“The relationship between self-efficacy, social anxiety, personality types and strong anxious reactions in a non-clinical sample of undergraduate students”

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Department of Psychology
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“The relationship between self-efficacy, social anxiety, personality types and strong anxious reactions in a non-clinical sample of undergraduate students”

Abstract

A study based on the National Co morbidity Survey Replication (NCS-R) which consisted of 9,282 English speaking U.S respondents found that panic attacks have a lifetime prevalence estimate of 22.7% (Kessler et al, 2006). The predictor variables of self-efficacy, social anxiety and personality types were chosen on the basis that they have been found to be significant in relation to individuals suffering from panic attacks in previous studies. This study looked at these variables collectively to determine if the same variables would correlate with strong anxious reactions in a non-clinical sample of undergraduate students (n=100). Independent samples t-test found a significant positive relationship between social anxiety and having a strong “anxious reaction”. A Pearson’s correlation also showed a significant negative relationship between self-efficacy and social anxiety (r = -.516, df = 98, p = < .01). Discussed is the relationship between self-efficacy, personality and social anxiety in relation to anxious reactions, this study also looks at relationships between these variables.

Introduction

Mental health is an integral and essential component of health. The World Health Organisation constitution states that “Health is a state of complete physical, mental and social
well-being and not merely the absence of disease or infirmity." (World Health Organization, 1946). An important consequence of this definition is that mental health is described as more than the absence of mental disorders or disabilities, thus addressing the importance of positive mental health.

Mental health is a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual well-being and the effective functioning of a community. This is one of many definitions of mental health. Concepts of mental health include, for example, the ideas of subjective well-being, personal autonomy, and the ability to realise one’s potential in life (A Vision for Change, 2006). The following definition of mental health highlights the importance of mental health not only to the individual but to the wider community.

Multiple social, psychological and biological factors determine the level of mental health of a person at any point of time. Certain factors have been recognised as posing risks to mental health such as persistent socio-economic pressures, clear indicators of poverty and low levels of education. Poor mental health is also associated with rapid social change, stressful work conditions, gender discrimination, social exclusion, unhealthy lifestyle, risks of violence, physical ill-health and human rights violations. There are also specific psychological and personality factors that make people vulnerable to mental disorders. Lastly, there are some biological causes of mental disorders including genetic factors and imbalances in chemicals in the brain (World Health Organization, 2004).

There is growing evidence of the global impact of mental illness. Mental health problems are among the most important contributors to the burden of disease and disability worldwide. Five of the 10 leading causes of disability worldwide are mental health problems. They are as relevant in low-income countries as they are in rich ones, cutting across age,
gender and social strata. ) A reported 11% of Irish people said they had personally experienced a mental health problem. (“Mental Health in Ireland, Awareness and Attitudes”, 2007). Furthermore, all predictions indicate that the future will see a dramatic increase in mental health problems worldwide (World Health Organisation, 2000).

Behaviour that is indicative of poor mental health may be defined as abnormal behaviour. Abnormal behaviour is however culturally dependent and not universally agreed (i.e. behaviours such as sacrificing animals to the gods), thus both personal and social judgements of behaviour enter into consideration of what is abnormal. Abnormal behaviour is defined as behaviour that is personally distressing, personally dysfunctional and/or so culturally deviant that other people judge it to be inappropriate or maladaptive. This definition is often covered under “The Four D’s” – deviance, distress, dysfunctional, dangerous. One such psychological state that can be described as particularly distressing for the individual experiencing it is anxiety.

### Definition of Anxiety

Anxiety is a natural part of human experience it is a state of tension and apprehension that is a natural response to perceived threat. Anxiety responses have four components: (1) a subjective-emotional component, including feelings of tension and apprehension; (2) a cognitive component, including worrisome thoughts and a sense of inability to cope; (3) physiological responses, including increased heart rate and blood pressure, muscle tension, rapid breathing, nausea, dry mouth, diarrhoea and frequent urination; and (4) behavioural responses, such as avoidance of certain situations and impaired task performance (Barlow, 2002).
**Definition of Anxiety Disorder**

In anxiety disorders, the frequency and intensity of anxiety responses are out of proportion to the situations that trigger them, and the anxiety interferes with daily life. Anxiety disorders take a number of different forms, including phobic disorder, generalized anxiety disorder, panic disorder, social anxiety disorder and many more (Passer et al, 2009). What the myriad of anxiety disorders have in common is a state of increased arousal or fear (Barbee, 1998). Anxiety disorders often are conceptualized as an abnormal or exaggerated version of arousal (Barlow, 2002).

**Prevalence**

Anxiety disorders are the most common mental illnesses worldwide (Andrews, Henderson, & Hall, 2001; Demyttenaere et al., 2004; Wittchen & Jacobi, 2005). A study based on the National Co morbidity Survey Replication (NCS-R) which consisted of 9,282 English speaking U.S respondents using face-to-face household survey utilising the fully structured WHO Composite International Diagnostic Interview (CIDI) found that panic attacks (PA) have a lifetime prevalence estimate of 22.7% for isolated panic without agoraphobia (panic attacks only), 0.8% for panic attacks with agoraphobia (AG) without panic disorder (panic attacks-agoraphobia), 3.7% for Panic Disorder without Agoraphobia (panic disorder only) and 1.1% for Panic Disorder with Agoraphobia. (Panic disorder-Agoraphobia). (Kessler RC, Chiu WT, Jin R, Ruscio AM, Shear K, Walters EE, 2006). It is unclear as to whether socio-economic status affects anxiety although “low” socio economic status has been found to increase susceptibility to depression. One such study conducted on the population of Stirling County, Atlantic Canada, indicated that during the 1950s and 1960s the prevalence of depression was significantly and persistently higher in the "low" socioeconomic status population than at other socioeconomic status levels. Anxiety was found to show a less clear
picture (Murphy et al, 1991).

The study of anxiety disorders and their treatment expanded steadily in the 1970s and 1980s; the National Institute of Mental Health dubbed the 1980s the "decade of anxiety" (e.g., Rachman & Maser, 1988; Tuma & Maser, 1985). The increasing prevalence of anxiety disorders provides justification for this study, as although this study does not look at anxiety disorders in a clinical sample it intends to investigate if the same variables correlate with anxious reactions- possibly indicating an increase in the vulnerability towards an anxiety disorder.

**Effects of Anxiety Disorders**

People who suffer from panic attacks are more likely to be unemployed, less productive at work, and to have difficult personal relationships, including marital problems (The Health Central Network, 2009). Anxiety disorders are associated with varied adverse outcomes, including school dropout, development of other disorders such as major depression, and suicide (Katzelnick et al., 2001; Pine et al., 1998; Stein & Kean, 2000). Panic disorder and agoraphobia, particularly, are associated with increased risks of attempted suicide (Hornig & McNally, 1995; American Psychiatric Association, 1998).

Despite the high prevalence of panic attacks in society sufferers may not seek professional help, may receive incorrect diagnoses, or have symptoms of anxiety confused with medical complaints, especially cardiac complaints (Leon et al. 1995; Wang et al. 2005). The prevalence of inefficient treatment is also a worrying factor in the overall scheme of this disorder as panic attacks, although often disabling are eminently treatable (Kessler et al. 2005, 2007; NCS-R 2007).
According to the National Comorbidity Survey Replication the 12 month prevalence rate for any mental disorder or substance disorder is 32.4%, of the four sub-groups of mental disorders (including substance abuse) anxiety disorders account for the highest rates of mental disorders (as characterized by the DSM – IV) with a prevalence of 19.1%. This figure has risen from earlier research on the prevalence of anxiety disorders, which stated that the prevalence of anxiety disorders was over 16% over a 1 year period in adults aged 18-54 years (Regier et al., 1990; Goldberg & Lecrubier, 1995; Magee et al., 1996), confirming that anxiety disorders are increasing and thus justifying the basis for this study.

**Previous Research on Predictor Variables**

**Self –Efficacy**

Self-efficacy expectancies refer to our expectation regarding our abilities to cope with the challenges we face, to perform certain behaviour skilfully and to produce positive changes in our lives (Bandura,1982,1986). We may be able to manage stress, including the stress of coping with illness, if we feel confident in our ability to cope effectively. Because high self-efficacy expectancies appear to be associated with lower secretion of stress hormones, people who believe they can cope with problems may be less likely to feel nervous. Health psychology and medicine have uncovered the possible causes of anxiety and stress in the deterioration of the body, such as the activation of the sympathetic nervous system. This arousal activates the secretion of adrenalin and noradrenalin which causes changes in factors such as blood pressure, heart rate, sweating and pupil dilation and is expressed as a feeling of arousal. Therefore self-efficacy not only affects an individual’s level of anxiety but their response to stress.
One study examined a possible relationship between self-efficacy and symptoms of affective disorders in a large sample of normal adolescents (n=596). Results showed that low levels of self-efficacy generally were accompanied by high levels of trait anxiety/neuroticism, depressive symptoms and anxiety disorder symptoms. Furthermore, some support was found for the notion that specific domains of self-efficacy are especially associated with particular types of anxiety problems. That is, social self-efficacy was most strongly connected to social phobia, academic self-efficacy to school phobia, and emotional self-efficacy to generalised anxiety and panic/somatic. When controlling for trait anxiety/neuroticism, self-efficacy still accounted for a small but significant proportion of the variance of symptoms of anxiety disorders (Muris,P, 2002).

Another such study also carried out on adolescents found that contingency-competence-related beliefs were inter correlated and that these beliefs, in turn, were significantly associated with symptoms of anxiety and depression. (Muris,P,2003). Thus previous research indicating a relationship between self-efficacy and anxiety support one of this study’s hypotheses that low levels of self-efficacy will correlate with having experienced a strong anxious reaction. The “General Self–Efficacy Scale” will be utilized to measure the variable of self-efficacy.

**Personality**

Previous research has shown that certain personality traits correlate with anxiety. Previous research indicates temperament to be a contributing factor to panic attacks, similar to that of a strong anxious reaction which this study seeks to investigate. Rapee and colleagues reasoned that a number of putative risk factors for anxiety disorders may be indexed or moderated/mediated by inhibited temperament (Rapee, 2002; Rapee et al., 2005).

Both McNally (1990) and Reiss (1991) have proposed anxiety sensitivity as a personality construct that constitutes a risk factor for the development of anxiety disorders.
Both theorised that neuroticism and anxiety sensitivity may be seen in hierarchical relation to each other (McNally, 1990, Reiss, 1991).

In addition, lower-order facets of extraversion, agreeableness, and conscientiousness were associated with certain disorders i.e. panic disorder (Bienvenu et al, 2001). This finding also supports the criterion variable of “a strong anxious reaction” in relation to the predictor variable of personality types.

One particular study’s findings indicated that personality, in particular the combination of high neuroticism and low extraversion, may play an important predisposing, etiological role in anxiety (Gershuny, Beth. Sher, Kenneth, 1998). Social phobia and agoraphobia, were also associated with low extraversion, whilst neuroticism in particular was related to acuity of disorder (Bienvenu et al, 2004). This finding in relation to social phobia supports one of this study’s hypothesis in relation to scores of low extroversion and high neuroticism on the “Big Five Inventory” will correlate with having experienced a strong reaction of anxiety.

**Gender**

There are demographic differences in regards to prevalence of anxiety disorders in various countries, however the rates were higher in female than male subjects in all countries (Myrna M. Weissman et al, 1997). Women are twice as likely to have an anxiety disorder as men. Anxiety disorders also occur earlier in women than in men. The brain system involved in the fight-or-flight response is activated more readily in women and stays activated longer than men, partly as a result of the action of estrogen and progesterone. (Anxiety Disorders Association of America, 2010).
While both men and women with anxiety disorders often receive suboptimal treatment, this is especially true for women. Women are more likely to receive benzodiazepines and are less likely to avail themselves of other effective pharmacological or psychological treatments (van der Waals et al. 1993). These previous findings justify the analyses of gender in one of this study’s hypothesis – more women than men will report having experienced a strong anxious reaction than men will.

**Age**

This study is utilizing undergraduate students as the early onset of this disorder is also a troubling factor with the onset median age of anxiety disorder being 11 years of age. 75% of sufferers of panic disorder develop the condition between the ages 6-21 years (Kessler et al, 2005).

**Social Anxiety**

Social anxiety is a marked and persistent fear of one or more social and performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. Usually the individual fears that he or she will be humiliated or embarrassed. According to Clark's model (Clark & Wells, 1995; Clark, 2001), social anxiety and phobia in adults is maintained through a vicious cycle. Throughout ontogeny, the individual seems to acquire a set of dysfunctional assumptions about the significance of social situations. These include: excessively high personal standards for their social performance; conditional beliefs concerning the consequences of performing in a certain way; and unconditional negative beliefs about the self.
When avoidance of a social situation is not possible, the exposure to the social situation provokes anxiety, sometimes to the intensity required to induce a panic attack. The manifestation of these symptoms interferes significantly with the daily living of the individual, bringing disruption of both social and professional life. Frequently feared situations include public speaking, going to parties, meeting strangers and talking to people in authority (Holt, Heimberg, Hope, & Liebowitz, 1992). Social anxiety is defined as anxiety that results from the prospect or presence of personal evaluation in real or imagined social situations (Schlenker & Leary, 1982).

This social anxiety can become so intense due to the fear of an intense anxious reaction, that the individual begins to avoid social situations altogether. This social avoidance can develop into an extremely co-morbid and debilitating disorder known as agoraphobia.

For 3 to 4% of us, social anxiety causes significant impairment and reduces the quality of life by inhibiting friendship development and career advancement (Safren, Heimberg, Brown, & Holle, 1997; Schneier et al., 1994). Multiple paradigms and methodologies have shown that adults suffering from social anxiety disorder also manifest atypical processing of faces, particularly when emotional expressions are involved.

Social anxiety has been found to be a contributing factor and often a primary cause of panic attacks. Thus this finding produces the basis of the variable of “social anxiety” in this study to determine if there is a link between social anxiety and intense periods of anxious reactions such as previous findings have suggested in regard to panic attacks. The “Interactions Anxiousness Scale” will be utilized as a measurement of social anxiety within this study.

Previous research on Criterion Variables

Strong Anxious Reaction
Participants will be given a brief definition of what a strong reaction of anxiety consists of such as: “A discrete period of intense fear or discomfort accompanied by palpitations, sweating, trembling, shortness of breath, chest pain, nausea, dizziness or light-headedness. The attack usually has an abrupt onset, building to a maximum intensity within 10 to 15 minutes. Most people report a fear of dying, “going crazy” or losing control of emotions or behaviour.” This criterion variable seeks to indicate if participant’s anxiety is experienced so strongly that it begins to take the form of a physiological experience.

**Aims of current study**

Anxiety, although often unpleasant, is a natural part of human experience. However for some it is experienced so intensely and frequently that it becomes immensely distressing. Although it is hard to imagine for most of us, anxiety can become so disruptive to one’s life that it results in sudden onsets of attacks in certain individuals- often referred to as anxiety attacks. For those who experience these episodes of severe anxiety normal day to day demands become increasingly difficult. An individual that experiences anxiety to this intensity may begin to adjust their behaviour in order to avoid any situation that may bring on such feelings of severe anxiety. Often for those who suffer from excessive anxiety social situations can often be a trigger for intense episodes of anxiety. In such circumstances the anxiety a social situation may present is often referred to as social anxiety – which can also develop into social phobia resulting in a complete avoidance of any social situation however big or small. This behaviour however can become increasingly restricted to the point where an individual experiencing it can no longer leave their home- a disorder often referred to as agoraphobia.
Studies carried out on anxiety and social anxiety, have determined various factors which may predict a vulnerability to such disorders. It is the intention of this study to investigate if these previously studied variables, correlate with “strong anxious reactions” in this sample. Although previous research exists in relation to anxiety it is mostly concentrated on clinical samples suffering from anxiety disorders. Many of these studies do not concentrate on anxiety disorders exclusively; many of them look at anxiety disorders with other co morbid disorders such as depression. This study seeks to investigate if these same variables which predict a vulnerability to these disorders – display high levels of anxiety in a non-clinical sample. A better understanding of the specific relationship among these variables could lead to more efficient education of the possible complications that could possibly arise from strong reactions of anxiety.

This study intends to look at anxiety with a particular interest in anxious reactions in relation to age, gender, social anxiety, self-efficacy and personality types. These variables have all been justified for this study by pervious research on anxiety disorders. Extroverted personality types, low levels of self-efficacy and high levels of social anxiety have all been found to correlate with high levels of anxiety and predict an increased vulnerability to developing an anxiety disorder such as panic disorder, social anxiety or agoraphobia. It is the intent of this study to investigate the variables which predict an increased risk of anxiety disorders, to determine if they may also correlate with strong experiences of anxiety- not at the level of an actual anxiety disorder but never the less accompany physiological sensations of a particular anxious experience similar to that of an individual suffering from a clinical diagnosis of an anxiety disorder.
**Hypothesis**

- Levels of social anxiety will be higher in those who have experienced a “strong anxious reaction”.
- There will be a significance in gender in relation to “strong anxious reactions”.
- Certain personality traits such as neuroticism and extraversion a will correlate significantly with having experienced a “strong anxious reaction”.
- Low levels of self-efficacy will correlate with having experienced a “strong anxious reaction”.
Method

Materials

This study used a paper and pencil questionnaire, which included questions on a range of topics, related to self-efficacy, social anxiety and personality types. A brief question was devised on “anxious reactions” and provided a definition of what an “anxious reaction” consisted of. Participants were asked if they had ever experienced such a reaction, and if so in what kind of situation did it occur? And how many had they had over the previous 12 months?

The questionnaires utilized in this study were “The Ocean’s Big Five” personality questionnaire (BFI), The “General Self-Efficacy” questionnaire (GSE) and the “Interactions Anxiousness Scale” (IAS) questionnaire.

The following definition was given in relation to a strong anxious reaction: “A discrete period of intense fear or discomfort accompanied by palpitations, sweating, trembling, shortness of breath, chest pain, nausea, dizziness or light-headedness. The attack usually has an abrupt onset, building to a maximum intensity within 10 to 15 minutes. Most people report a fear of dying, “going crazy” or losing control of emotions or behaviour.”

Participants were asked to respond either “yes” or “no” to having experienced such a reaction of anxiety. “What kind of situation where you in when you experienced this reaction?” to determine whether the situation was social, private or both.

Following this question participants were asked “how many of these kind of reactions have you experienced in the last 12 months?”.
Apparatus

Pen or pencil to fill out the questionnaire.

Participants

Participants were obtained from a non-clinical sample of undergraduate psychology students from Dublin Business School. Undergraduates studying psychology were selected on the basis that students seeking to become mental health practitioners should themselves be mentally in good health. Participants were also chosen on the basis of their age. This study seeks to analyze the possible variables which may correlate with strong anxious reactions. These variables where selected on the basis that they have been linked with anxiety disorders in previous research and clinical observations. Anxiety disorders are usually early in onset with the median age being 11 years old (Kessler et al, 2005). It was determined that undergraduate students would be the most appropriate participants to administer these non-clinical measurements to, as they are of a consenting age and may not be as vulnerable a population as a younger sample might be. Permission was granted to access this sample through psychology lecturers of undergraduate students. Participants (n=100) will be asked to fill out a questionnaire pack and informed that they can stop at any given time.

Design

This study was quantitative in nature, implemented through a cross sectional survey,
which was descriptive and retrospective in design. The focus was on undergraduate students who were examined in relation to whether they had experienced a “strong anxious reaction” in the past 12-months. The predictor variables for this study were personality types, self-efficacy and social anxiety. The criterion variable was a “strong anxious reaction”, how many of these “strong anxious reactions” over the past 12-months was also tentatively explained as an additional criterion variable. The demographic factors of age and gender may affect the outcome of this study.

Procedure

Self administered questionnaires were handed out to 100 undergraduate students studying psychology in Dublin Business School and University College Dublin. Students were asked to fill out the questionnaire and informed they could withdraw at any time. 60 questionnaires were administered to first year psychology students of which 58 were completed, 40 questionnaires were administered to final year psychology students of which 36 were filled out. A remaining 6 questionnaires were handed out to undergraduate psychology students in University College Dublin. The questionnaire took approximately 5 minutes to complete. A description was given of what the research entailed was given and participants were reassured that their answers would remain anonymous.

References central to study


• Shearer (2007), Recent Advances in the Understanding and Treatment of Anxiety Disorders, Prim Care Clin Office Pract 34 (2007) 475–504

• Moree (2007), The Relationship among self-efficacy, negative self-statements, and social anxiety in children: a mediation, Clemson University

Results
Descriptive Statistics

Participants consisted of (n=42) males and (n=58) females. Chi-square found that there was no significant difference between male and females in regards to “anxious reactions” ($x^2 = .246$, df =1, $p=.682$) illustrated in table 1.1, therefore resulting in the rejection of the hypothesis “There will be a significance in gender in relation to “strong anxious reactions”.

Table 1.1

<table>
<thead>
<tr>
<th>Anxious Reactions</th>
<th>&quot;yes&quot;</th>
<th>“No”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>

Reported in Table 1.2, is an independent samples t-tests used to determine if there was statistical significance in the mean scores between gender and number of anxious reactions in the last 12 months. The mean scores of males and number of anxious reactions (M=13.05, SD=25.32) did not vary significantly ( $t=.454$, df=36 , two-tailed, $p=.652$) from females and number anxious reactions (m=10.23, SD=11.78). Nor did a Mann-Whitney U test find any significant difference between gender and number of “anxious reactions” (U= 141.5, n1=17,n2=23, two-tailed, $p=.137$).
Table 1.2  

<table>
<thead>
<tr>
<th>Measure</th>
<th>Male</th>
<th>SD</th>
<th>Female</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of anxious reactions</td>
<td>13.05</td>
<td>25.3</td>
<td>10.23</td>
<td>11.78</td>
<td>.454</td>
</tr>
</tbody>
</table>

In the last 12 months

An independent samples t-test found that there was a weak negative relationship between anxious reactions and self-efficacy, \( t = -2.988, \text{df} = 98, \text{two tailed,} \ p = .004 \) with the mean scores of those who had had an anxious reaction (m=28.07, SD=5.8) compared to those who had not had an anxious reaction (m=31.11, SD=4.3) as illustrated in table 1.3.

Table 1.3
Another independent samples t-test was conducted to determine if there was a statistical difference between levels of social anxiety between those who answered “yes” to an “anxious reaction” and those who answered “no”. An independent samples t-test found that among those who had experienced an “anxious reaction” (M=46.57,SD=10.41) levels of social anxiety were significantly higher (t=4.50, df=98, two-tailed, p=.001) than among those who had not experienced an “anxious reaction” (M=37.30,SD=9.12) It would appear from this finding that people who experience episodes of intense anxiety are also more anxious in social situations than those who do not experience these intense episodes of anxiety as illustrated in table 1.4. Thus allowing the acceptance of the hypothesis “levels of social anxiety will be higher in those who have experienced a strong anxious reaction”

<table>
<thead>
<tr>
<th>Measure</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of anxious reactions</td>
<td>13.05</td>
<td></td>
<td>10.23</td>
<td>11.78</td>
<td>.454</td>
<td>.652</td>
</tr>
</tbody>
</table>

In the last 12 months

*Table 1.4*

**Anxious Reaction**

<table>
<thead>
<tr>
<th>“yes” group</th>
<th>“no” group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Mean</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>46.57</td>
</tr>
</tbody>
</table>

A Pearson’s correlation found a strong negative relationship between social anxiety and self-efficacy ($r = -0.516, df=40, p=.001$). This would suggest as levels of self-efficacy decrease levels of anxiety increase. Pearson’s correlation also showed a weak positive relationship between levels of self-efficacy and extraversion ($r=.205, df=98, p=.041$). Suggesting that the more inhibited one feels the less extraverted he or she is. A weak positive relationship was found between neuroticism and social anxiety ($r=.218, df=98, p=.041$), which correlates with previous research which found social phobia was positively and moderately correlated with introversion and neuroticism (Heiser, Turner, Beidel, 2002). A moderate positive relationship was also found between agreeableness and extroversion ($r=.329, df=98, p=.001$). A strong positive relationship was found between conscientiousness and self-efficacy ($r=.432, df= 98, p,.01$).
### Pearson’s correlation

<table>
<thead>
<tr>
<th></th>
<th>Self</th>
<th>social</th>
<th>Extraver</th>
<th>Agreeable</th>
<th>Conscienti</th>
<th>Neurotic</th>
<th>Openness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>efficacy</td>
<td>66</td>
<td>-0.516</td>
<td>0.205</td>
<td>0.224</td>
<td>0.432</td>
<td>-0.002</td>
<td>0.339</td>
</tr>
<tr>
<td>anxiety</td>
<td>97</td>
<td>0.205</td>
<td></td>
<td>-0.038</td>
<td>-0.154</td>
<td>0.218</td>
<td>-0.292</td>
</tr>
<tr>
<td>Extraver</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sion</td>
<td>68</td>
<td>0.224</td>
<td>-0.01</td>
<td>0.329</td>
<td>0.381</td>
<td>0.315</td>
<td>-0.197</td>
</tr>
<tr>
<td>Agreeable</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eness</td>
<td>51</td>
<td>0.432</td>
<td>-0.038</td>
<td>0.329</td>
<td>0.441</td>
<td>0.526</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>conscien</td>
<td></td>
<td></td>
<td>tious</td>
<td>89</td>
<td>-0.002</td>
<td>-0.154</td>
</tr>
<tr>
<td>-------</td>
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Discussion

A large number of participants reported having experienced an episode of strong anxiety with 40% having answered that they had experienced “a strong anxious reaction” in response to the definition given, which included physiological symptoms such as “shortness of breath, dizziness etc.”. This finding mirrors similar research conducted on an undergraduate sample which found that 40% of all young adults have occasional panic attacks, especially during times of intense stress, such as exams week (King, Gullone & Tonge, 1993). Previous research suggests in relation to panic attacks, 10% of the population will experience an isolated case in a given year (U.S surgeon general’s report, 1999). This study focused on anxious reactions in relation to variables associated with panic attacks, to determine if the same variables previously correlated with panic attacks would also correlate with strong anxious reactions in a non-clinical sample. To establish the importance of each variable, variables where looked at individually in relation to the criterion variable “anxious reaction”, to determine if there was a relationship between each predictor variable and the criterion variable.

Validity of questionnaires

The questionnaires used were as follows: “The Big Five Inventory” (John, Donahue & Kently, 1991) was used to measure personality traits, often referred to as the Ocean’s Big Five Personality questionnaire the BFI measures openness, conscientiousness, extraversion,
agreeableness and neuroticism. Openness includes traits like having wide interests, and being imaginative and insightful, conscientiousness includes traits like organized, thorough, and planful, extraversion the broad dimension of extraversion encompasses such more specific traits as talkative, energetic, and assertive, agreeableness includes traits like sympathetic, kind, and affectionate, and finally neuroticism includes traits like tense, moody, and anxious. The Big Five personality factors have been accepted widely in the literate on personality for a number of years (John, 1989, 1990), and many researchers have argued that no assessment of personality is complete without measuring these five basic factors (Aguilar, Kaiser, Murray, & Ozer, 1998).

The “General Self-Efficacy” scale (Yildirim, LLtan, 2010) was used to measure levels of self-efficacy in participants; Research on the validity of the General Self-Efficacy Scale has determined it is a valid and reliable instrument for the assessment of general self-efficacy in individuals (Yildirim, LLtan, 2010).

The “Interactions Anxiousness Scale”(Leary,1983) was used to measure social anxiety, The IAS demonstrates high test-retest and internal reliability. Correlations with measures relevant to social and general anxiety document its convergent and discriminant validity, and it correlates well with measures of anxiety and interpersonal concern in actual interactions (Leary & Kowalski, 1993).

**Gender in relation to anxious reactions**

Gender was first looked at in accordance with previous research findings that females are twice as likely to suffer from anxiety attacks and anxiety disorders (Van der Waals et al,1993), however a Pearson’s chi-square did not find any statistical significance between
gender and “anxious reactions” ($x^2=.246$, df=1, $p=.620$). Participants consisted of 42% males of which 18% answered “yes” to having a “strong anxious reaction” and 24% answered “no”. 58% of participants were female to which 22% answered that they had experienced a “strong anxious reaction” and 36% answered “no”. This finding resulted in the rejection of the hypothesis “there will be significance in gender in relation to strong anxious reactions”. It is unclear as to why previous research findings in relation to gender where not found in this study, however one possible reason may be that the sample size of this research study was relatively small.

**Self-efficacy in relation to anxious reactions**

Previous research indicates a strong genetic component in panic attacks and panic disorder, Family and twin studies suggest that it is a genetic disorder and transmission patterns within families are compatible with a hypothesis of a disease gene predisposing to the condition (Crowe, 2002). Future recommendation for studies on non-clinical samples studying reactions in relation to anxiety similar to panic attacks may consider asking participants if a family member has suffered from strong reactions of anxiety. Future research may be able to determine if strong anxious reactions may also have a hereditary component as in panic attacks. However possible future research should also consider anxious reactions possibly containing a conditioned component, as there seems to be a prominent lack of this kind of research. Such previous research has considered a conditioning component, building on the work of early theorists such as Ivan Pavlov (1927), Watson (J. B. Watson & Rayner, 1920), and later Mowrer (1947) and Solomon (e.g., Solomon, Kamin, & Wynne, 1953). Unfortunately, enthusiasm for this work on the part of psychopathology research began to wane in the 1970s as criticisms of the applicability of this earlier work to human neuroses mounted (Rachman, 1977,1990). In one such study the authors propose that panic disorder develops because exposure to panic attacks causes the conditioning of anxiety (and sometimes panic) to
exterceptive and interoceptive cues. This process is reflected in a variety of cognitive and
behavioural phenomena but fundamentally involves emotional learning that is best accounted
for by conditioning principles (Barlow, 2001). According to studies conducted by The National
Institute of Mental Health, fearful experiences or traumas can condition a person to respond
excessively to situations in which most people would not experience fear. This is a learned fear
response (NIMH 2000). It is widely accepted that panic attacks have a large genetic component
with one such study’s results locating genes on chromosome 13q, and possibly on chromosome
22 as well, that influence the susceptibility toward a pleiotropic syndrome that includes panic
disorder (Hamilton et al, 2002). Previous research has found that parental panic disorder-
agoraphobia, either alone or comorbidly with manic depressive disorder, increases the risk for
both anxiety and depressive disorders in offspring (Biederman et al, 1991). Susceptibility to
panic disorder is moderately hereditary, but etiology is multi-factorial, including adverse early
experiences that may sensitize an individual to feelings of being overwhelmed or loss of
control. Components of the fear-conditioning process and temperamental ‘‘anxiety sensitivity’’
(i.e., fearful response to anxiety symptoms) both seem to aggregate in families. Panicky arousal
and compelling symptoms that occur in the context of such pre-existing vulnerabilities may
initiate a vicious cycle. In short, fearful self-monitoring and efforts to control or avoid panicky
arousal that is deemed dangerous only escalate panic proneness (Shearer, 2007).

Previous research has also found the rates of behavioural inhibition in children of
probands with panic-disorder agoraphobia, with or without co morbid major depressive
disorder (MDD), were significantly higher than for our comparison group without panic
disorder agoraphobia (Rosenbaum et al, 1988). Which may suggest that children of inhibited
anxious parents, may come to learn that they too have little psychological control over their
life.

This research supported the findings of this study, which found self-efficacy amongst
those who had strong anxious reactions (m= 28.07, SD =5.8) were slightly lower (t=-2.98, df=98, two-tailed, P= .004) than those who hadn’t (m=31.11, SD=4.3). This finding also correlates with previous literature that showed that low levels of self-efficacy generally were accompanied by high levels of trait anxiety/neuroticism and anxiety disorder symptoms (similar to “strong anxious reactions”) (Muris,2002). Cognitive CBT appears to be both efficacious and effective in the treatment of anxiety disorders, which often works to modify self-efficacy in patients suffering from anxiety and depression (Otte, 2011).

However although a weak significant correlation was found between self-efficacy and having had an “anxious reaction” Pearson’s correlation found no significant relationship between self-efficacy and number of “anxious reactions” (r=.247, df = 40 , p< .001). Which shows that self-efficacy is related to anxious reactions but not necessarily the frequency of anxious reactions. This finding shows a need for more research on levels of self-efficacy in relation to the severity of anxious reactions. Such research may possibly determine if varying levels of self-efficacy correlate with varying severity and frequency of anxious reactions.

**Social anxiety in relation to anxious reactions**

Social anxiety was also analyzed in relation to anxious reactions, an independent samples t-test found that those who had experienced an “anxious reaction” (M=46.57,SD=10.41) levels of social anxiety were significantly higher (t=4.50, df=98, two-tailed,p=.001) than those who had not experienced an “anxious reaction”(M=37.30,SD=9.12). This finding correlates with previous research which illustrates that individuals with high levels of social anxiety have an increased vulnerability to panic attacks. Individuals who are high in social anxiety usually try to avoid social situations however when avoidance of a social situation is not possible, the exposure to the social situation provokes anxiety, sometimes to the
intensity required to induce a panic attack. (Hold, Heinberg, Hope & Liebowitz, 1992).
Social anxiety is a marked and persistent fear of one or more social and performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. Usually the individual fears that he or she will be humiliated or embarrassed. According to Clark's model (Clark & Wells, 1995; Clark, 2001),

One such study has also found the likelihood of having responded to treatment (defined by a CGI rating of improvement) was more than twice as high for patients without a personality disorder or social phobia than for Patients with a personality disorder or social phobia (Berger et al,2003). The presence of social anxiety in people who suffer from strong anxious reactions is a particularly worrying factor in about half of cases, panic disorder includes attribution of possible panic to particular places or situations (eg, driving, crowds, flying, enclosed places), often with significant avoidance, it is designated as panic disorder with agoraphobia. The DSM-IV-TR portrays agoraphobia as a complication of panic disorder (Shearer,2007) Evidence indicates that it is the most prevalent clinical phobic disorder with age of onset in the mid- to late-twenties. It primarily affects women with no particular socioeconomic distinctions. (Tearnan, Telek, Keefe,2004).

However it is unclear from current research whether social anxiety causes anxious reactions or if anxious reactions precipitate social anxiety. Further study in regards to cause and effect may increase insight into treatment and possibly indicate vulnerability to anxious reactions or actual panic attacks.

**Personality in relation to anxious reactions**

A weak positive relationship was found between neuroticism and social anxiety
(r= .218, df=98, p= .041), which correlates with previous research which found social phobia
was positively and moderately correlated with introversion and neuroticism (Heiser, Turner,
Beidel, 2002). Both McNally (1990) and Reiss (1991) have proposed anxiety sensitivity as a
personality construct that constitutes a risk factor for the development of anxiety disorders.
Both theorised that neuroticism and anxiety sensitivity may be seen in hierarchical relation to
each other (McNally, 1990, Reiss, 1991). In addition, lower-order facets of extraversion,
agreeableness, and conscientiousness were associated with certain disorders i.e. panic
disorder (Bienvenu et al, 2001). This finding also supports the criterion variable of “a strong
anxious reaction” in relation to the predictor variable of personality types.

One particular study’s findings indicated that personality, in particular the combination
of high neuroticism and low extraversion, may play an important predisposing, etiological role
in anxiety (Gershuny, Beth. Sher, Kenneth, 1998). Social phobia and agoraphobia, were also
associated with low extraversion, whilst neuroticism in particular was related to acuity of
disorder (Bienvenu et al, 2004).

A moderate positive relationship was also found between agreeableness and extroversion
(r= .329, df=98, p= .001). Which could be interpreted that the more well adjusted an individual
is the more incline they are to be sociable.

A Pearson’s correlation showed a significant negative relationship between self-efficacy
and social anxiety (r= -.516, df = 98, p = .01). As a part of people’s beliefs and expectations of
themselves self-efficacy plays an important role in the development and maintenance of social
anxiety. Global self-efficacy (also known as general self-efficacy which this study) refers to
more general beliefs about a person’s expectations across situations whereas the more specific
term “social self-efficacy” refers to a person’s belief about his or her capability to accurately
perform in a social situation (Shelton, 1990). Research has suggested that global and specific
self-efficacy often interact with one another to influence a person’s beliefs (Shelton, 1990). Therefore, it is important to examine both global self-efficacy and specific self-efficacy to understand how self-efficacy influences social anxiety. Bandura defined self-efficacy as “the conviction that one can successfully execute the behaviour required to produce the desired outcome”, the link between self-efficacy and social anxiety may lie in one’s belief that they can execute the desired behaviour in various social situations. High levels of social anxiety may correlate with believing that one can act upon the environment and that one’s action can regulate the environment. Perhaps in contrast to an individual who is low in self-efficacy who may feel as if they are passive in reacting to social cues and possibly feel as if they are powerless to alter social interactions? This lack of belief in one’s ability to navigate social situations would explain the significant negative correlation between self-efficacy and social anxiety. Some support was found for the notion that specific domains of self-efficacy are especially associated with particular types of anxiety problems. That is, social self-efficacy was most strongly connected to social phobia, academic self-efficacy to school phobia, and emotional self-efficacy to generalised anxiety and panic/somatic. When controlling for trait anxiety/neuroticism, self-efficacy still accounted for a small but significant proportion of the variance of symptoms of anxiety disorders (Muris, 2002).

This finding also correlates with previous research findings that low levels of self-efficacy are often accompanied by high levels of trait anxiety/neuroticism (Muris,2002), which was also indicated in this study through a Pearson’s correlation which showed a weak positive relationship between neuroticism and social anxiety (r= .218, df= 98, p= <.01). Self-efficacy has been linked to performance in many areas of human endeavour. Examinations of personality correlates of self-efficacy suggest that emotional stability or neuroticism is consistently related to self-efficacy.

**Limitations of the current study**
Many of the findings in this particular study have correlated with previous research on anxiety and symptoms of anxiety disorders. However this study contained certain limitations as to the confidence with which these findings can accurately resemble that of the population. The sample consisted of undergraduate psychology students who may have been familiar with the questionnaires being used. This study was restricted in that it could not ask participants whether they felt as if their anxious reaction constituted a “panic attack”. It may have been interesting to see the percentage of participants who felt they had themselves experienced a panic attack as no such study exists which ask participants if they feel their anxiety was experienced so intensely that it constituted a panic attack, rather researchers have interpreted their description to define whether or not it fits the description of a panic attack. Such a study may also reflect society’s idea of what a “panic attack” actually is. The setting of the study may also have affected participant’s answers as the questionnaires were filled out in a full classroom. 40% of participants reported that they had had a strong anxious reaction which corroborated with previous studies on undergraduate students one which in fact also reported exactly 40%, however it must be considered that undergraduate students are exposed to continuous assessments on a regular basis which usually carries a degree of pressure. This previous study noted that participants reported having these intense periods of anxiety especially during times of intense stress, such as exams week (King,Gullone & Tonge,1993). It might be interesting to see if these anxious reactions are increasing in the run up to exams in comparison to periods between exams. Furthermore 60 of the 100 participants selected for this study were freshmen students who have just navigated the transition from secondary school to college, bringing with it a whole different social setting. This transition may prove to be a factor in the prevalence of participants who cited strong anxious reactions. This study sought to investigate if the same variables associated with anxiety disorder
symptoms such as panic attacks, would also correlate with strong anxious reactions in a sample without any diagnosis. However this research was restricted in that it did not ask participants whether or not they were currently seeking help for anxiety, therefore although this study intended to determine if the variables related to anxiety disorder symptoms would also correlate with anxious reactions in a non clinical sample, it is unknown whether or not any participants have been given a diagnosis of anxiety disorder.

An undergraduate student sample may not represent the general population in that to have successfully been accepted onto 3rd level education a certain standard of intelligence and grade criteria must be met. Studies have shown a significant negative correlation between low intelligence and anxiety. One such study carried out on 10th grade children found that in complex learning these high anxious children do not perform as well as the low anxious. (McCullum, 1964). A study conducted on a sample of randomly selected participants measuring IQ scores and levels of anxiety may provide a greater confidence in the link between anxiety and intelligence.

The age of undergraduate students also fall into the age bracket at which the symptoms of anxiety disorders initially present. Half of all lifetime cases start by age 14 years and three fourths by age 24 years. Future study should seek to compile a sample of participants of varying ages and should seek to avoid outliers that may skew results.

Further studies into why many people do not seek treatment for anxiety should also be looked at, as the prevalence of inefficient treatment is also a worrying factor in the overall scheme of this disorder as panic attacks, although often disabling are eminently treatable (Kessler et al. 2005, 2007; NCS-R 2007). Many people who may feel as if their reactions of anxiety are becoming more frequent and intense may fear that the labelling associated with a possible diagnosis might bring, may prevent them from reaching out to loved ones or seeking professional help. One such study conducted by the National Institute of Health found that
perceived stigma was present in 13.5% (22.1% in developing and 11.7% in developed countries). Suffering from a depressive or an anxiety disorder (vs. no mental disorder) was associated with about a two-fold increase in the likelihood of stigma, while comorbid depression and anxiety was even more strongly associated (OR = 4.0, 95%CI = 3.1, 5.4). Chronic physical conditions showed a lower association (Alonso et al, 2008). A longitudinal study may be more insightful as to whether these variables of self-efficacy, social anxiety and personality types increase and decrease over time and if so do they effect whether individuals experience anxious reactions or the number of anxious reactions. Another recommendation is possibly the focus of coping strategies, as studies of individuals suffering from panic disorder, simple panic and no panic show that the groups differed significantly on coping, anxiety, and depression inventories and number of phobias. The panic disorder group used less problem-focused and more wishful thinking than the other groups. Within the panic disorder group, anxiety and depression were correlated negatively with problem-focused coping and positively with wishful thinking, and number of phobias was correlated negatively with the seeking of social support and positively with wishful thinking (Vitaliano et al, 1987).

**Implications of the current research**

Although there were certain limitations to this study, the present research has shown that factors which have been found to contribute to anxiety disorders analyzed in this study such as self-efficacy, social anxiety, and personality types also correlate with anxious reactions in a non-clinical sample. The recognition that these variables often accompany anxiety disorder symptoms, may be indicators of susceptibility to future development of an anxiety disorder. Early detection of these attributes by primary care givers and educationalists may provide an early window of opportunity for early intervention or even
prevention of the development of an anxiety disorder. Further education among educators, caregivers and health practitioners on the factors which contribute to anxiety disorders such as low self-efficacy and high social anxiety may provide warning signs to the possible susceptibility of individuals to anxiety disorders. Anxiety disorders can adversely affect quality of life, mobility, education, employment, social functioning, health care, and physical well being. Although the directional sequence of comorbidity varies, a primary anxiety disorder often contributes to secondary depression or substance abuse. The presence of an anxiety disorder is significantly associated with thyroid disease, respiratory disease, gastrointestinal disease, arthritis, migraine headaches and allergic conditions, and this comorbidity with physical conditions is significantly associated with poor quality of life and disability. Anxiety disorders impose a societal economic burden comparable with the cost of depression, with 54% of the cost expended for non psychiatric medical care of physical complaints. Individuals with anxiety disorders incur two fold the primary care costs and overall health care costs compared with those without anxiety disorders, even when adjusted for medical comorbidities. Anxiety is a natural part of human experience it is a state of tension and apprehension that is a natural response to perceived threat, however the general public must be made aware of the distinction between a “normal” level of anxiety and anxiety that is experienced so frequently that it becomes distressing. The variables studied in this research were found to be significant in relation to anxious reactions in a non-clinical sample, where also significant in a clinical sample. These factors therefore may benefit from monitoring in individuals who seem to react with particularly strong to anxiety, particularly in the case of school going aged children who fall into the age bracket of increased anxiety disorder susceptibility. Possible education of teachers as to warning signs of factors associated with anxiety disorder symptoms, may provide early detection and possibly even prevention of children and adolescence developing such a
disorder.

References


Dear Participants,

My name is Niamh Fitzgerald, I am a final year psychology student currently collecting data for my final year project. I would greatly appreciate if you would answer the following questions as honestly as possible.
I am conducting my research on stressful or anxious situations and the characteristics which may correlate with them.

The following questionnaires are relatively short and should take no longer than 5 minutes.

Your answers will remain completely anonymous. You can stop filling out the questionnaire at any stage, however your completion of the questionnaire would be greatly appreciated.

If you have any further questions on what the research entails please do not hesitate to contact me on [REDACTED]
Please circle whether you are:  male / female

Please state your age:

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others?* Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

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I am someone who...

1. _____ Is talkative
2. _____ Tends to find fault with others
3. _____ Does a thorough job
4. _____ Is depressed, blue
5. _____ Is original, comes up with new ideas
6. _____ Is reserved
7. _____ Is helpful and unselfish with others
8. _____ Can be somewhat careless
9. _____ Is relaxed, handles stress well.
10. _____ Is curious about many different things
11. _____ Is full of energy
12. _____ Starts quarrels with others
13. _____ Is a reliable worker
14. _____ Can be tense
15. _____ Is ingenious, a deep thinker
16. _____ Generates a lot of enthusiasm
17. _____ Has a forgiving nature
18. _____ Tends to be disorganized
19. _____ Worries a lot
20. _____ Has an active imagination
21. _____ Tends to be quiet
22. _____ Is generally trusting
23. _____ Tends to be lazy
24. _____ Is emotionally stable, not easily upset
25. _____ Is inventive
26. _____ Has an assertive personality
27. _____ Can be cold and aloof
28. _____ Perseveres until the task is finished
29. _____ Can be moody
30. _____ Values artistic, aesthetic experiences
31. _____ Is sometimes shy, inhibited
32. _____ Is considerate and kind to almost everyone
33. _____ Does things efficiently
34. _____ Remains calm in tense situations
35. _____ Prefers work that is routine

36. _____ Is outgoing, sociable

37. _____ Is sometimes rude to others

38. _____ Makes plans and follows through with them

39. _____ Gets nervous easily

40. _____ Likes to reflect, play with ideas

41. _____ Has few artistic interests

42. _____ Likes to cooperate with others

43. _____ Is easily distracted

44. _____ Is sophisticated in art, music, or literature
Use the following numbers to score how you feel each statement reflects your personality.

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

1. I can always manage to solve difficult problems if I try hard enough.______

2. If someone opposes me, I can find the means and ways to get what I want.______

3. It is easy for me to stick to my aims and accomplish my goals.______

4. I am confident that I could deal efficiently with unexpected events.______

5. Thanks to my resourcefulness, I know how to handle unforeseen situations.______

6. I can solve most problems if I invest the necessary effort.______

7. I can remain calm when facing difficulties because I can rely on my coping abilities.______

8. When I am confronted with a problem, I can usually find several solutions.______

9. If I am in trouble, I can usually think of a solution.______

10. I can usually handle whatever comes my way.______
Indicate how characteristic each of the following statements is of you according to the following scale:

1 = Not at all characteristic of me.
2 = Slightly characteristic of me.
3 = Moderately characteristic of me.
4 = Very characteristic of me.
5 = Extremely characteristic of me.

_____ 1. I often feel nervous even in casual get-togethers.

_____ 2. I usually feel comfortable when I'm in a group of people I don't know.

_____ 3. I am usually at ease when speaking to a member of the other sex.

_____ 4. I get nervous when I must talk to a teacher or a boss.

_____ 5. Parties often make me feel anxious and uncomfortable.

_____ 6. I am probably less shy in social interactions than most people.

_____ 7. I sometimes feel tense when talking to people of my own sex if I don't know them very well.

_____ 8. I would be nervous if I was being interviewed for a job.

_____ 9. I wish I had more confidence in social situations.

_____ 10. I seldom feel anxious in social situations.

_____ 11. In general, I am a shy person.
12. I often feel nervous when talking to an attractive member of the opposite sex.

13. I often feel nervous when calling someone I don't know very well on the telephone.

14. I get nervous when I speak to someone in a position of authority.

15. I usually feel relaxed around other people, even people who are quite different from me.

Below is a brief description of a reaction to a particularly anxious or stressful situation:

“A discrete period of intense fear or discomfort accompanied by palpitations, sweating, trembling, shortness of breath, chest pain, nausea, dizziness or light-headedness. The sensation usually has an abrupt onset, building to a maximum intensity within 10 to 15 minutes. Most people report a fear of
dying, “going crazy” or losing control of emotions or behaviour.”

Have you ever experienced such a reaction as a result of a stressful or anxious situation Yes / No

If you answered “yes” to the above “What Kind of situation where you in when you experienced this reaction?”

How many of these kind of reactions have you experienced in the last 12 months?
If you feel you have been affected by any of the questions asked please feel free to contact any of the following services:

- Samaritans helpline on 1850 60 90 90
- Aware helpline 1890 303 202
- Dublin Business School Student welfare officer on (01)4178748