolescence claimed school, family and friends were the top three stressors they experience. These new adaptations adolescence face can impact their self-esteem and increase stress as some individuals may find it difficult to adjust to the rapid changes occurring (Dooley et al., 2012).

Rosenberg (as cited by Moksnes et al., 2012) claims self-esteem refers to how an individual perceives their worth and/or importance. Social psychologists claim self-esteem is the attitude individuals hold towards themselves (Baron, Branscombe & Byrne, 2009). The self and self-esteem have been considered tangent, the structure of the self, determines how one views the world and others, it influences our emotion, thought and behaviour, which forms the basis of human existence (Baron et al., 2009). The individual’s self-view shapes their behaviour and this behaviour may affect their social realism and the social realities of the people around them, Baumeister (as cited in Amazue & Uzuegbu 2013). Self-esteem portrays holistic and personal feelings of self-reliance, self-acceptance and self-worth, these feelings and views are considered a phenomenon that starts at birth and continues throughout one’s life (Baron et al., 2009). Self-esteem can be affected by events in one’s life, especially the adolescence stage.
A mounting body of evidence suggests self-esteem holds an important part to how one perceives themselves and the causation of their life events. It has a positive relationship with personal goals, hopes and coping mechanism, (Zinty & Halama, 2011; Dahlqvist, Landstedt, & Gadin, 2012; Cakar & Karatas, 2012; & Kilic, Erol & Kilic, 2011).

A longitudinal study conducted by (Erol & Orth, 2011) found a positive relationship between self-esteem and ones perceived personality traits, and their perceived sense of mastery. (Kilic, et al., 2011) established a correlation amidst self-esteem and ones supposed hopelessness.

(Zinty, et al., 2011) found a relationship amongst ones professed locus of control and self-esteem. Studies have been found to display the psychosocial importance of self-esteem among adolescence. These studies are focusing on identifying possible causes of low self-esteem. Hirsch & DuBois (as cited in Amazue & Uzuegbu 2013) found that one third of adolescents are struggling with low self-esteem.

People displaying high self-esteem tend to have a higher life satisfaction, positive attitude towards themselves and a sense of self-worth and self-respect. They aren’t as concerned about individuals’ opinions of them, they are more averse to conform to incorrect opinions of others and more inclined to stand behind their beliefs. Generally they portray a more socially skilled, adaptive and pro-social behaviour than those displaying low self-esteem. Individuals with low self-esteem see themselves as unworthy and incompetent. They hold negative views towards themselves and are likely to adapt to incorrect opinions of others and societal norms. They are usually isolated and socially shy unlike individuals with moderate or high self-esteem. There have been evidence which displays a decrease in cognitive abilities of those with low self-esteem. Self-esteem may have an impact on ones emotions, cognition and ability to respond in stressful environments.
Depressive symptoms are increasing among adolescence in the Western countries. This is observed as low self-esteem is a suggested depressive symptom among early adolescence. (Dahlqvist, et al., 2012) conducted a study to see whether psychosocial exposure affects the development of depressive symptoms. Their study suggested psychological distress (sadness, anxiety and distraction) during childhood increases the risk of depressive symptoms such as low self-esteem, which may further cause mental health issues in later adult life.

There is no set theory in understanding self-esteem. However, the theory of social identity has been used in explaining self-esteem. An Identity is portrayed as a set of emotions, interpretations and expectations that connect to the self. Henri Tajfel (as cited in Mc Leod, 2008) produced the Social Identity theory. Social identity refers to how a person recognizes themselves based on their group membership. Tajfel implied the group an individual associates with is a principle aspect for the growth of their self-esteem. To increase self-image individuals tend to raise the societal group in which they belong by making an in-group and out-group class.

The principle theory of an in-group and out-group situation is that group members on an in-group will endeavour to get the negative aspects of the out-group in order to heighten their self-esteem and self-image. Tajfel, proposed there is mental process required in the evaluation of in-groups and out-groups which consist of social categorization, social identification and social comparison.
Social categorisation provides the individual with an intellect of individuals/groups, their social norms and what to expect based on categorising objects, people and events. Examples are ethnicity and religion. This categorisation is useful as it helps us define behaviours to social norms we belong to.

The second process involved implies we identify with the group we have categorised ourselves with. Example: a person classifies themselves as a student therefore, behaves like one and conforms to the social norm of the group. This process is a foundation for the advancement of self-esteem, as it constrains a person’s self-esteem to the group (McLeod, 2008).

The last process (Social comparison), which is usually performed in order to maintain self-esteem. Individuals analyse and compare the group which they consider themselves with other out-groups, once these groups become identified they compete in order for the members of their group to maintain their self-esteem (Baron et al., 2009). This process is considerable motivated by self-enhancement and positive distinctiveness (an individual belief that the group that they are associated with is better than other groups) Hogg & Vaughan (2011). A study conducted by Schmitt, Branscombe, Silvia, Garcia, & Russell (2006) found that the situational context was a determinant of whether individuals will compete in order to maintain their self-esteem. In an intergroup context individuals who identified with a group were more likely to display downward social comparison (a comparison of the self to another who they consider to be less equal than them). Although in an interpersonal context individuals were more likely to exhibit upward social comparison (a comparison of themselves to an individual who they consider superior).

This three stage process is critical in understanding our self-esteem, without categorisation, identification and comparison we cannot identify with a social group therefore our sense of belonging becomes diminished decreasing our self-esteem (McLeod, 2008). If
an individual believe they do not identify with any group, this could cause stress (Baran et al., 2009).

Stress is a negative emotional experience involving biochemical, physiological, behavioural and cognitive changes; these changes are either altering or accommodating the stressful event (Taylor, 2012, p.139).

Ukeh, Aloh & Kwahar (2011) claims stress as an unpleasant arousal (heighten physiological activity) that individuals experience in a situations they perceive as dangerous or threatening. It can be both physical and mental, inducing both physical and mental disorders, i.e. low self-esteem, depression, and anxiety, which can later cause physical problems (Butcher, Mineka, & Hooley, 2013).

When our body is faced with a threat of a stressor biological changes occur. The sympathetic-adrenomedullary (SAM) system and the hypothalamus-pituitary-adrenal (HPA) system are involved. Stress can be seen as a distinct way as to how people appraise demands of a situation, this is evident in the theory of Fight or Flight, Lazarus & Folkman (as cited in Ukeh et al., 2011).

The main theory of stress discussed in this study is Fight or Flight, developed by Cannon (as cited by Taylor, Klein, Lewis, Gruenwald, Gurung & Updegraff, 2000). The SAM system allows stress responses to be mobilized and helps prepare the individual for a fight-or-flight response. Arousals become intense when an individual is faced with external threats, the person will either fight it or escape from the source of stress. This fight or flight situation is caused by the stress in which a person perceives, this further identifies the importance of perceived stress, as it causes numerous physiological changes in our body.

The HPA system stimulates the Sympathetic Nervous System (SNS), which enables the hypothalamus to release the hormone corticotrophin, this hormone allows the pituitary
gland to secrete a hormone called glucocorticoids, which is cortisol in humans, and this cortisol hormone prepares the body for a fight or flight. The fight or flight response is mainly associated with acute stress (the experience of a short term stress), this type of stress is evident amongst adolescence (Butcher et al., 2013). There has been reports of adolescent stress, during the beginning of their school term, exam time, and completing assignments/homework on time. They reported this stress as an uncomfortable, anxious feeling (Suldo & Dedrick, 2013). This theory is regarded as the prototypic human response to stress, it has been embraced as a metaphor for an individual’s behavioural response to stress. It focuses on whether an individual/organism fights or flees the environment, this all depends on the nature of the stressor and ones cognition (Butcher et al., 2013).

Cognition is used to determine the possible outcome of the threat. If the organism concludes they can overcome the threat then they will fight. However, if they believe they are likely to be defeated they will flight from the situation. This is equally the same for both males and females, an experience of hormonal response to a threat is evident in both sexes (Taylor et al., 2000). Fight or Flight is considered one of the first and vital theories in understanding stress, it is used globally and adopted to further enhance our understanding of male and female response to stress, (Butcher et al., 2013). The current study will focus on how stress may influence ones perception of the causation of their life events.

Locus of Control (LOC) established by Julian B Rotter (as cited in Zaidi & Mohsin, 2013) is considered a principle aspect of social personality. LOC refers to the extent to which an individual believes they are in control of events occurring in their lives. LOC has been found to impact self-esteem, (Zinty et al., 2011) and stress (Khan, Saleem & Shahid, 2012). Rotter developed upon this idea, and found LOC, he used this term to report how an individual perceived their relationship with their environment (Rotter, 1966). This study shall focus on Internal and External LOC. Rotter asserted a person
with an internal LOC held beliefs that the achievements they obtained were guided by the choices they made, they believed an unsuccessful outcome was due to their own actions (Rotter, 1966). Researchers (Khan et al., 2012) found that Individuals who portray an Internal LOC perceive they are in control of their lives, and have control over events. These individuals are lead to feel happier, less stress and freer than those who portray external LOC. On the other hand, those with an external LOC tend to think they have no control of the conditions in their lives, they are at risk of depression, stress and low self-esteem.

Zaidi & Mohsin, (2013) believe LOC is the knowledge of how one sees their outcomes. Those able to control the results of their lives are internal. These individuals are considered to strive for achievements, and they can be described as “self-determined” or “self-control”. Those unable to control their outcomes are seen as externals, they are known to search a cause for their failures. It is interesting to note an internal character may develop a psychological and unhealthy lifestyle, as they often require surroundings which influence them to experience success. If they are declined of this, depression, nervousness, stress and anxiety may occur, Neill (2006). Nonetheless, external individuals may be relaxed, easy-going and live a joyful life, Hans, Hattie, Marsh, Neill, & Richards (as cited in Zaidi et al., 2013). This is arguable as conflicting evidence suggests individuals with an internal LOC acquired lower stress levels in contrast to those with an external LOC (Khan, et al., 2012). LOC holds an importance in one’s ability to make decisions, it permits the person to reflect on his/her life achievements, it is said that one’s circumstantial control reflects responsibility, self-worth and happiness, Neill (2006).

The theory of LOC was developed from Banduras Social Learning Theory, it contradicts the behaviourist belief that a person must gain a reward or punishment for learning to improve (“The Social Cognitive Perspective”, n.d).
He believed individuals were likely to determine the correlation between their behaviour and the consequence. This belief was supported by Bandura's Bobo Doll experiment. He developed reciprocal determinism, which states that a person, their environment and behaviour are correlating. He suggest people create the environment that attributes to their development. The theory of reciprocal determinism state humans are involved in creating the environment which influences their growth in life ("The Social Cognitive Perspective", n.d.).

Numerous factors are associated with LOC, stress and self-esteem are considered determinants of LOC, Gadzella, Masten, & Stacks (as cited in Carvalho, Gadzella, Henley, & Ball, 2009). They found an overall significant difference between LOC and stress groups. Their study also indicated, in terms of personal success, males showed a more internal LOC than females (Carvalho, et al., 2009). There are specific factors related to both internal and external LOC. Assertiveness and external/internal LOC are positively correlated. Self-handicapping and internal academic LOC hold a strong relationship, this is similar to self-esteem and internal LOC. Extraversion, self-esteem and internal LOC are positively associated (Zaidi et al., 2013). Some of these factors may be due to a persons living environment. It is said that an individual brought up in an environment in which they do not see the outcomes of hard work are external, this is also considered for individuals who are socially disadvantaged. This may be linked to learned helplessness in a responsive environment (Zinty et al., 2011).

As mentioned external LOC may cause numerous disorders, anxiety, stress, and depression. Evidence suggests LOC can be modified as it is learned, in a non-responsive circumstance which an individual holds no control, an external LOC is related to a sense of contentment. Rotter developed Attribution training, which focuses on strengthening a person’s internal LOC. This training is extremely effective as it encourages individuals to associate their behaviours with the outcomes they experience, decreasing anxiety, stress and
low self-esteem. It has also been found to increases self-efficacy. (“The Social Cognitive Perspective”, n.d.).

Stress and self-esteem are determined by a person’s perception, similarly to the way LOC is determined by a person’s perception (Ukeh et al., 2011). LOC is an important factor in understanding how an individual perceives results of their behaviours. A student with an internal LOC may conclude they received a poor result as they did not study efficiently for the exam. In contrast those with an external LOC, might believe the exam was unfair and the teacher was incompetent concluding that external factors are the reason for their results. This suggests a relationship between a student’s academics and their LOC (Carvalho, et al., 2009).

**Literature Review**

This study will focus on how ones self-esteem, influences their stress levels and LOC in relation to their age and gender. This research will further determine the relationship between self-esteem, LOC & stress amongst adolescence. Over the years there has been an increase in the predicament of stress, self-esteem and locus of control among students (Ji, & Zhang, 2011; Ukeh et al., 2011; Sharma, 2013; & Altio, & Ustun, 2013).

The transition from junior secondary school to senior secondary school has been noted as a critical phase during adolescence which may cause changes to occur, such as stress, self-esteem and personality changes (Sancakoglu et al., 2012). It is proposed that research should focus on the influence age has on self-esteem, as the transition from Primary School to University has been found to decrease self-esteem, Sahlstein & Allen (as cited in Frost et al., 2004).
The current study shall observe the relationship amongst age, self-esteem, stress and LOC, numerous studies have suggested an academic decline during the transition to senior secondary school. This may be due to the stress of the transition. This may further cause a decline in ones self-esteem (Suldo & Dedrick, 2013).

Researchers have found a positive relationship between self-esteem and stress levels among university students, Saleem & Rafique (2009). Although their study focused on procrastination and self-esteem the participants used claimed they were experiencing or experienced acute stress. This is in disarray as (Ukeh et al., 2011) study found no significant difference between stress and self-esteem. Nonetheless, they discussed the importance and influence stress has on ones self-esteem and gender (Ukeh et al., 2011).

Fraizer & Schauben (as cited in Ukeh, et al., 2011) found a correlation between stress and self-esteem among female students. Their study found that students were experiencing stress due to college finances, academic pressure, and fear of rejection. They also found a relationship between stress and depressive traits, low self-esteem, hopelessness, and anxiety. However, few studies have discussed the effects stress has on adolescence therefore there remains a lack of significant results between the two (Ji et al., 2011; Altiok et al., 2013; Lee et al., 2011; & Khan et al., 2012).

According to (Zinty et al., 2011) study there is a positive correlation between LOC and self-esteem. They suggested that high self-esteem is positively associated with an internal locus of control. Although, they failed to look at how ones gender may influence their LOC and self-esteem, as suggested by (Zaidi et al., 2013) females are likely to have an external LOC. Their study displayed a significant difference between gender and LOC.

The consideration of ones gender will be evident in this study, previous research has shown that gender may influence ones self-esteem levels (Dahlqvist, Landstedt, and Gadin, 2012).
It has been found that gender plays a principle role in understanding ones self-esteem, numerous studies have shown a difference in male and female’s self-esteem. Skaalvik (1986) found men had a higher self-esteem than women, however some research has found higher scores for women, or little or no difference Erol & Orth (2011).

A study established no significant gender differences in self-esteem, this may be due to the various age groups used, 14 to 30 years. They also suggested that as ones age progresses their self-esteem tends to increase. They hypothesized that self-esteem increased during adolescence. Yet, their study failed to show an increase self-esteem during the adolescent stage (Erol et al., 2011). Another study conducted by Ukeh, Aloh & Kwahar (2011) found no significant relation between gender and self-esteem, they used their students which predominantly males, and conducted the study during lecture times, this may have effected their results. The current study shall use an evenly divided number of males and females, and a smaller range of ages.

There has not been a consistent amount of data to verify age as an impact of self-esteem, although some studies continue to research the impact of age and self-esteem. (Frost et al., 2004) claims age has been found to increase and decrease a person’s self-esteem. Evidence from studies show that self-esteem is higher for girls than boys under the age of 13, nonetheless this changes during adolescence as self-esteem increases for boys (Tiggaman &Weinstein, 2000).

This signifies, as age increases an individual’s self-esteem changes. However, this result is insignificant to current research as it is apparent self-esteem drops during adolescence. (Frost et al., 2004) study showed males scored higher in university, secondary school and primary school. Although self-esteem decreased with age, males significantly had higher self-esteem than females. It is often hypothesized that university students’ self-esteem may be lower than secondary students, however, (Frost et al., 2004) study displayed that in both male and
females secondary school students score were lower than primary school and university school students.

Ones LOC may have influenced this, a study conducted by Krausea & Strykerb (1984) proposed that men with an internal locus of control cope more effectively with stress which causes an increase in self-esteem. This was dissimilar to women and those with an external LOC. This signifies for the importance of gender consideration in the current study as some studies proposed females have an internal LOC, Ghasemzadeh & Sadat (as cited in Zaidi and Moshin 2013). A reanalysis of the study was conducted by Zaidi et al., (2013) their results suggested women scored higher on external LOC in comparison to men. The participants of the study lived in Pakistan. This could have affected the LOC results of females, as women in Pakistan are considered second class citizens (Khan, 2013).

The current study focuses specifically on students Locus of Control, it has been found that female students have an external LOC than male students (Parsons & Scheider, 1974).

Research evidence shows in educational attainment, men have a higher internal locus of control (Zaidi et al., 2013). Males may obtain an internal locus of control due to cultural norms, as they are considered to acquire aggressive behaviours while females are considered submissive (Zaidi et al., 2013).

As society changes this may become diminished. As people age they tend to become more internal, as children individuals have little control over their lives. People in successful organisations tend to be more internal. Rotter suggests the internal trait is identified with success and motivation (“The Social Cognitive Perspective”, n.d.).

LOC has been found to have a positive relationship with stress, individuals acquiring an internal LOC usually have lower stress levels. In contrast those attaining an external LOC acquire high stress levels Annieet (as cited in Khan et al., 2012). A study investigated the
power perceived control would have on subjective stress responses, and found participants with a higher internal LOC have lower stress levels. Students who display low levels of perceived stress, usually achieve higher academic results than students who perceive high levels of stress. This is also evident among students who experience stressful life events (Suldo & Dedrick, 2013). As mentioned stress may have an impact on a person’s academic performance. A review on the correlation between academic achievement and locus of control showed internal beliefs were associated with exceeding academic results. This relationship showed more significance in secondary school adolescence than college/university students. Researchers also found a significance of this in males (Maureen & Harris, 1977).

To sum up LOC enables students to reflect on their academic achievements, circumstances in their lives, helps enhance their responsibilities in their life, encourages self-worth and happiness (Khan et al., 2012). This study shall determine the relationship between the discussed variables, self-esteem, LOC, stress, age and gender.

Hypothesis

This study holds a principle contribution to understanding how self-esteem can effect an adolescence stress levels, and locus of control. Self-esteem has been found to determine whether a person has internal or external locus of control (Zinty et al., 2011). There may be a relation to an adolescence self-esteem and stress; it is evident that gender plays a principle role in determining ones self-esteem and locus of control. There is a decrease in self-esteem among adolescence in comparison to other age groups (Ukeh et al., 2011).

1. There will be a significant difference between gender and self-esteem.
2. Stress is positively associated with self-esteem.

3. There will be a correlation between self-esteem and age.

4. There is a difference on age groups and self-esteem and on age groups and stress.

An independent sample t-test will be used to test the first hypothesis.

A Pearson’s Correlation will be used to test the second hypothesis.

The third hypothesis will be tested with a Pearson’s Correlation.

A one-way (ANOVA) variance, will be utilised to determine the fourth hypothesis.
Methodology

Participants

A total of 73 participants were involved in the current study, and participants attended a private institute. The sample population was from a secondary school in the Dublin region. The participants were contained by convenience. A letter was sent to the school in order to conduct the study on students. All participants gave informed consent and were not rewarded for their participation. The respondents were split up into two groups 2\textsuperscript{nd} year and 4\textsuperscript{th} year (transition year).

Participation was voluntary and consisted of both males (n= 40) and females (n=33), this shows that the analyses was fairly evenly divided, which was good for testing gender differences. The age range of participants was 14 to 16 years, with a mean of 14.9 and a standard deviation of .869. (See table 1 below).

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<tr>
<th>Gender</th>
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<table>
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<td>14</td>
<td>33%</td>
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Table 1: demographic data of participants
**Design**

The study utilised a correlational quantitative design. A quasi-experimental approach was also used as two different groups of secondary school students were used, 2\textsuperscript{nd} and 4\textsuperscript{th} year students.

Demographic variables were age and gender and between subjects were age groups and within subjects was all those within group 1, all those within group 2, and those within group 3.

Criterion variables were stress, gender & LOC, while the predictor variables was self-esteem age. The unrelated group was gender. The participants were formerly in their class groups upon conducting the study.

As there are two variables an independent sample t-test was used to test the first hypothesis (H1). This was to determine that the criterion gender showed significant differences among the predictor self-esteem.

A Pearson’s Correlation Coefficient was used to explore the second hypothesis (H2), whether there will be a relationship between stress and self-esteem.

To explore the third hypothesis (H3). A correlation between self-esteem and age, a Pearson’s Correlation Coefficient was utilised.

The fourth hypothesis (H4) explored the relationship between age groups, and the predictor self-esteem and age groups and stress. This was done with the use of an ANOVA.

In the interest of identifying which groups differed from each other a post-hoc test was used.
Further analysis was conducted to examine the relationship among the criterion variable self-esteem, in the case of this analysis the predictor variables were stress, gender and age. A multiple regression was used in order to test the significance among the criterion self-esteem and the predictor variables.

**Materials**

A total of three questionnaires were used, The Perceived Stress Scale (Cohen, Kamarack and Mermelstein 1983), Rotter’s (1966) Children Locus of Control Scale (Revised), and Rosenberg’s (1965) Self-Esteem scale. Two demographic questions were asked to determine age and gender.

**Perceived stress**

The Perceived stress scale (PSS) consists of a 10-item inventory design, which measures how participants perceive stressful events in their lives (Cohen et al., 1983), (see appendix 1 for questionnaires). Participants were asked to indicate the thoughts and feelings they had in the past month and how often they felt or thought that way. The questions are general and are free from content specific to individual groups. Participants responded to each item in the PSS on a scale of 0-4 with 0 meaning “never” and 4 meaning “very often”. A sample question in the PSS is “in the last month how often have you felt you could not cope with all the things you had to do?”

PPS scores are retrieved through reverse scoring (e.g. 0=4, 1=3, 2=2, 3=1, & 4=0) the four positively stated items, (4, 5, 7, & 8) and then summing the scale items. The higher the total score, indicates a greater amount of perceived stress. The PSS has a reliability of .798 and good validity.
Rotter’s Locus of Control

Rotter’s LOC was designed by Julian B Rotter in 1966 and consists of 29 pairs of statement, however for the current study only 10 items were used. The scale determines whether participants possess internal or external LOC. Participants were presented with two statements and were asked to indicate which statement they agreed with the most. Participants responded to each item by circling either A or B, a sample statement: “A: many of the unhappy things in people’s lives are partly due to bad luck. B: Peoples misfortunes result from the mistake they make.”

Rotter’s LOC scores are retrieved by summing 1 point for certain statements. A high score suggests external LOC and a low score determines internal LOC. The internal consistency of the scale range from .65 to .79 (Rotter, 1966), however the reliability test was considerably low .201 therefore further test were not conducted on LOC.

Self-Esteem

Rosenberg’s (1965) self-esteem scale was used to measure self-esteem. It consists of 10 item statements, it aims to asses ones self-esteem by measuring general feelings towards yourself. Participants were presented with a statement in which they circled either SA= strongly agree, A= agree, D=disagree or SD=strongly disagree. The statements were both positive and negative, example statements:
“At times I feel I am no good at all” and “I take a positive attitude towards myself” (Rosenberg, 1965).

Rosenberg’s self-esteem score were retrieved through reverse scoring the negatively stated items (2, 5, 6, 8, & 9), SA= 0, A=1, D=2, SD=3. The scores were summed for the 10 items, the higher the score, the higher the self-esteem. The Rosenberg (1965) has a strong reliability, it holds a Guttman scale coefficient of reproducibility of 0.92 (Rosenberg, 1965), this demonstrates excellent internal reliability (Corcoran, 2000). The self-esteem has a reliability test of .870.

A letter of explanatory was attached to the questionnaires discussing the nature of the study and informing participants of support services (see appendix 1).

**Procedure**

The principle of the school was contacted via telephone and email, a letter of statutory declaration was forwarded to the principle via email (see appendix 2). This was considered due to the ethical issues, working with minors.

The aims and objectives of the study was outlined, and the principle agreed and supported the research. The principle consented for the students to participate. A phone call was made to the 4th and 2nd year head of department in order to organise a time to conduct the study.

Upon arriving at the school each participant was given a booklet of questionnaires including an information sheet outlining the nature of the study. A verbal explanation was given to participants, full anonymity was discussed thus withdrawal after collection of data was impossible, and participants were informed their completion of questionnaires was a consent to part take in the study.
The participants were informed of a debriefing session after completion of the study. They were instructed to answer all questions individually and as honest as they could and left to complete the questionnaires which took 10 minutes on average.

The first section participants were asked demographic questions, age and gender. The second section they completed Cohens et al., (1983) perceived stress scale, which they responded on a 0-4 Likert scale (0=never, 4=very often). The third section of the study participants completed Rotter’s (1966) Locus of Control scale, participants responded to the statement in which they agreed with by circling either A or B. The fourth, final section the participants responded to Rosenberg’s (1965) self-esteem scale, they responded with levels of agreement and disagreement.

The data was collected and the participants were debriefed (see appendix 3 for protocol). The debriefing informed participants of the true nature of the study, and participants were able to ask questions concerning the research. The participants were thanked for their time and participation.
Results

Descriptive Statistics

73 participants took part in the survey, 40 males and 33 females.

All tests were run with SPSS Version 21 and appropriate test were conducted.

The mean score for Perceived Stress Scale was 17.75 (SD=7.24). The mean score for Locus of Control was 4.17 (SD=1.35), and the mean score for Self-Esteem was 11.42 (SD=6.33), (see table 1.1 below).

Table 2 Descriptive Statistics of Psychological Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Stress Scale</td>
<td>17.75</td>
<td>7.24</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>4.17</td>
<td>1.35</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>11.42</td>
<td>6.33</td>
</tr>
</tbody>
</table>

Testing for Normal distribution
Analyses was conducted to test for a normal distribution among self-esteem, locus of control, stress and age. None of the variables were significantly skewed or peaked, indicating a normal distribution.

Testing for Reliability

The internal reliabilities of Rosenberg’s (1965) Self-Esteem scale, Rotter’s (1966) Locus of Control and the Perceived Stress scale (Cohens et al., 1983) were tested using a Cronbach’s Alpha. This measures scale reliability using the variance of respondents’ scores on each item (Cortina, 1993). The alpha coefficient for Perceived stress was .79 and the alpha coefficient of Rosenberg’s (1965) Self-Esteem was .87, which is considered a high internal reliability (Coolican, 2004).

As mentioned there was a low reliability score on Rotter’s (1966) Locus of Control, therefore no further analysis was conducted, as the Cronbach’s Alpha was .201.

There was a low mean of 4.18 (SD= 1.36). A minimum of 1 and maximum of 10.

Inferential Statistics

The aim of the study was to determine whether age and gender influences self-esteem, locus of control and perceived stress.

First hypothesis
An independent sample T-test was used to determine a significant difference between gender and self-esteem. Females (mean 13.00, SD=5.39) were found to have higher self-esteem than males (mean 10.12, SD=6.80). The 95% confidence limits show that the population means of difference variables lies between -5.78 and .03.

An independent sample t-test found that there was no significant difference between self-esteem levels of males and females (t (71) -1.96 p =.053). Therefore the null can be accepted.

Second hypothesis

The second hypothesis predicted stress would be positively associated with self-esteem. A Pearson’s Correlation was run to test the hypothesis. The mean score for stress was 17.75 (SD=7.24) and self-esteem 11.42 (SD=6.33). There was a strong positive relationship between stress and self-esteem (r (71) = 0.55, p = .01). The null hypothesis is rejected (See table 3 below).

Table 3: Correlation table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stress Correlation</th>
<th>Self-Esteem Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>Pearson’s Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>73</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>Pearson’s Correlation</td>
<td>.550**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>73</td>
</tr>
</tbody>
</table>

**. Correlation is significant at .01 level (2-tailed).
Third hypothesis

A Pearson’s Correlation was used to determine the relationship between age and self-esteem. The mean score for self-esteem was 11.42 (SD=6.33) and age 14.85 (SD=.86). There was no significant correlation between self-esteem and age (r (71) = 1.95, p = .09). The null hypothesis is accepted.

Fourth hypothesis

A One-way Anova Variance (ANOVA) was utilised to determine the relationship between age groups and self-esteem, and age groups and stress. The criterion variable was stress and the predictor variable was age groups, with three levels (1) 14 years, (2) 15 years and (3) 16 years. The first ANOVA was run to determine the relationship between stress and age groups, there was no statistical significance between group means (F (2, 70) = 2.71, p = .07).

The second ANOVA determined whether self-esteem and age groups correlated. There was no statistically significant difference between group means (F (2, 70) = 1.41, p = 2.51). The null hypothesis is accepted.

Further analysis was conducted to identify whether gender predicts self-esteem and stress. A multiple regression was conducted, the results suggested that the predictor self-esteem explained 32% of the variance (R^2 = .33, F (2, 67) = 18.83, p= .001). It was found that self-esteem significantly predicted stress (β = .55, p = .001, 95% CI = .31 – .65). There was a significance found in gender and self-esteem (β =.22, p = .02, 95% CI = .28
-.63), this was the same for self-esteem and gender ($\beta = .23, p = .022, 95\% CI = .31–5.17$).

All checks were made in order to determine the existence of a relationship at the appropriate level.

### Discussion

Summary

The aim of the current study was to determine the influence age and gender has on stress, Locus of control and self-esteem among adolescence.

The first hypothesis suggested a difference in gender and self-esteem levels. There was no overall significance found, however, females had a slightly higher mean than males. This is similar to a study conducted by (Erol et al., 2011) they found no significant difference between gender and self-esteem. However, McMullin & Cairney (as cited by Erol et al., 2011) reported a difference in self-esteem for adolescence male and females. Moksnes, Maljord, Espnes, & Byrne, (2010), found a difference between self-esteem and gender, male adolescence had higher self-esteem than female adolescence. Nonetheless, the current study shows females have a slightly higher self-esteem than males. Research conducted by (Frost et al., 2004), discovered a difference in gender differences among self-esteem, and similar to (Moksnes et al., 2010) his study suggests males have a higher self-esteem than females, these findings are against the first hypothesis. Nonetheless, numerous studies have suggested no
significant difference between gender and ones self-esteem, Abouerie, Hudd et al., & Youngs, Rathge, Mullis & Mullis (as cited in Ukeh et al, 2011).

An independent sample t-test was used in order to determine the difference between self-esteem and gender. Although the means score results were dissimilar to current research, (Moksnes et al., 2012), the overall outcome was in relation with previous studies (Ukeh et al., 2011). This hypothesis further helps in understanding the overall question, self-esteem influences ones locus of control and stress in relation to age and gender.

The second hypothesis predicted a correlation between stress and self-esteem with the use of a Pearson’s Correlation. This result is consistent with previous studies Saleem & Rafique (2009) and Lee, Joo & Choi (2011), they found a significant relationship between perceived stress and self-esteem. A study conducted by Wu, Li & Johnson (2011) found self-esteem moderates stress and various outcomes, this is similar to the hypothesis. Previous studies, (Ukeh et al., 2011) suggests stress may have an influence on self-esteem, their study claims when the body cannot cope self-esteem will be attacked. However, their study found no significant relation between stress and self-esteem.

No significant relationship was found for the third hypothesis, a relationship between age and self-esteem. This is inconsistent with current research which states age influences ones self-esteem Frost et al., (2004). As mentioned in the introduction the development of adolescence produces a decrease in adolescence, Tiggaman et al., (2000). However, researchers Erol et al., (2011) found inconsistent results for age and self-esteem, this supports the results of the hypothesis.
An ANOVA discovered the fourth hypothesis showed no significant difference between self-esteem, age groups and stress. This is consistent with Erol et al., (2011) study, as there was no significance between self-esteem and ages. As mentioned above Frost et al., (2004) found a positive correlation between self-esteem and age, they used various age groups for their findings, 10-21 years. Saleem et al., (2013) study supports this hypothesis as they found a strong relationship among self-esteem and stress, as did Lee et al., (2011).

A regression was conducted to determine the overall relationship between the variables, with self-esteem being the criterion variable and age groups, gender and stress being the predictor variables. The most significant results were found with self-esteem and stress. This may suggests perceived stress has an immense influence on self-esteem, which is in correlation with previous researchers Saleem et al., (2009) and Li et al., (2011), however these studies were not conducted on adolescence, the current study provides an insight into self-esteem and stress of adolescence.

Self-esteem and gender also showed a significant result. This is in contrast to earlier tests as no significance was found on the independent sample t-test.

The results of the current study may suggests a gap in research, as various studies found a relationship between gender and self-esteem, Monksnes et al., (2010).

**Limitations**

A considerable limitation of the present study, was the Locus of Control scale, as only 10 items were presented to participants, there was a low reliability therefore the locus of control scale was not included in forming hypothesis and conducting tests. This was a major setback for the study as the main research question was to determine an influence in self-
esteem locus of control and stress with relation to age and gender. However, the current study focused on identifying a relationship between various meaningful factors in an individual’s personal growth, there is a lack of this seen within current research, (Saleem et al., 2009).

Another considerable limitation was the sample size of the study, only 73 students were used in total, previous studies used a large sample of participants (Cakar et al., 2012; Zinty et al., 2011; Erol et al., 2011; & Rickwood et al., 2005). Sample size may contribute to significant results. The current study focused on a specific sample (adolescence), and specific ages 14-16 years, as mentioned earlier this is in contrast to previous research (Erol et al., 2011).

The population was a private secondary school, this may have affected the results of self-esteem, as socioeconomic backgrounds have been found to influence an adolescence self-esteem (Amazue et al., 2013). Although the use of one secondary school can allow further insight into a specific population.

The sample were gathered through convenience, this has been found to be limited as the participants were not randomly selected, causing caution in the interpretation of results (Laerd Dissertation, n.d.).

**Directions for Future Research**

As mentioned in limitations the Locus of Control scale consisted of 10 items, future researchers should include all 29 items of the scale. This will cause a greater reliability score, and help gain further understanding of the research question. A larger sample size should be considered when conducting research on adolescence, as mentioned in the introduction,
adolescence has been classified to range from ages 12-25 years (Dooley et al., 2012), therefore a larger range of ages should be considered.

Socioeconomic should be further researched as it has been found to greatly influence self-esteem and stress (Amazu et al., 2013; Sharma 2013), this suggests future research should be conducted on numerous schools from various socio-economic backgrounds. The use of random sampling should be highly considered as the cons are extremely low. The results of random sampling has been found effective in research (Laerd Dissertation, n.d.).

This research can be applied in a real life context, adolescence is considered a vital stage in a person’s life, involving growth and development, therefore society should be aware of these changes and how they impact a young person’s life, specifically the education system. Teachers and the Irish Board of Education should consider adapting social, personal and health education (SPHE) classes to focus on coping strategies for stress, understanding gender differences and self-esteem.
Conclusion

The findings of the study are not consistent with previous research which initiates that self-esteem, LOC, stress, gender and age are related. Although some specific tests found a significant correlation between stress and self-esteem which further emphasizes the importance of the two variables. Although there was no substantial difference between self-esteem and gender. The mean scores displayed a slightly higher mean difference for females, therefore suggesting a possible difference in gender and self-esteem. While a negative correlation was found between age groups, self-esteem and stress. As aforementioned previous studies have found a strong correlation between the three. Indicating the effects self-esteem can have on stress, and the relation between both self-esteem and age groups. It is apparent that there is a correlation concerning self-esteem, stress, age and gender.
References

Altiok, H., & Ustun B. (2013) *The Stress Sources of Nursing students*, 13(2) Retrieved from May 1, 2013, from

http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?sid=e8e5ed23-2510-44e3-b22e-c83f34e66bd3%40sessionmgr4004&vid=8&hid=4111


http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?sid=d7fc44f4-2a1c-49b5-8888-7fd2be1fe8f0%40sessionmgr13&vid=1&hid=6

http://www.bbc.co.uk/science/humanbody/mind/articles/emotions/teenagers/moods.shtml


http://dissertation.laerd.com/convenience-sampling.php#third


http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=d5d72019-ce82-4de6-bb11-7c33e8e9fa6b%40sessionmgr112&hid=110


http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?vid=15&sid=996de9f6-f7f7-46d6-9ff7-cef293eb2e20%40sessionmgr4005&hid=4202


*Biobehavioral Responses to Stress in Females: Tend-and-Befriend, Not Fight-or-Flight*, 
107(3) Retrieved from January 26th 2000, from 

http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?vid=10&sid=996de9f6-f7f7-46d6-9ff7-cef293ebec20%40sessionmgr4005&hid=4202

http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=0cb0355a-6e88-420f-8eb7-1edffe6711b3%40sessionmgr14&hid=2

http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=d5d72019-ce82-4de6-bb11-7c33e8e9fa6b%40sessionmgr112&hid=110

Zaidi, I. & Moshin, N. (2013). *Locus of Control in Graduation Students*, 6(1), retrieved from July 1, 2013, from
My name is Idowu Olatunji and I am conducting research in the Department of Psychology (Dublin Business School) which explores Feeling, Sense of Control and Stress. This research is being conducted as part of my final year project and will be submitted for examination.

I am inviting you to take part in this study and participation involves completing and returning the attached anonymous survey. The nature of the study requires participants to be unaware of the exact research question. For this reason participants will be fully debriefed after all data has been collected. The survey’s asks some questions in which may cause some negative feelings; it has been used widely in numerous researches. If any of the questions raise difficult feelings, Information for support services are listed below.

Participation is completely voluntary, and there is no obligation to take part. Participation is anonymous and confidential; no responses can be related to any participant. Due to this it is impossible to withdraw from participation after the questionnaire has been collected.
The questionnaires will be stored securely and data from the questionnaires will be transferred from paper to electronic format, which will be stored on a password protected computer. It is important that you understand that by completing and submitting the questionnaires you are consenting to participate in the study.

Should you require any further information about the research, please contact

Idowu Olatunji

My supervisor can be contacted at

Thank you for taking the time to complete this survey.

Support Services

Teenline
Free Phone: 1800833 634

Childline
Free Phone: 1800 666 666
Free Text: 50101
**Perceived Stress Scale**

Please try and answer the questions as honest as possible. Thank you

Please circle gender: **Boy**           **Girl**

**Instructions**

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

The questions in this scale ask you about your feelings and thoughts during the last month.

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In the last month, how often have you been upset because of something that happened unexpectedly?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td>2</td>
<td>In the last month, how often have you felt that you were unable to control the important things in your life?</td>
<td>0 1 2 3 4</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Scale</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>3</td>
<td>In the last month, how often have you felt nervous and stressed?</td>
<td>0-4</td>
</tr>
<tr>
<td>4</td>
<td>In the last month, how often have you felt confident about your ability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to handle your personal problems?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>In the last month, how often have you felt that things were going your</td>
<td></td>
</tr>
<tr>
<td></td>
<td>way?</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>In the last month, how often have you found that you could not cope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with all the things you had to do?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>In the last month, how often have you been able to control irritations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in your life?</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>In the last month, how often have you felt that you were on top of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>things?</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>In the last month, how often have you been angered because of things</td>
<td></td>
</tr>
<tr>
<td></td>
<td>that happened that were outside of your control?</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>In the last month, how often have you felt difficulties were piling up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>so high that you could not overcome them?</td>
<td></td>
</tr>
</tbody>
</table>

0 = never    1 = almost never    2 = sometimes    3 = fairly often
4 = very often
Rotter’s Locus of Control Scale

1. a. Children get into trouble because their patents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.

2. a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in
   politics.
b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world

b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries

5. a. The idea that teachers are unfair to students is nonsense.

b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.

b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you.

b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality

b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.

   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.

   b. Many times exam questions tend to be so unrelated to course work that studying in really useless.

Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

   1. On the whole, I am satisfied with myself. SA A D SD
   
   2. At times, I think I am no good at all. SA A D SD
   
   3. I feel that I have a number of good qualities. SA A D SD
   
   4. I am able to do things as well as most other people. SA A D SD
5. I feel I do not have much to be proud of. SA A D SD

6. I certainly feel useless at times. SA A D SD

7. I feel that I’m a person of worth, at least on an equal plane with others. SA A D SD

8. I wish I could have more respect for myself. SA A D SD

9. All in all, I am inclined to feel that I am a failure. SA A D SD

10. I take a positive attitude toward myself. SA A D SD
DUBLIN BUSINESS SCHOOL / DBS SCHOOL OF ARTS
STATUTORY DECLARATION

I, ___________________________ of ___________________________,
aged 18 years and upwards do solemnly and sincerely, declare that:

1. I am not and have never been engaged in any conduct which could result in a conviction
   for any offence under the Child Pornography Act 1998. I understand that the offences
   under the Act comprise child trafficking, the taking of children for the purposes of sexual
   exploitation, allowing children to be used for the production of child pornography, the
   dissemination of child pornography, and the possession of child pornography.

2. I have never been convicted of any criminal offence for assault, battery, rape, murder,
   false imprisonment or unlawful carnal knowledge.

3. I have also never been convicted of any criminal offence relating to the trafficking or
   possession of drugs for supply.

4. I have never been excluded from working with children.

5. I have read and agree to abide by the code of ethical conduct set out by the Psychological
   Society of Ireland currently in force at the date of making this Declaration and I agree to
   abide by this code as subsequently amended from time to time.

6. I have read and agree to abide by the guidelines as set out in the DBS Ethics Policy.

7. I have been informed and understand that if I make a false declaration regarding any of
   these matters Dublin Business School will immediately terminate my research in the
   department and that any qualifications from the School will be negated.

I make this declaration for the satisfaction of Dublin Business School believing the same to
be true and by virtue of the Statutory Declarations Act 1928.

Signature

DECLARED before me by the said ____________________________

Who is personally known to me
(or who is identified to me by) ____________________________

Who is personally known to me at ____________________________

In the City of Dublin this ___________ day of ___________

Commissioner for Oaths / Practicing Solicitor

Accountancy and Business College (Ireland) Ltd t/a Dublin Business School Reg'd No 134610
Directors: G Muldowney, S Paton (UK), D Quill (also Secretary)