

**The roles stress and coping play in college students who  
attended public or private schools**

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## ABSTRACT

This study investigated the influence of the type of school that students attended and the effects it has on an individual's stress and coping while also looking at the moderating roles self-esteem, self-efficacy, personality and optimism have in relation to stress and coping. Questionnaires were filled out by a total of 90 participants, 37 of which attended private schools and 53 who attended public schools. The questionnaires used were the (GHQ-12: Goldberg, 1978), the Brief Cope (Carver 1997), Rosenberg's Self-Esteem Scale (SES: Rosenberg, 1965), Big Five personality (NEO PI-R: Costa & Mc Crea, 1992), general Self-Efficacy Scale (GSE: Schwartzer & Jerusalem, 1995) and the Values in Action (VIA scale: Peterson & Seligman, 2004).

Strong correlations were found between stress and coping (avoidance coping) among Students, indicating that students in denial for example 'I've been saying to myself this isn't real' are showing greater distress. General happiness was also shown to show a significant difference between gender with females showing to be generally happier than males ( $t(88) = -2.899, p < 0.05, 2\text{-tailed}$ ).

## Chapter 1

### INTRODUCTION

Various emotions can accompany stress, including fear, anxiety, depression and anger, which, as well as the positive experiences students experience in college, are the same emotions that most students relate to at some stage during their time at college. Stress may change as people develop but the condition of stress can occur at any time in the life span (Sarafino & Smith, 2012)

Education is a subject that is widely discussed and debated and is of much relevance on a daily basis in today's society (Anderman & Kaplan, 2008). The objective of this research is to examine how different educational settings may or may not have an effect on an individual's development. In November 2011 Deputy Brendan Smith asked the minister for Education and Skills, during a Dail Eireann debate, what the total number of pupils attending fee-paying private schools were for the school years 2009/10 and 2010/11. The minister, deputy Ruairi Quinn, said that a distinction is made between the private fee paying schools which are financially aided by the department (in the form of payment of teachers salaries) and those that receive no financial assistance by the department.

The number of pupils attending fee paying department –aided second level schools for 2009/10 were 26,277 and 2010/11 were 26,219. Minister Quinn went on to say that an estimated cost to the state on an annual basis of a fee paying student to transfer to a state funded school would be marginal at an estimate of €168.42 per pupil per annum. He pointed out that grants are not paid by his department in respect of pupils enrolled in fee charging schools. A student in state funded schools would get grants totalling €661 per annum. The cost therefore in respect of an

individual pupil is estimated at €829.42 per annum ( Dail Eireann, 2011) The debate for the Government to continue to fund fee paying schools (teachers salaries) is more prevalent in these times of austerity than ever .One of the arguments for those who say that private schools cause inequality between pupils is that they have fought to overcome inequality in relation to sex, social class, race and many other elements, but private schools remain. They feel private schools represent inequality because only pupils with well-off parents can afford to attend these schools hence disadvantaging the other schools. Another argument that can be put forward is that parents who send their children to fee paying schools are tax payers and if they want to spend more on their child's education, that is absolutely their right.

If parents think it will benefit their child, have they not a right to choose to send them to fee paying schools no more than the parent who sends their children to the Gaeltacht (where you learn Irish) or to piano lessons. Safeguarding parental choice and preventing a monopoly in terms of school provision, either by school or state, is strongly supported by the Organisation for Economic Co-Operation and Development (OECD) report *Education at a glance*. "The availability of choice for students and parents is a powerful stimulus for improving the quality of school and education outcomes. It is also necessary to ensure that the school system caters for different needs, choices and aptitudes."(Thornhill, 2010).

Modern private schools can have different relations with the state, this relationship is the degree to which private schools have a judicial right to funding by the state. In Germany and the Netherlands this right is constitutional law. Alongside them exists a number of OECD countries such as Ireland, Spain and Sweden to name but a few whose private schools autonomy is restricted depending on the degree of state funding which would be in regard to their curriculum, mode of examination,

payment of teachers and admission criteria of students ( Dronkers and Robert, 2008), they also go on to say that their analysis of OECD countries shows clearly that private government dependent schools are more effective than public schools with the same students, parents and social composition not only for reading but also for maths. The better school climate in the private school is the explanation for the higher effectiveness. The different teaching conditions in private and public schools do not explain differences in the effectiveness.

Current theorists (Lubienski and Lubienski 2006) who employed hierarchal linear models to examine public versus private students performance found that demographic differences between students in public and private schools more than account for relatively high raw scores of private schools. Indeed, after controlling for these differences, the presumably advantageous private effect disappears. (Couch and Shugart 1995) reported evidence suggesting that public schools respond to competition from private schools by improving the quality of education they provide for their students. Public schools serve to provide students with a common set of values and knowledge to create citizens who can function demographically and contribute to equality of social, economical and political opportunities. This should also involve the rights of families to decide in which way their children will be moulded and types of influences to which they are exposed such as political, social or religious beliefs. Private schools cater for this and it has long been established they enhance earnings and can increase social standing (Levin, 1987). Although an analysis of the effects of educational systems is flawed if it only uses a country level and a student level and that in order to get reliable estimators of systems and individual effects one must use additional tracks-within-school levels. ( Dronkers, Van Der Veldon and Dunne, 2012)

This research will explore how attending either a public school or a private school can affect one's attitudes towards college life. The study will specifically investigate if there are significant differences in stress levels and coping mechanisms in college students who attended public schools and college students who attended private schools. The study will also investigate if there are gender differences present in such a comparison. The literature will discuss the different contributory factors that can have an effect on an individual's personality such as levels of self-esteem, self-efficacy, personality and character strength in the relationship between stress and coping.

#### *Sources of stress and college life*

The construct of stress is quite complex. So much so, in fact, that researchers cannot agree on a single definition for stress. Consequently, there are at least eight different definitions for stress (Riggio, 2009, p246).

The transition into college life from a school setting can be challenging for some people. It coincides with many social, familiar, and individual changes in the adolescent's life and this transition is often stressful. The transition involves moving from top dog to the lowest position. (Santrock, 2004, p399). There are many different ways that people can react to the change in their settings. The transition for some of the students who are in employment and return to college life part-time find making new friends can be difficult and the extra workload on their already busy lives to be overwhelming.

Stress is a condition in the environment that makes unusual demands on the organism. 'It is a negative emotional experience accompanied by predictable biochemical, physiological, cognitive and behavioural changes that are directed either toward alerting the stressful event



or accommodating its effects' (Taylor, 2009, p.147). It is also an internal condition, a personal response to a stressful situation. It may manifest on physiological, emotional, behavioural and cognitive levels (Garett, 2002). Stress has been identified as being a major contributor to ill health among all ages.

College students represent a group which is particularly sensitive to stress. In addition to the common stressors experienced by the general population, college students encounter an additional range of stressors relating to the academic environment with the constant levels of evaluation in the form of assignments and exams. This, combined with competition for good grades and degree completion all contribute to making a student's life a stressful one.

For college students today, stressors come in many forms, being away from home for the first time, holding down a job, time management, financial obligations towards fees etc, and on a social/emotional level maintaining relationships.

Stress is the consequence of a person's appraisal process: the assessment of a person's resources are sufficient to meet the demands of the environment. Stress, then, is determined by person-environment fit (Taylor, 2009, p.147). Although different types of PE fit predicted different types of psychological need satisfaction (Greguras and Diefendorf 2009).

Observations from Selye (1956) developed a concept of the general adaptation syndrome which argued that when an organism confronts a stressor, it mobilizes itself for action. It consists of three stages, the first alarm which is when the organism mobilizes to meet the threat. The second is resistance, the organism makes an effort to cope with the threat and the third is exhaustion, the organism fails to overcome the threat and depletes its physiological resources in the process of trying (Taylor, 2009). Although (Lazarus and Folkman, 1984) thought Selye's (1976) theory might be different depending on how a person perceived the stressful event and saw stress as a person's perception that a certain environmental event is a threat and their perception on how capable they are at managing the threat, for you and I

might interpret the same event very differently. A study in a university in the United States found that the five highest stressors among the student population were a change in sleeping habits, a change in breaks, a change in eating habits, new responsibilities, and increased workload (Ross, Neibling and Hecket, 1999). New students, in particular, represent a group that is vulnerable to high levels of stress, but it is worth noting that college student stress is not chronic stress. Taylor (2009) points out that most events themselves are not stressful and it depends on how the individual appraises potential stressors. He then goes on to list what can make stressful events; one, being a negative event which produces more stress than a positive event. Negative events show a stronger relationship to both psychological distress and physical symptoms than do positive ones.

Two, uncontrollable events or unpredictable events are perceived as more stressful than controllable events. Feelings of control not only mute the subjective experience of stress but also influence biochemical reactions to it.

Three, ambiguous events are perceived as more stressful than clear cut events. An individual must try and understand the stressor as they had no opportunities to take action which can be time consuming. Four, overloaded people who have more tasks in their lives report higher levels of stress than do those who have fewer tasks (Taylor, 2009, p155), which would apply to college students especially around exams. Although research shows only negative events predicted adverse health and most modern researches now define stress in terms of negative life changes only (Cohen, Kessler & Gordan 1995).

### *Stress and the body*

Stress has a negative effect on both physical and psychological well-being. Stress can also be a response that has cognitive, physiological, and behavioural components (Passer & Smith, 2008). On a physiological level the body responds to what it perceives as a threatening

situation. These responses to negative stressors initiate the body's fight or flight response (Cannon, 1932) but this could depend on personality factors, such as optimism and hardiness (Passer et al). The physiology of the stress response are emotions consisting of behavioural, autonomic, and endocrine. The autonomic and endocrine are the ones that are not so good for an individual's health. Stress responses refer to the physiological reactions that prepare the body for strenuous action by mobilizing the body's energy resources. Such responses involve the activation of the sympathetic branch of the autonomic nervous system and the subsequent secretion of the stress hormones epinephrine, norepinephrine and cortisol. As epinephrine and norepinephrine increase cardiac output and release glucose from the muscles, the body is then provided with the increased energy it necessitates under stressful situations. High blood pressure, if prolonged, however, can ultimately lead to heart attacks or stroke (Carlson 2007). It is now well established that psychological stress can down regulate the cellular immune response.

Study of the interaction between immune system and behaviour, mediated by the nervous system is a relatively new field of study called Psychoneuroimmunology. Different types of white cells in the immune system produce both non-specific and specific responses to invading organisms. The non-specific response includes the action of natural killer cells against viruses and cancer cells. The specific responses include chemically mediated responses which are carried out by B-lymphocytes, which release antibodies that bind with the antigens on micro-organisms and kill them directly or target them for attack by other white blood cells. A wide variety of stressful situations have been shown to increase people's susceptibility to infectious diseases and there is now sufficient data to conclude that immune modulation by psychosocial stressors can lead to actual health changes (Carlson 2007).

The central nervous system and the immune system work together through a network of bidirectional signals linking the nervous, endocrine, and immune systems. Stress disrupts the

homeostasis of this network, which in turn, alters immune functions (Rozlog, Kiecolt-Glaser, Marucha, Sheridan, Glaser, 1998). 'Several studies indicate that the suppression of the immune response by stress is largely (but not entirely) mediated by glucocorticoids. Because the secretion of glucocorticoids is controlled by the brain, the brain is obviously responsible for the suppressing effects of these hormones on the immune system'. (Carlson 2007, p610). Medical students were found more likely to contract acute infections and to show evidence of suppression of the immune system during the time that final examinations were given (Taylor, 2009).

Due to academic situations of continuous assessments, deadlines, exams, papers to be handed in and time constraints especially for part-time students with full-time employment means that many of the stressors are persistent and on-going.

Difficulties can arise when there is a sustained and prolonged elevation of stress levels. The body's energy reserves become depleted. As such these stressors tend to produce a more sustained stress response over time rather than consisting of one single stressful event. Such low-level stressors, combined with daily life hassles can accumulate and place increasing demands on the body, specifically the cardiovascular system and immune system responses. Although stress can affect immune functions, the relations are far from simple. As shown in a major meta-analysis by Suzanne Segerstrom and Gregory Miller (2004), which combined the statistical results of more than 300 studies, effects depend on the nature of the stressors and the specific immune functions of the body (Passer et al, p505, 2008).

People respond very differently to stress. The impact of any potentially stressful event is substantially influenced by how a person appraises it (Taylor 2009). Type A people are characterized by high levels of competitiveness and ambition, which can foster aggressiveness and hostility when things get in their way while type B people are shown to be more serene and patient. Type A people have an increased risk of coronary heart disease

compared to type B. However, the type A persons fast paced, time conscious life style and high ambition are not the culprits to vulnerability to coronary disease. Rather, the crucial component seems to be negative emotions, particularly anger (Passer et al 2008).

### *Coping strategies*

Cognitive functions such as memory, concentration and so on are affected in periods of extended stress. The cognitive approach to stress appraisal and coping is one which advocates a reappraisal of the stressful event and the adaptation of a suitable response. In stressful situations, different means of coping are employed in order to deal with challenging or stressful situations. Not all stressors will affect people adversely. Individual difference accounts for perceptions of what constitutes a stressful situation, in other words different people will appraise and evaluate potentially stressful situations in different ways (Lazarus and Folkman, 1994).

This appraisal can be divided into primary and secondary appraisal. Primary appraisal involves the individual estimating the level of threat involved in the situation at hand.

Secondary appraisal involves developing a suitable mechanism or strategy to better deal with the situation. Coping in this case can be defined as a series of transactions between a person who has a set of resources, values and commitments and a particular environment with its own responses, demands and constraints (Taylor, 2009).

Coping strategies can be divided into three different classes; Problem-Focused Coping is an attempt to confront and directly deal with the demands of the situation and change it so it is no longer stressful. Instead of dealing with the stressful situation head on, Emotional Focused Coping strategy is to attempt to manage the emotional responses that result from the stressful situation, like a student going to the cinema to take his mind off a test. The third coping strategy is Seeking Social help which like it says is turning to others for assistance and emotional support in times of stress e.g. a student seeking help from a class mate to prepare

for a big exam (Passer et al., 2008). However one study did show that problem focused coping methods and seeking social support were linked with favourable adjustment to stressors and that emotion-focused strategies that involved bottling up feelings or taking things out on other people predicted depression and difficulty in adjusting (Holahan and Moos, 1990).

People also bring different personalities to stressful events which will influence how that person copes with that specific event. These characteristics come from both genes and the environment that surrounds them. Some personalities make stressful situations worse and others improve them (Kozak, Strelau, & Miles, 2005). Some people are just going to experience stressful events even more stressful because of their personalities. The research into this is called negative affectivity which is a negative mood marked by anxiety, depression, and hostility. People high in negative affectivity express distress, discomfort, and dissatisfaction across a wide range of situations, and are more likely to be depressed, to engage in gestures of suicide and drink heavily.

#### *Optimism on stress*

Optimists however have a more positive mood, which itself may lead to a state of physiological resilience (Taylor, 2009). College students did a study measuring optimism, perceived stress, depression, and social stress at the beginning of the school year and again at the end of the first term. The optimists experienced less stress and depression and enjoyed more social support. The optimists were also more likely to seek out social support and to positively reinterpret the stressful circumstances they encountered, which was why they coped with the transition better (Brissette, Scheier, & Carver, 2002). In short, optimism is a potent and valuable resource. It may help people deal with stressful events by getting them to use their resources more effectively. Optimists also appear to size up stressful situations more positively and stay focused (Taylor, 2009, p177). Indeed, recent research has shown that

nurturing human strengths has acted as a powerful buffer against stress and depression and has improved happiness. These strengths include optimism, courage, work ethic, interpersonal skills, hope and honesty. (Seligman, Steen, Park, & Peterson, 2005). This indicates that pursuing positive traits is inherent to human nature.

### *Interventions for stress*

A program called Combat Stress Now is a stress management program that reaches troubled students before the stresses of academic life lead them to fail or drop out. Participants in the program learn what stress is and how it creates physical wear and tear. They also learn how to monitor stress and recognise to do things in moderation. Avoiding negative self-talk and to recognise it, and engaging in positive self-talk. (CSB) also work on the importance of completing after hours assignments, acquiring new skills, setting goals, relaxation training and training in time management and planning. Loneliness can also cause some student distress which can be helped by learning to recognise the importance that social support can serve in helping them combat stress in a world with many sources of stress (Taylor, 2009).

Looking at the social development of an individual is one of the important areas to focus on in relation to stress and coping. Psychosocial variables such as self-esteem and self-efficacy, while representing very different psychological constructs, have both been associated with lower stress levels (Negga, Applewhite and Linston 2007). Self-efficacy refers to the belief in ones ability to accomplish a task. In other words, the degree of confidence people have in their ability to execute certain courses of action or to achieve specific outcomes (Bandura, 1977). Self-esteem, on the other hand, is a personal judgement of worthiness. Unlike self-efficacy, it is a generalized personality characteristic, not a momentary attitude or an attitude specific to individual situations. It is an evaluate aspect of self-concept, and it concerns how

worthwhile and confident an individual feels about himself or herself (Pervin and Cervone, 2010).

### *Self-efficacy*

Bandura attributed self-efficacy as the belief in ones own capacity to organise and execute the courses of action required to manage prospective situations. A persons own beliefs of efficacy function are important determinants of motivation, affect, thought and action. Such a belief may act as moderating variable in the stress-strain relationship. A low sense of self-efficacy is associated with depression, anxiety and helplessness. People with low self-efficacy also hold pessimistic thoughts about their performance and personal development. In contrast a strong sense of belief in ones self facilitates cognitive and executive processes in multiple contexts, influencing, for example, decision making and academic achievement (Bandura, 1997).

People who are high in self-efficacy seem to be less affected by stress than are people who are low in self-efficacy. Researchers have found that students beliefs and feelings about themselves are likely to positively correlate with their overall adjustment.

Apparently, parents rely on their children's prior grade accomplishments when they set goals for their children, however, their children rely on their self-efficacy beliefs as well as their parents aspiration for them when setting their own goals. Again researchers finding's correspond with what many parents and teachers have learned from frustrating personal experiences as students often do not adopt the academic aspirations imposed upon them. Clearly, a determinant of student aspiration is their belief in their academic efficacy (Zimmerman, Bandura and Martinez-Pons 1992).



### *Self-esteem*

Self-esteem is a personal judgment of worthiness. Levels of self-esteem can be low in a person however this does not suggest that a person does not feel confident in themselves in any way. The idea of self-esteem has been argued by psychologists that it is too global (Gifford, 1997). Individuals generally have different levels of self-esteem in different areas rather than it being a global self-esteem. "Self esteem refers to global evaluations of the self. Self-esteem is also referred to as self-worth or self-image" (Santock, 2004, p.337) Self-concept refers to domain specifics of the self.

Each individual has their strengths and their weaknesses, academics, athletics and appearance are among some of the types of domains. One may have high levels of self-esteem academically but not socially. Self-esteem has also been found to be lower among girls than boys and to decrease as adolescents progress from early to late adolescence (Van Den Berg, Mond, Eisenberg, Ackard and Sztainer 2010). Different characteristics are due to biological and psychological functions.

### *Personality differences*

The biological functions include: Personality differences shaped by evolutionary factors; Genetic bases for individual differences and temperament; Individual differences in customary level of cortical arousal and suddenness with which autonomic shifts occur; Individual differences on biological bases for temperament (Passer & Smith, 2008).

The psychological functions are those that can be adapted throughout the lifespan development and are caused by ones surrounding environment. It can be suggested that an individual's level of self-esteem, self-efficacy and personality traits may also be linked to their physiological functions.

The following research will also look at the idea that public schools and private schools can have an effect on one's personality development. Social development is an important topic because it deals with everyday problem solving tasks which are important for an individual to be able to adapt to, if a person should fail to adapt to social norms, they may become lonely. The social learning theory has encouraged many theorists to expand on social behaviours and how they are learned. Social learning theorists such as O.H. Mowrer, Neal Miller, John Dollard, and Robert Sears. Leonard Doob and John Whiting (as cited by Miller, 2002) believed that personality is learned. "A major focus of social learning theory was socialization, the process by which attempts to teach children to behave like the ideal adults of society" (Miller, 2002, p.171).

A well known development psychologist Piaget discussed the importance on the nature versus nurture theory. According to Piaget, "innate and experiential factors are inter-twined because of personality development." Innate factors include physical structures (for example, the structure and positioning of the particular species eyes), reflexes, physical maturation, and the invariant functions (organisation and adaptation). Given these innate factors and the nature of the physical and social world, development inevitability processes in the way it does (Miller, 2002, p.70). In contrast to Piaget's approach, many researches view cognitive development as a continuous process in which the same set of information processing abilities become more efficient over time (Siegler, 1996). Vygotsky (1965) socio-cultural theory argued that the role of others and their guidance can be a factor in one's development with his zone of proximal development (Passer et al.2008).

Environmental factors should also be considered when looking at different personalities. This is important because environmental factors may be involved in the development

of ones personality. Whether an individual is confident and has high levels of self-esteem or they are shy with low levels of self-esteem, environmental factors may be one of the contributory factors to this. There are five different reasons why ones personality is an integral part of environmental psychology.

The first reason suggests that according to Extraversion and Introversion, the difference between the two is based on a persons degree of stimulation from the outside, this could be the type of school in which a person attended.

The second is, by understanding a Persons Traits, this helps us to understand and predict environmental relevant behaviour.

The third is Environmental Trust. A measure of how different individuals feel secure in potentially threatening environmental situations.

The fourth reason is Personal Disposition. This is one of the more essential reasons because it looks at a persons environmental compatibility. Does the individual fit in with their particular setting? If they do they feel secure and grow in confidence. If they don't then they will become lost or isolated and overwhelmed at times. The final reason is how personality can be turned around and be applied to places rather than people (Gifford, 1997).

How personality has been analysed, understood and defined in the individual differences that exist in personality have shown huge interest in the past. In the most basic terms personality is thought to be a semi-permanent, internal predisposition that can influence the behaviour of individuals within a reasonable consistent manner in various situations. In addition, personality theory has focused on the number of traits, or personality traits that an individual could have, such as being warm, friendly or trustworthy (Eysenck, 2002). Personality traits have been identified as being hierarchically arranged. This would suggest that certain personality traits would be

global and higher arranged than those which could be more specific and much lower arranged (Goldberg, 1993). (Eysenck and Eysenck, 1975) have identified numerous correlated personality traits, though many were found to resemble each other. Though in each case both sets of theorists suggested different numbers of major personality traits. They have also identified two original orthogonal personality factors that were labelled Introversion/Extraversion and Neuroticism. An additional personality factor was latter labelled Psychoticism (Eysenck, Eysenck and Barrett, 1985). Those scoring high on Extraversion are perceived to be extraverts, while those with low scores perceived to be introverts. This dimension is related to impulsivity and where the extravert can be characterised as being very sociable, active, assertive, carefree, and optimistic.

Introverts are characterised to be the opposite of these traits and participants scoring high on neuroticism are perceived to be more anxious, shy and suffer from feelings of guilt and when they show low scores they tend to be more depressed. The participants scoring high on the Psychoticism trait are perceived to be more aggressive, uncaring, unfriendly and hostile. This personality trait has also been labelled Normality and the participants with low scores are perceived to have a normal personality. These individuals would express more emotions than those on Psychoticism. Raymond B. Cattell (1965) developed a widely used personality test called the 16 Personality Factor Questionnaire to measure individual differences on each of the dimensions and provide a comprehensive personality description. In more recent years theorists such as Mc Crae and Costa (1990) have argued that there are five major personality traits and is known as the Big Five. They also found that the Big Five are universal to most cultures as the same five factors have been found to be consistent in trait ratings in diverse places as North America, Asia, South America and Europe (Passer and Smith,

2008). The Big Five Factors or OCEAN for Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism is when a person is placed at a specific point on each of these five dimensions by means of a psychological test, behaviour ratings or direct observations of behaviour, the essence of her his personality has been captured (Mc Crae and Costa, 2003). Cross-sectional and longitudinal studies have indicated that among the Big Five, Neuroticism, Openness, and Extraversion exhibit average declines from the late teens to the early thirties, whereas Agreeableness and Conscientiousness tends to increase. Individuals can show developmental changes in many aspects of personality given influential life experiences (Passer et .al 2008) such as what type of education they received. Although high profile individuals such as Michael Jackson would have showed a high level of Conscientious traits such as self discipline and confidence at an early age, traits of Neuroticism such as self-consciousness seemed to increase with age as he became more obsessed with his looks especially his face. The increase in his Neuroticism traits, anxiety and depression are probably what lead to his drug taking and eventual death.

### *Gender*

It has been said that personalities between males and females differ sometimes through different bodily hormones secreted, different ideas of leisure activities in general and personal likes and dislikes ( Demetriou, Doise and Van Liesshout, 1998) However, if males and females are integrated into one educational setting, does that mean that they will begin to share common likings towards particular activities. Studies indicates that there are gender differences in stress reactions and coping strategies among the student population. Gender differences seem to impact strongly on coping strategies and inherent responses to stress, influencing a student's outlook and reaction to academic stressors. Studies have shown that female students tend to

express their emotions behaviourally (Hyde and Plant 1995; Misra, Mc Kean, West, and Russo, 2000). Gender differences in reactions to stress may be a result of the gender-role socialisation which teaches that the behavioural expression of emotions is socially acceptable. A study looked at students from high schools and ranked sets of values from the “Rokeach Value Survey” first in order of importance for themselves then in order of how they felt their schools would identify them and it was found that school adjustment was positively related to the extent to which subjects values matched school values. Men often report controlling their emotions, accepting the problem, not thinking about the situation, and engaging in problem-solving efforts.

### *Conclusion*

School is one of the most important times of our life and is a privilege to all in most western societies whether privately or publicly educated. It is essential in developing a positive attitude towards life so that they may have a good education and strong social skills. The specific aim of this study is to contribute to the literature on schools attended by students who went on to college life and their stress levels and coping skills patterns, updating current data and providing additional data on the subject. Such research hopes to create a better understanding of students who attended either public or private schools and to further assist colleges and universities in developing stress intervention programs. The study will specifically investigate the hypothesis that there are significant differences in stress levels and coping mechanisms in students who attended public school compared with students who attended private schools, also investigating the hypothesis that there are gender differences present in relation to stress. A secondary purpose of the study is to analyse the hypothesis that the moderating roles of self-esteem, self-efficacy, personality and optimism will show a significant difference in the relationship between stress and coping.

## Chapter 2

### METHODOLOGY

#### *Participants*

A total of 90 final year psychology students enrolled at Dublin Business School (DBS) were invited to take part in this study. The participants consisted of 37 private school educated students and 53 public school educated students. Of these participants 55 were part-time students and 35 were fulltime. In the group 28 were male and 62 were female. Participants were a convenience (haphazard) sample recruited personally by the researcher at DBS, Aungier street, Castle house and Dame street. The age of the participants ranged the age of 18 to the age of 50. Missing values on some items meant that the response rate for some parts of the questionnaire was less than 90.

#### *Materials*

A brief demographic questionnaire was developed by the researcher to obtain information on age, gender, school education received (private or public), full or part-time college students, satisfaction with course being studied and general happiness. In addition to this brief questionnaire, all respondents were asked to complete a series of questionnaires including the Values in Action (VIA: Peterson & Seligman, 2004), the General Health Questionnaire (GHQ-12: Goldberg, 1978), the Brief *COPE* (Carver, 1997), the General perceived Self- Efficacy Scale (GSE: Schwartz & Jerusalem, 1995), the Big Five Personality Test (NEO PI-R: Costa & McCrae 1992) and the Rosenberg Self-Esteem Scale (SES: Rosenberg, 1965)

*The General Health Questionnaire (GHQ-12: Goldberg, 1978)*

The General Health Questionnaire (1978) is self-administered and only takes about five minutes to complete. This questionnaire was designed to detect non-psychotic psychiatric disorder in people in community and medical settings using a self-report questionnaire. It identifies cases as well as measuring a degree of disorder. The questionnaire being used was the GHQ-12, which is a shortened version of the GHQ-60 questionnaire. Even though the questionnaire which was used is shorter, it is still deemed as valid and reliable.

The GHQ-12 model uses a four-point scale; 'not at all', 'no more than usual', 'rather more than usual', 'much more than usual'. This four-point scale asks if the participant has ever had a particular symptom or way of behaviour recently. When scoring the GHQ-12 it gives a Likert scoring where participant's scores are 1,2,3,4 respectively. This method is helpful for comparing degrees of disorder because it gives a less skewed distribution of scores, ranging from 1 to 48. The higher the score is in the questionnaire, the greater the probability of a clinical disorder. The GHQ-12 questionnaire has a good internal consistency. According to Cronbach's Alpha, in a series of studies it ranged from 0.82 to 0.90, the split-half reliability was 0.83, and the test-retest reliability was 0.73.

*Brief COPE (Carver, 1997)*

The Brief COPE Inventory (Carver, 1997) was developed to assess a broad range of coping responses. It is an adaptation of the original COPE (Carver, Scheier & Weintraub, 1989) and consists of four sub-scales. The factors represented are Approach coping, (e.g. self-distraction : 'I've been turning to work or other activities



to take my mind off things' & planning : 'I've been thinking hard about what steps to take'), Avoidance coping, (e.g. denial: 'I've been saying to myself this isn't real' & humour: 'I've been making fun of the situation'), Altering consciousness, (e.g. substance use: 'I've been using alcohol or other drugs to try and help me get through it' & religion: 'I've been praying or meditating') and Seeking support, (e.g. 'use of emotional support: 'I've been getting emotional support from others' & venting: 'I've been expressing my negative feelings'). The Brief COPE was validated with an undergraduate population in Florida (Carver, 1997).

*Rosenberg's Self-Esteem Scale (SES).*

Rosenberg's Self-Esteem Scale (Rosenberg, 1965) is a brief and valid measure of global self-esteem. The Rosenberg Self-Esteem Scale is a ten item self-report measure of global self-esteem. It consists of ten statements related to overall feelings of self-worth or self-acceptance. Statements range from 'On the whole I am satisfied with myself' to 'I certainly feel useless at times'. The items are answered on a four-point scale, ranging from 'strongly agree' (SA) to 'strongly disagree' (SD). The scale is scored by summing the ratings assigned to all the items, after reverse scoring the positively worded items. Scores range from 10 to 40, with higher scores indicating higher self-esteem. The Self Esteem Scale has been validated for use with both male and female adolescent, adult and elderly populations.

The Rosenberg Self-Esteem Scale has shown good validity and reliability across a large number of different sample groups (Rosenberg, 1965).

*General Self-Efficacy Scale (GSE: Schwartzer & Jerusalem, 1995).*

The General Self Efficacy Scale (Schwartz & Jerusalem, 1995) is a 10-item scale designed to assess optimistic self-beliefs used to cope with a variety of demands in life. Questions include 'I can always solve difficult problems if I try hard enough' and 'When I am confronted with a problem I can generally find a solution'. The score for each question ranges from 1 to 4 (1 = *not at all* to 4 = *exactly true*). Higher scores indicate stronger beliefs in self-efficacy. The GSE has been translated into several languages and tested in populations around the world. The reliability and validity of these translations were very high. (Sholz, Dona, Sud & Schwarzer 1995).

Research has shown that the GSE has high reliability, stability, and construct validity (Leganger, Kraft Roysamb, 2000).

*The Big Five Personality Test (NEO PI-R: Costa & Mc Crea, 1992)*

The original Neuroticism-Extroversion-Openness Inventory (NEO-1) was designed by Costa & Mc Crae (1976) as an exhaustive look at broad range of personality traits. This version only measured three of the Big Five personality traits. It was later revised to include all five traits and renamed (NEO PI). The one used in this particular is the short scale of the third and latest version, the (NEO PI-R: Costa & Mc Crea, 1992). It is a 25-item personality questionnaire primarily designed to measure the individual's dimensions of personality such as, Neuroticism (e.g. self-consciousness: 'I dislike myself'), Extraversion (e.g. gregariousness: 'I make friends easily'), Openness (e.g. fantasy: 'I have a vivid imagination'), Agreeableness (e.g. trust: 'I believe that others have good intentions') and Conscientiousness (e.g. self-discipline: 'I get chores done right away'). The items are answered on a Likert scale

from 1-5, from Strongly Agree (SA) to Strongly Disagree (SD). The test retest reliability of the NEO IP-R is also good, they are stable over a long period of time, as the scores over 6 years are only marginally more different than the scores as measured a few months apart (Costa & Mc Crae, 1992).

*Values in Action Inventory of strength (VIA-IS: Peterson & Seligam, 2004)*

The Values in Action Inventory of strengths (VIA-IS) is a self report assessment intended to measure an individual's possession of character strengths. Since the test's development in 2004, one million people have taken the VIA-IS and it has been translated into ten languages. The one used in this particular study is the short scale of the VIA-IS. It consists of 8 statements related to over all feelings of optimism or self strength. Statements range from 'look on the bright side' to 'Am not confident that my way of doing things will work out for the best'. The items are answered on a Likert scale from 1-5, from Strongly Agree (SA) to Strongly Disagree (SD). The scale is scored by summing up the ratings assigned to all items, after reverse scoring the positively worded items. The test shows good reliability on measures of internal consistency and test-retest correlations and correlates substantially with self-nominations of strengths (La Follette, 2010).

**Design**

The study represented a retrospective quantitative, cross-sectional design, where students looked back in time to their school days while answering the questionnaires. It is a correlational study looking in depth at the variables gender, status ( private or public), part-time or fulltime, happiness, life satisfaction, general health, coping style, self-esteem, self-efficacy, personality and optimism.

**Procedures**

At the time this study was carried out, the participants were students who were attending Dublin Business School. Full-time and part-time students were included in the present study. Data collection occurred during the second semester, during the first two weeks of February 2012. Recruiting of participants was organised in consultation with administration staff and lecturers. The participants were asked to complete all the questions as honestly as possible as there was no right or wrong answers. Once the questionnaires were completed participants were thanked for their time and co-operations. There was also time for questions upon completing the questionnaire. All analysis was carried out using SPSS (Version 18).

**Ethical considerations**

The study has been approved by the ethics committee of DBS. The participants were made aware that the responses of this survey would be kept completely confidential and any personal details entered into the questionnaire would not be mentioned in the thesis. They were also advised that they could pull out at any time and that anonymity would be maintained at all times. Questionnaires were left in a secure place until analysis began.

## Chapter 3

### RESULTS

#### *Descriptive Statistics*

There were a total of participants (N=90) in this study of which 28 (31.1%) were male and 62 (68.9%) were female, Mean 1.69 and SD .466. The age ranged from 18 years to 50 years old, Mean 29.01 and SD 7.637. Of the 90 participants in this study, 37 (41.1%) attended a private school, 53 (58.9%) attended a public school, Mean 1.59 and SD .495, 55(61.1%) were part-time college students and 35 (38.9%) were full-time, Mean 1.39 and SD .490.

Table 1 shows the mean and standard deviation highest and lowest score of the data collected from the questionnaires used in this study which were the VIA, Self-Efficacy Scale, Self-Esteem and The Brief Cope:(Carver 1997) was divided into four sub-scales which include approach coping, avoidance coping, altering coping, altering coping and seeking support. The Big Five was also divided into five sub-scales known as OCEAN, Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. All data was coded in SPSS (version 18)

**Table 1- Descriptive Statistics on mean score comparisons**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Happy question	90	2	5	3.97	.741
Satisfaction	90	2	4	3.16	.579
optimismmean	90	2.25	5.00	3.7236	.44835
selfefficacymean	90	1.90	4.00	3.1278	.42875
selfesteemmean	90	2.20	3.80	2.9989	.39873
neuroticismmean	90	2.20	5.00	3.4400	.55299
extraversionmean	90	2.40	4.00	3.1133	.33392
opennessmean	90	2.20	4.00	3.0128	.33230
agreeablenessmean	90	1.80	4.00	2.9022	.46597
conscientiousnessmean	90	1.60	4.20	2.8522	.43297
aproachcopingmean	90	1.00	3.78	2.5407	.54325
avoidancecopingmean	90	1.00	3.00	1.7676	.49160
alteringconsciousnessmean	90	1.00	2.50	1.4639	.49656
seekingsupportmean	90	1.00	3.80	2.2894	.74111
generalhealthmean	90	.00	1.00	.2184	.25593
Valid N (listwise)	90				

### *Inferential Statistics*

The second hypothesis stated there will be a relationship between part-time and full time students and course satisfaction with full-time students showing a statistically significant higher scores than part-time students.

An independent sample t-test was conducted to examine if differences between the scores of part-time and fulltime college students and course satisfaction exists. The mean score for part-time students in regard to course satisfaction was 3.05 with a standard deviation of .488. The mean score for full-time students was, 3.31 with a standard deviation of .676, this indicates that full-time students scored marginally higher than part-time students with regard to course satisfaction. An independent

sample t-test showed a statistically significant difference between full-time and part-time students in regard to course satisfaction which can be seen by using the t-test ( $t(88) = -2.115, p < 0.05, 2\text{-tailed}$ ).

The third hypothesis stated there will be gender difference and general happiness with females showing a statistically significant higher score than males.

An independent sample t-test was conducted to examine if differences between the scores of males and females and general happiness exists. The mean score for males was 3.64 with a standard deviation of .826. The mean score for females was 4.11, with a standard deviation of .655, which indicates that in general females scored higher in happiness than males. An independent sample t-test showed a statistically significant difference between males and females in relation to their general happiness which can be seen by using the t-test ( $t(88) = -2.899, p < 0.05, 2\text{-tailed}$ ).

The fifth hypothesis stated there will be a relationship between part-time and full-time students and general happiness with full-time students showing a statistically significant higher score than part-time students. The mean score for part-time in relation to happiness was, 3.89 with a standard deviation of .737. The mean score for full-time students was, 4.09 with a standard deviation of .742, this indicates fulltime students scored marginally higher than part-time students in relation to happiness. An independent sample t-test showed no significant difference between part-time and full-time students in relation to their happiness ( $t(88) = -1.219, p > 0.05, 2\text{tailed}$ ).

The mean score for part-time in relation to general health was, .2331 with a standard deviation of .27478. The mean score for full-time was, 2.3429 with a standard deviation of .22501, part-time students scored higher on general health than fulltime students. An independent sample t-test showed no significant difference ( $t(88) = .685, p > 0.05, 2\text{tailed}$ ).

The first hypothesis stated there will be a relationship between private educated students and public educated students and general health with private students showing a statistically significant higher score than public educated students.

The mean score for private educated students in relation to general health was, .1722 with a standard deviation of .22685. The mean score for public educated students was, .2506 with a standard deviation of .27184. Public educated students scored higher on general health than private. An independent sample t- test showed no significant difference ( $t(88) = -1.439, p > 0.05, 2$  tailed).

The fourth hypothesis stated there will be a relationship between private and public educated students and general happiness with private educated students showing a statistically significant score than public educated students.

The mean score for private in relation to happiness was, 4.19 with a standard deviation of .616. The mean score for public was, 3.81 with a standard deviation of .786. An independent sample t-test found that there was no significant difference between happiness and public and private educated students ( $t(88) = 2.445, p > 0.05, 2$  tailed).

The mean score for private educated students in relation to course satisfaction was, 3.22 with a standard deviation of .584. The mean score for public was, 3.11 with a standard deviation of .577. An independent sample t-test found that there was no significant difference between course satisfaction and private and public educated students ( $t(88) = .829, p > 0.05, 2$  tailed).

For general health the mean score for males was, .1649 with a standard deviation of .20981. The mean score for females was .2425 with a standard deviation of .27235. Females scored higher than males in general health. An independent sample t-test found that there was no significant difference in general health of males and females.



Finally the mean for males in relation to course satisfaction was, 3.35 with a standard deviation of .701. The mean score for females was, 3.11 with a standard deviation of .515. An independent sample t-test found that there was no significant difference in course satisfaction and males and females.

Table two outlines the mean, standard deviation, maximum and minimum of the outcome variables and three groups

**Table 2 Descriptive Statistics on outcome variables**

	N	Minimum	Maximum	Mean	Std. Deviation
Happy question	90	2	5	3.97	.741
Satisfaction	90	2	4	3.16	.579
School attended	90	1	2	1.59	.495
Gender	90	1	2	1.69	.466
Parttime/Fulltime	90	1	2	1.39	.490
generalhealthmean	90	.00	1.00	.2184	.25593
Valid N (listwise)	90				

### *Correlations*

The second aim of the study was to explore the correlation between key predictors and well-being measures.

From this aim the first hypothesis that optimism will be significantly different when associated with stress was investigated and was not significant.

The second hypothesis states that self-efficacy will be significantly different when associated with stress, was investigated and found there was a statistical significant difference. As self-efficacy went up (negatively) so did stress. The relationship between stress and key predictors was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a weak negative correlation between the two variables,  $r = -.25$ ,  $n = 90$ ,  $< .05$  with higher

levels of self-efficacy(negatively) associated with higher levels of stress.

The third hypothesis states that self-esteem will be significantly different when associated with stress, was investigated and found there was a significant difference. As self-esteem went up negatively so did stress. There was a moderate negative correlation between the two variables,  $r = -.40$ ,  $n=90$ ,  $< .01$ .

The fourth hypothesis states that avoidance coping will be significantly different when associated with stress, was investigated and found there was a statistical significant difference. There was a moderate positive correlation between the two variables,  $r = .30$ ,  $n=90$ ,  $< .01$ .

The fifth hypothesis states that Neuroticism will be significantly different when associated with stress, was investigated and found there was a statistical significant difference. There was a weak negative correlation between the two variables,  $r = -.21$ ,  $n=90$ ,  $< .05$ . Table three shows the key predictors and criteria General Health variable.

*Table 3 .Correlations between key predictors & out come variable*

		Outcomevariable
Predictors		General health
1.	Self-efficacy	-.225*
2.	Avoidance coping	.309*
3.	Self-esteem	-.406**
3.	Neuroticism	-.215*

Note: \*\* Correlation is significant at the .01 level (2-tailed).  $P < 0.05^*$

The first hypothesis of general happiness states that Optimism will be significantly different when associated with general happiness, was investigated and found there was a significant difference. The relationship between general happiness and Optimism was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong positive correlation between the two variables,  $r = .50$ ,  $n=90$ ,  $p < 0.01$ .

The second hypothesis states that self-esteem will be significantly different when associated with general happiness, was investigated and found there was a significant difference. There was a weak positive correlation between the two variables,  $r = .27$ ,  $n=90$ ,  $p < 0.05$ .

The third hypothesis states that Seeking support will be significantly different when associated with general happiness, was investigated and found there was a significant difference. There was a weak positive correlation between the two variables,  $r = .29$ ,  $n=90$ ,  $p < 0.01$ . Table four shows the predictor variables and criteria general happiness variable.

*Table 4 .Correlations between key predictors & out come variable*

		Outcomevariable
Predictors		General happiness
1.	Seeking support	.293**
2.	Optimism	.509**
3.	Avoidance coping	-.270*

Note: \*\* Correlation is significant at the .01 level (2-tailed). P < 0.05\*

The first hypothesis of course satisfaction states optimism will be significantly different when associated with course satisfaction, was investigated and found there was a statistical significant difference. . The relationship between course satisfaction and key predictors was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a moderate positive correlation between the two variables  $r = .40, n = 90, < 0.01$ .

The second hypothesis states Self-efficacy will be significantly different when associated with course satisfaction, was investigated and found there was a statistical significant difference. There was a weak positive correlation between the two variables  $r = .29, n = 90, < 0.01$ .

The third hypothesis states Self-esteem will be significantly different when associated with course satisfaction, was investigated and found there was statistical significant difference. There was a strong positive correlation between the two variables  $r = .73, n = 90, < 0.01$ .

The fourth hypothesis states Neuroticism will be significantly different when associated with course satisfaction, was investigated and found there was statistical significant difference. There was a moderate positive correlation between the two variables  $r = .49, n = 90, < 0.01$ .

The fifth hypothesis states Avoidance coping will be significantly different when associated with course satisfaction, was investigated and found there was statistical significant difference. There was a moderate positive correlation between the two variables  $r = .40, n = 90, < 0.01$ . Table five shows the key predictor variables and the criteria variable course satisfaction.

*Table 5 .Correlations between key predictors & out come variable*

Predictors		Outcomevariable
		Course satisfaction
1.	Optimism	.400**
2.	Self-efficacy	.295**
3.	Self-esteem	.736**
4.	Neuroticism	.493**
5.	Avoidance coping	-.406**

Note: \*\* Correlation is significant at the .01 level (2-tailed).  $P < 0.05^*$

### *Regression*

The third aim of the study was to develop separate models that can predict levels of happiness, stress and course satisfaction.

The hypothesis's from this aim is to investigate if a particular predictor chosen will predict a significant amount of variance in level of Stress, Course satisfaction and General happiness.

The first hypothesis of this aim is that regression on general happiness and Avoidance coping, Seeking support and Optimism predict levels of variance.

The standardized model of regression carried out to test research included 3 predictor variables (avoidance coping, optimism and seeking support)

R squared explained 35.6% of the variance on scores in general happiness.

$F(3,86) = 15.82, p < 0.05$ . Table six shows the final regression model with general happiness as the outcome.

Table 6 *Final Regression on General Happiness*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		1	(Constant)	.615			.670	
	avoidancecopingmean	-.174	.137	-.115	-1.265	.209	.902	1.109
	seekingsupportmean	.312	.088	.312	3.543	.001	.965	1.036
	optimismmean	.791	.148	.478	5.333	.000	.932	1.073

a. Dependent Variable: Happy question

R squared = .356, Adjusted R squared = .333

The final regression model explained 35.6% of the variance in scores on happiness. As Optimism goes up happiness increased. As Avoidance coping went up (negatively) Happiness decreased. Where Seeking support increased happiness also increased. This indicates the predictors chosen (avoidance coping, seeking support, and optimism) did significantly predict variance scores on General happiness.

The second hypothesis of this aim is that regression on general health and Avoidance coping, Self-esteem, Self-efficacy and Neuroticism predict levels of variance.

The standardized model of regression carried out to test research included 4 predictor variables (avoidance coping, self-esteem, self-efficacy and neuroticism)

R squared explained 18.6% of the variance on scores in general happiness.

( $F(4,85) = 4.86$ ,  $p < 0.05$ ). Table 6 shows the final regression model with general happiness as the outcome.

Table seven shows the regression model with General health as the outcome

*Table 7 Final Regression on General Health*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			
	B	Std. Error	Beta			Zero-order	Partial	Part	
1	(Constant)	.812	.321		2.528	.013			
	selfefficacymean	-.045	.064	-.076	-7.06	.482	-.225	-.076	-.069
	selfesteemmean	-.192	.084	-.300	-2.277	.025	-.406	-.240	-.223
	neuroticismmean	-.003	.053	-.008	-.066	.947	-.215	-.007	-.006
	avoidancecopingmean	.077	.059	.148	1.318	.191	.309	.141	.129

a. Dependent Variable: generalhealthmean

R squared = .186, Adjusted R squared = .148

The final regression model explained 18.6% of the variance in scores on G H. As Self-efficacy went up (negatively) stress went down. As Avoidance coping went up stress also increased. As Neuroticism went up (negatively) stress went down.

The only significant predictor of General health was Self-esteem, (Beta = -.30,  $p < 0.05$ ). The standardized Beta value indicated Self-esteem as having a weak negative predictor effect on levels of General health. Given that as Self-esteem went up (negatively) stress also went up.

The third hypothesis of this aim is that regression on course satisfaction and Avoidance coping, Self-esteem, Self-efficacy, Neuroticism and Optimism predict levels of variance.

The standardized model of regression carried out to test research included 5 predictor

variables (avoidance coping, optimism, self-esteem, self-efficacy and neuroticism)

R squared explained 57.6% of the variance on scores in general happiness.

( $F(5,84) = 22.80$ ),  $p < 0.05$ . Table eight shows the final regression model with course satisfaction as the outcome variable.

*Table 8* *Final Regression on course satisfaction*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1 (Constant)	-.439	.572		-.767	.445			
selfefficacyme	-.016	.107	-.012	-.151	.880	.295	-.017	-.011
selfesteemme	.870	.142	.599	6.149	.000	.736	.557	.437
neuroticismme	.163	.087	.156	1.880	.064	.493	.201	.134
avoidancecopin	-.045	.097	-.038	-.462	.645	-.406	-.050	-.033
optimismme	.149	.102	.115	1.451	.151	.400	.156	.103

a. Dependent Variable: Satisfaction

R squared = .576, Adjusted R squared = .551.

The final regression model explained 57.6% of the variance in scores on Course satisfaction. As Self-efficacy went up (negatively) Course satisfaction went up. As Avoidance coping went up (negatively) course satisfaction went up. As Neuroticism went up so did course satisfaction and as Optimism went up so did Course satisfaction.

The only significant predictor of Course satisfaction was Self-esteem, (Beta = .59,  $p < 0.05$ ). The standardized Beta value indicated Self-esteem as having a moderate positive predictor effect on levels of Course satisfaction. Given that as Self-esteem went up Course satisfaction also went up.



Checking the assumptions for carrying out a regression analysis were carried out showing the criterion variable was always continuous. There was no substantial outliers indicated by the Mahalanobis distance values and predicted values were not related to the residual scores which were normally distributed. The tolerance values did not exceed 0.2, indicating that there was no multi- collinearity.

## Chapter 4

### DISCUSSION

The main purpose of the present study was to test for differences in stress levels and coping mechanisms in college students who attended a public school (non fee paying) or a private school (fee paying). The study also aimed to investigate if there were gender differences present in such a comparison and if students who were part-time or full-time would present a difference. The secondary purpose of the study was to analyse the moderating roles of self-esteem, self-efficacy, personality and optimism in the relationship between stress and coping.

While findings indicate that academic stress is a major concern for all students, our findings failed to support the hypothesis that the student population who were educated in private schools demonstrated higher stress levels or exhibited different coping styles to the student population educated in public schools. The GHQ-12 (Goldberg 1978) was used to measure distress as it is well established and is an instrument that has undergone rigorous psychometric assessment with a large population of Irish students. The well being measure GHQ focus is on the adverse distress of a person's well being.

Looking at the mean score for private and public educated students in regard to general health, public educated students did score higher than private educated students. However as said before the difference was found not to be significant. The fourth hypothesis that there would be a relationship between private and public educated students and general happiness showed a higher mean score for private students than public student in relation to happiness, though there was no significant difference.

Findings also failed to support the hypothesis that gender would have a significant difference in relation to general health although the mean score for gender for general health found that females scored higher than males. While the mean score for males was higher than females in relation to course satisfaction but again there was no significant difference. However findings did support the hypothesis that there would be a significant gender difference in regards to general happiness. The mean score for females was higher than males indicating that females are generally happier than males and there was also a statistical significant difference.

Findings also supported the hypothesis that there would be a relationship between part-time and full-time in relation to course satisfaction with the mean score for full-time students being higher than part-time students, full-time students enjoying the course more than part-time students and showing a statistical significant difference. The hypothesis that part-time and full-time would have a relationship in regards to general happiness was not found, full-time students did have a higher mean than part-time but there was no significant difference. While the mean score was higher for part-time students than full-time in relation to general health there was no significant difference.

Although there was no significant difference in the main hypothesis between private and public educated students in relation to stress, the evidence clearly showed that the hypothesis that there would be a relationship between male and female college students in relation to general happiness showed that females were generally happier than males and that there was a significant difference provides further evidence to Feather's (1972) report that satisfaction for girls was greater than it was for boys who were in a co-educational school. Girls rated a higher level of happiness in school than did boys (Feather, 1972), which would now show is continuing on into

college life.

The reason for the significant difference in full-time students showing a higher score than part-time students in course satisfaction could be down to the extra work load part-time students have which could take away from their enjoyment of college life, leaving for a more pleasant climate for full-time students which would agree with Jaap Dronkers and Peter Roberts (2008) research that a better school climate was an explanation for higher effectiveness. More research could be undertaken into the different experiences of both full-time and part-time students in college life.

While there were no overall significant differences in coping styles, the study did find differences in specific coping strategies. The research of this study has told us that the impact of any potentially stressful event is influenced by how a person appraises it (Taylor, 2009). The fourth hypothesis of the second aim of the study is that Avoidance coping would be significantly different when associated with stress. This was found to be true with a moderate positive correlation between the two variables. So it was found that students that did not appraise a stressful event differently like seeking support or confronting the problem head on ( problem focused coping) (Passer et al, 2008), were more stressed because they avoided dealing with the stressful event and bottled it up or took it out on other people (Holahan et al, 2009).

As the variables self-esteem and self-efficacy went up (negatively) stress went up which would agree with the research that these two variables while representing very different psychological constructs have been both associated with lower stress levels (Negga et al, 2007). Stress also went up as Neuroticism went up (negatively) which might seem unusual at first but it could be associated with anxiety decreasing in exam time and positive stress increasing in the form of adrenaline, well maybe more for those who had put in the work. 18.6 % of the variance was scored on General health

with these four key predictors being regressed and findings found that self esteem may serve as a moderator between stressful situations and reactions to those situations which supports the study by Maciejew, Prigerson & Mazure (2000) where in a large sample of American students, self-efficacy and self-esteem were found to mediate the relationship between stressful life events and depressive situations.

The study's findings also found the hypothesis that there would be a significant difference in the coping strategies Avoidance coping which could be humour "I've been making fun of the situation" and Seeking support "I've been getting emotional support from others" in relation to general happiness. Again avoidance coping is seen to go up (negatively) with general happiness this time. Seeking support going up would also indicate that students are getting the right type of support whether it be instrumental or emotional.

The hypothesis that optimism would have a relationship with general happiness did show a significant difference. Both these findings for optimism and seeking support would be consistent with Brissette, Scheiver, & Carver (2002) findings that optimists experienced less stress and depression and were more likely to seek out social support and to positively reinterpret a stressful event by using their resources more effectively.

The hypothesis that self-efficacy would have a relationship with course satisfaction did show a significant difference with self-efficacy going up (negatively) after being entered into the model for regression and course satisfaction going up which may have to do with the belief that I can do these the course work going down as exams get closer. Optimism also showed a significant difference in relation to course satisfaction, which again would lead us again to the research that optimist strengths include work ethic and good interpersonal skills (Seligman et al, 2005) which would

indicate pursuing positive traits would increase the enjoyment one gets out of the course.

The results of this research provide the background work for future research into the effects that students who had private school education or public school education have on stress and coping and on an individual's self-esteem, self-efficacy, optimism and personality. With regard to this research it should be noted that there are a number of limitations restricting the general ability of this study. A major weakness of the current study was the small population. The sample size of 90 students (53 public & 37 private) was inadequate. In order to obtain a more accurate reading the sample size would need to be increased and the participants would need to be from different social backgrounds. The participants sampled, while representing a broad range of disciplines, were all students at a third level private, urban educational institution. Therefore, generalization of the general population would be restricted. The allocation of the questionnaires was done in the recreation and lecture room areas of Dublin Business School. Some participants did complete them individually and some in small groups. Unfortunately this meant in some situations, that participants might influence each other on the answers they might give and not answer the questions as honestly as possible given the nature of some of the questions, and avoid portraying themselves in negative way to their peers. The study also relied on self report measures rather than third party assessments of actual behaviour.

Another limitation of the study comprised of the questionnaires which were all presented in English. Although the participants would presumably have a good standard of English as that would be a requirement of admission to the college, there is a chance that some participants taking a questionnaire in the English language might lead to a response that reflects English and western cultural responses.

As a result respondents may have placed different meanings on questionnaires questions as there interpretations may vary (Sanchez, Spector, Cooper, 2006). Also asking participants to rate stress in a general way and asking them after the stressful event had passed might lead them to remember it different, maybe by getting them to keep a diary would give a more precise account.

Another limitation is that in part this study is an exploratory analysis and by asking participants to rate sources of stress on well being and its moderating effect it has on coping resources is that they may find significant findings that do not relate to the specific hypothesis simply because it is a exploratory analysis and as a result those findings could be random error.

The final limitation was the absence of money. A larger study could have been carried out if there had been no time constraints and financial backing. That would of meant that that the variables in the study could have been explored more and a larger sample size from different colleges could be of been used.

Further research is needed within this particular area of education which might give people a better understanding into the ongoing argument over public school education and private school education. Every individual's needs are different so it cannot be stated that all students who attend a private school will have lower stress, cope better, have higher levels of self-esteem, self-efficacy, optimism and better personalities than public schools. Although, in general the type of school attended could contribute to a Person's development.

Optimism, Self-efficacy, self esteem, personality, and coping were the predictors used. Coping was in itself not significant and according to Lazarus & Folkman (1984) approach coping would have been a significant predictor but again was not but this maybe because it takes longer to set in. (Gibbons, Dempster, & Moutray, 2011).

Future studies might further explore the moderating effects of self-efficacy on stress in both private and public educated student population in terms of intervention strategies to help students raise their self-efficacy levels which could have a more productive time in their studies. Also looking more into students levels of optimism and coping strategies might have a positive impact on their skills of appraising stress.

Although there were not many significant correlations on personalities, though neuroticism, general health and course satisfaction did, a further look at the different personalities would help student councillors in dealing with student stress. Future research could explore the gender differences in relation to stress. Although not significant, findings did show men and woman differ in their perception to stress, these findings could help college counsellors considering treatments on the basis of these differences.

This study compared stress levels in college students who attended public and private schools and examined the relationship among the constructs of coping responses and the moderating effects of self-efficacy, self-esteem, personality and optimism. The difference in gender was also explored in relation to each construct. Although the results did not support the main hypothesis that there would be significant difference in stress and coping in students who either attended a private school education or a public school education, taken together our results do raise some very valid points that can be added to contemporary research involving students and stress and coping mechanisms and used in further research in this area.

This study hopes to help colleges monitor the sources of stress and help students with well being and academic performance.



## Chapter 5

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## APPENDICES

Please tick the answer that is relevant to you.

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

Gender: M \_\_\_\_\_ F \_\_\_\_\_

Type of school education received:

Private: (fee paying) \_\_\_\_\_

Public: (non-fee paying) \_\_\_\_\_

Full time student: \_\_\_\_\_

Part time student: \_\_\_\_\_

Course satisfaction:

1. If I had to choose again, I would still want to study this course.

Strongly agree Agree Disagree Strongly disagree

2. I enjoy my studies in this course.

Strongly agree Agree Disagree Strongly disagree

3. If the opportunity arises, I would like to stop this course.

Strongly agree Agree Disagree Strongly disagree

4. In general I am happy with life

Strongly agree Agree Disagree Strongly disagree

## Optimism/Happiness:

Values in Action [VIA] (Peterson & Seligman, 2004)				
1. Look on the bright side.				
Strongly agree	Agree	Neither	Disagree	S Disagree
2. Can find the positive in what seems negative to others.				
Strongly agree	Agree	Neither	Disagree	S Disagree
3. Remain hopeful despite challenges.				
Strongly agree	Agree	Neither	Disagree	S Disagree
4. Will succeed with the goals I set for myself.				
Strongly agree	Agree	Neither	Disagree	S Disagree
5. Think about what is good in my life when I feel down.				
Strongly agree	Agree	Neither	Disagree	S Disagree
6. Expect the worst.				
Strongly agree	Agree	Neither	Disagree	S Disagree
7. Have no plan for my life five years from now.				
Strongly agree	Agree	Neither	Disagree	S Disagree
8. Am not confident that my way of doing things will work out for the best.				
Strongly agree	Agree	Neither	Disagree	S Disagree

## General Health Questionnaire

The following items ask about your general health *over the past few weeks*. Please answer all the questions simply by circling or emboldening the answer that you think most nearly applies to you. Remember that we want to know about your present and recent complaints, not those you had in the past. It is important that you try to answer all the questions. [GHQ – outcome measure]

Have you recently:

1. been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2. lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3. felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4. felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5. felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
6. felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
7. been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
8. been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
9. been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10. been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

## Rosenberg Self-Esteem Scale (SES: Rosenberg, 1965).

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 am 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 towards myself                                 | SA | A | D | SD |



General perceived Self-Efficacy Scale. Schwartz & Jerusalem, 1995.

Instructions: Below is a list of statements dealing with your self-beliefs about yourself. Read it carefully and respond to each statement as it relates to you. Use the 4 point scale. You can circle any number from 1 to 4 to indicate various levels of agreement or disagreement with the statements expressed.

1=Not at all	2=Hardly True	3=Moderately True	4=Exactly True
--------------	---------------	-------------------	----------------

- |  |         |
|--|---------|
| 1. I can always solve difficult problems if I try hard enough                          | 1 2 3 4 |
| 2. If someone opposes me I can find the means and ways to get<br>what I want           | 1 2 3 4 |
| 3. I am certain that I can accomplish my goals   | 1 2 3 4 |
| 4. I am confident that I could deal efficiently with unexpected results                | 1 2 3 4 |
| 5. Thanks to my resourcefulness I can handle unforeseen situations                     | 1 2 3 4 |
| 6. I can solve most problems if I invest necessary effort                              | 1 2 3 4 |
| 7. I can remain calm when facing difficulties because I rely on<br>my coping abilities | 1 2 3 4 |
| 8. When I am confronted with a problem I can find a general solution                   | 1 2 3 4 |
| 9. If I am in trouble I can think of a good solution                                   | 1 2 3 4 |
| 10. I can handle whatever comes my way   | 1 2 3 4 |

**Brief COPE (Carver, 1997).** You have done really well – thank you. These next items deal with ways you've been coping with the stress in your life. The stress issue is the 'it' in some of the items! There are many ways to try to deal with problems. These items ask what you've been doing to cope with present stresses. Each item says something about a particular way of coping and please avoid answering on the basis of whether how you've been coping seems to be working or not—just whether or not you're doing it. Use these response choices and try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Coding categories:

1 = I haven't been doing this at all 2 = I've been doing this a little bit 3 = I've been doing this a medium amount 4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape. \*
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
  
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

## Personality Test (Costa and McCrea)

Participants respond on a Likert scale from 1-5

Strongly Agree through to Strongly Disagree

Instructions: Below is a list of statements dealing with your general feelings about yourself.  
Circle the response option that corresponds to you.

Strongly Agree = SA    Agree = A    Neither = N    Disagree = D    Strongly Disagree = SD

1. I often feel blue.	SA	A	N	D	SD
2. I dislike myself.	SA	A	N	D	SD
3. I am often down in the dumps.	SA	A	N	D	SD
4. I rarely get irritated	SA	A	N	D	SD
5. I am not easily bothered by things	SA	A	N	D	SD
6. I feel comfortable around people	SA	A	N	D	SD
7. I make friends easily	SA	A	N	D	SD
8. I have little to say	SA	A	N	D	SD
9. I keep in the background	SA	A	N	D	SD
10. I would describe my experiences as somewhat dull	SA	A	N	D	SD
11. I believe in the importance of art	SA	A	N	D	SD
12. I have a vivid imagination	SA	A	N	D	SD
13. I tend to vote for liberal political candidates	SA	A	N	D	SD
14. I am not interested in abstract ideas	SA	A	N	D	SD
15. I do not like art	SA	A	N	D	SD
16. I have a good word for everyone	SA	A	N	D	SD
17. I believe that others have good intentions	SA	A	N	D	SD
18. I have a sharp tongue	SA	A	N	D	SD
19. I cut others to pieces	SA	A	N	D	SD
20. I suspect hidden motives in others	SA	A	N	D	SD
21. I am always prepared	SA	A	N	D	SD
22. I pay attention to details	SA	A	N	D	SD
23. I get chores done right away	SA	A	N	D	SD
24. I waste my time	SA	A	N	D	SD
25. I do just enough work to get by	SA	A	N	D	SD

**Participant information sheet.**

Study title – Validating a questionnaire on sources of stress in college students.

My name is Gary Ross. I am a final year psychology student at Dublin Business School. I am interested in the stress of college students and this is partial fulfillment of the requirements for the BA (Hons) degree in Psychology. The aim of this project is to try and enhance our understanding of the sources of stress that you have experienced while you have been a college student and the affect they have had on your well-being. We would like to invite you to take part in a questionnaire that looks at sources of stress and some of the effects of stress. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. Your participation in completing the questionnaire is entirely voluntary and all your responses are anonymous. The results will be used to improve our understanding of stress in students and the steps that could be taken to reduce distress. All the students in your year group have been invited to take part. The questionnaire measures the different sources of stress experienced while you have been a student and some of the effects of stress. The questionnaire will take approximately 10 minutes to complete. All the results are anonymous and in this study you are being tested only once. Previous research using questionnaires has found that participants tend not to find the experience distressing. All the information that you consent to provide is treated in strictest confidence and will be held securely. Once the results have been analysed for the purposes of this study they will be destroyed. It is not our intention that you find completing the questionnaire a source of distress but if you do then please stop. If you experience distress related to the study at any time during or afterwards or if there is anything you do not understand or if you would like more information please contact [REDACTED]. However, it is not our intention that the experience is one that will be uncomfortable or distressing.

This study has been reviewed and approved by the Ethics Committee of DBS. Finally, do please ask if there is anything that is not clear or if you would like more information and take time to decide whether or not you wish to take part.