



### PERFECTIONISTIC SELF PRESENTATION AS A PREDICTOR OF ANXIETY SENSITIVITY AMONG UNIVERSITY STUDENTS

<sup>1</sup>Solomon A. AGU and <sup>2</sup>Chinenye B. MMAMEL

<sup>1,2</sup>Department of Psychology, Enugu State University of Science and Technology Nigeria. e-mail: <u>amasol2003@yahoo.com</u> 08037415662

# ABSTRACT

The study investigated the relationship between perfectionist self presentation (perfectionist self promotion, non-display of imperfection, nondisclosure of imperfection) and anxiety sensitivity among university students. A total of 276 participants comprising 118 male and 158 female undergraduate students participated in the study. They were between the age range of 19 - 26 with a mean age of 21.47 and a standard deviation of 1.64. They were selected making use of available sample technique from the population of students from the Faculty of Management Sciences and Faculty of Law, Enugu State University of Science and Technology. A 27-item Perfectionist Self-Presentation Scale (PSPS; Hewitt et al., 2003) that assesses the stylistic personality trait which is associated with a need to appear perfect to others and 18-item Anxiety Sensitivity Index-3 (Taylor et al., 2007) designed to assess the fear of anxiety-related sensations and their consequences were used in the study. Correlational design was adopted for the study while Hierarchical Multiple Regression statistics result showed that perfectionist self presentation (perfectionist self promotion, PSP; non-display of imperfection, NDP; nondisclosure of imperfection, NDC) significantly predicted anxiety sensitivity (PSP, r = .95, P < .01,  $r^2 = .90$ ; NDP, r = .91, P < .01,  $r^2 = .83$ ; NDC, r = .88, P < .01,  $r^2 = .77$ ). The findings were discussed in view of literature reviewed and recommendations were made.

Key words: Perfectionist, Self Presentation, Anxiety, Sensitivity, Imperfection

# INTRODUCTION

As a construct perfectionism is complex and this is because it is a reflection of the interaction taking place between cognitive, emotional, motivational, and behavioural factors and processes (Flett, & Hewitt, 2007). So far, there is no definition of perfectionism upon which everybody agrees (Flett, Madorsky, Hewitt, & Heisel, 2002), but there is a general consensus about the fact that it should include setting very high standards and feeling highly concerned with meeting these standards (Frost, Marten, Lahart, & Rosenblate, 1990; Hamachek, 1978; Pacht, 1984). Through a literature review, it was hypothesized that there are six dimensions making up the construct of multidimensional perfectionism (Frost, Marten, Lahart, & Rosenblate, 1990) which are: (a) a tendency to react negatively when mistakes occur and to view mistakes as failures (concern over mistakes), (b) a tendency to doubt the quality of one's performance (doubts about actions), (c) a tendency to set very high standards and place excessive importance on these for self-evaluation (personal standards), (d) a tendency to perceive one's parents as having high expectations (parental expectations), (e) a tendency to perceive one's parents as being overly critical (parental criticism) and (f) a tendency to emphasize the importance of order and organization (organization). Flett and Hewitt (2002) argue that there is a great tendency in the literature to think that there are many negative outcomes directly connected with perfectionism. This is because behaviours performed to be perfect can result in stress as perfectionism-oriented people exhibit a propensity to meticulously evaluate their performance and mostly focus on negative aspects and accordingly experience little satisfaction. Johnson and Slaney (1996) reported that perfectionists are usually self-critical and anxious.

However, research conducted more recently shows that the connection between specifically maladaptive perfectionism and anxiety is much stronger. Schuler (2000) revealed the fact that the level of anxiety experienced by maladaptive perfectionists is higher. Research looking



at the role played by perfectionism in psychopathology has revealed that the construct of perfectionism can be conceptualized in different ways (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt, & Flett, 1991; Stoeber, Schneider, Hussain, & Matthews, 2014). Maladaptive perfectionists usually fail in their efforts due to their unrealistic standards and goals and as a result it becomes inevitable for them to experience anxiety, depression, and sense of inadequacy (Stoeber, Schneider, Hussain, & Matthews, 2014; Flett, Besser, & Hewitt, 2014; Levinson, Rodebaugh, Shumaker, Menatti, 2015; Mackinnon, Battista, Sherry, & Stewart, 2014). Perfectionism is now generally thought to have personal and interpersonal components and these components have differing connections with various phenomena such as depression, anxiety, suicide ideation, personality disorder, and the endorsement of irrational beliefs (Johnson, & Slaney, 1996; Handley, Egan, Kane, & Rees. 2014; Sherry, Sherry, Macneil, Smith, Mackinnon, Stewart, & Antony, 2014; Vargahan, Gharraee, Kazem, Vahid, & Habibi, 2014). Suddarth and Slaney (2001) found that maladaptive perfectionism explains 40% of the variance seen in trait anxiety. Kawamura, Hunt, Frost, and DiBartolo (2001) also stated that there is significant correlation between maladaptive perfectionism and higher levels of anxiety. A study was conducted on 223 middle school students and found a significant correlation between the maladaptive style of perfectionism and anxiety (Stornelli, Flett, & Hewitt, 2009).

According to Alden, Ryder, and Mellings, (2002) there are two main elements involved in pathological perfectionism which are high performance expectations and high maladaptive self-appraisal. People having high performance expectations are inclined to use high standards to evaluate themselves. These high standards are either generated by one or adopted from the ones already established. Hewitt and Flett (1991) argue that within the maladaptive self-appraisal, there is a sense of personal inadequacy and neurotic self-doubt and they are accompanied by a pathological self-appraisal system that serves the function of dramatizing even small behavioural mistakes and feeling of internal anxiety. Ellis (1962) reported that the main characteristic of people tending to have elevated anxiety levels is that they are fearful of their own fear (anxiety sensitivity). Anxiety sensitivity is observed when someone is afraid of experiencing anxiety and this is viewed to be one of the "fundamental fears" or one of the important reasons for people to avoid certain behaviours and situations.

Anxiety sensitivity has been more specifically defined as the fear of anxiety-related bodily sensations and believing that devastating somatic, social or psychological outcomes will result from these sensations leads to sense of anxiety (Reiss, & McNally, 1985; Reiss, Peterson, Gursky, & McNally, 1986). Anxiety sensitivity contributes to the differences observed in the extent to which general fearfulness is experienced by different individuals and in the extent to which tendency for various types of anxiety disorders such as panic disorder, social anxiety disorder, specific phobia, and posttraumatic stress disorder exhibited by different individuals (Broman-Fulks, Urbaniak, Bondy, & Toomey, 2014; Drenckhan, Glöckner-Rist, Rist, Richter, Gloster, Fehm, et al., 2015). When people experiencing high anxiety become anxious, they pay greater attention to their arousal-related sensations and this further amplifies their anxiety.

This finding is consolidated by the evidence showing that people having various types of anxiety disorders experience more anxiety sensitivity when compared to control participants and the higher the current level of anxiety, the higher the risk for displaying future anxiety symptoms (Zavos, Wong, Barclay, Keers, Mill, Rijsdijk, et al., 2012; Taylor, 1999). Recently, Ellis (1962) went a step further and suggested that perfectionists are likely to be characterized by high levels of anxiety sensitivity because their all-or-none approach includes the belief that they must be perfectly free from panic, and this belief is activated as the discomfort of panic sensations become more apparent. It is also important to note that neuroticism, maladaptive perfectionism, and self-criticism are necessary in the dynamics of anxiety sensitivity. Flett et al. (2002) also described evidence suggesting that perfectionism is associated with the behavioural inhibition system (Gray,



1982), and perfectionists seem to have a fearful sensitivity to signals of punishment and nonreward (Flett, Greene, & Hewitt, 2004). Though there seems to be a connection between anxiety sensitivity and perfectionism, the amount of research looking at this connection is quite little at present. Cox, Enns, Walker, Kjernisted, and Pidlubney, (2001) conducted a study on the role of personality variables in major depression and panic disorders and reported that there is a direct connection between perfectionism and anxiety sensitivity. This is in compliance with general evidence indicating the role of social-evaluative concerns in perfectionism, Hewitt, and Flett, (1991) and that there is a correlation between anxiety sensitivity and fear of negative evaluation (Flett, Greene, & Hewitt, 2004; Greenberg, & Burns, 2003; McWilliams, Stewart, & MacPherson, 2000).

Perfectionism is a personality style that is commonly characterized by striving for flawlessness, the setting of excessively high standards for performance, and tendencies toward self-criticalness. Research has shown that excessive perfectionism is linked to poor psychological adjustment in the form of depression, anxiety disorders, eating disorders, increased risk for suicide, as well as somatic/health problems and interpersonal problems (Shafran & Mansell, 2001). Although the connection between perfectionism and a variety of negative outcomes has been well established, less research has focused on perfectionistic self presentation and anxiety sensitivity. Hence, the main goal of the study is to examine if perfectionistic self presentation will predict anxiety sensitivity among university students.

### **Perfectionistic Self-Presentation**

One potential malleable risk factor of social anxiety is perfectionistic self presentation (PSP), or the belief that a perfect presentation (both outward appearance and behaviour) is needed to avoid negative evaluation (Hewitt et al., 2003). PSP was initially conceptualized based on theories of social anxiety (Clark & Wells, 1995; Heimberg, Brozovich, & Rapee, 2010; Rapee & Heimberg, 1997) that present a process by which negative evaluation leads to the internalized belief that perfect presentation is needed to bypass negative social judgements (Hewitt et al., 2003). Heimberg et al., (2010) proposed a model of social anxiety in which socially anxious individuals form an internal mental self-representation that is compared with the individual's perceived performance standard as expected by their audience. These authors state that socially anxious individuals are likely to think they are unable to meet the standards their audience holds and form the belief that they must perform perfectly in social situations to avoid negative evaluation, which further increases social anxiety. Based on the theoretical description presented by Heimberg et al., (2010) PSP is an important construct in the development of social anxiety.

As expected, based on the theoretical account presented by Heimberg et al., (2010), empirical studies have demonstrated robust relations between PSP and social anxiety. Individuals diagnosed with Social Anxiety Disorder (SAD) report higher levels of PSP compared to community participants (Jain & Sudhir, 2010; Teale Sapach, Carleton, Mulvogue, Weeks, & Heimberg, 2014). Further, PSP is positively related to social anxiety symptom severity (Hewitt, Habke, Lee-Baggley, Sherry, & Flett, 2008; Mackinnon, Battista, Sherry, & Stewart, 2014; Newby, Pitura, Penney, Klein, Flett, and Hewitt, 2017).

In another study, Newby et al., (2017) found that PSP explained unique variance (3.4% of the variance) in social interaction anxiety above the effects of neuroticism and trait perfectionism. In the only study to investigate these constructs longitudinally, Mackinnon et al., (2014) used a daily diary study design over a 21-day period in an undergraduate sample. Participants in the study completed measures of PSP and social anxiety once a day over this 21-day period. Findings revealed that PSP predicted both within- and between participant variance in social anxiety, even



after controlling for other variables (i.e., perfectionistic cognitions, depression, baseline socially prescribed perfectionism; Mackinnon et al., 2014).

### **Multidimensional Perfectionism**

Although unidimensional attitudinal conceptualizations of perfectionism have existed for some time, several multidimensional models of perfectionistic behaviour have dominated the literature over the past decade (e.g., Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991b; Hewitt et al., 2003). Perfectionism has been conceptualized as a multidimensional construct that encompasses three broad domains of personality including perfectionism traits (Hewitt & Flett, 1991b), perfectionistic self–presentational styles (Hewitt et al., 2003), and automatic cognitive processing (Flett, Hewitt, Blankstein, & Gray, 1998; Hewitt & Genest, 1990). In terms of perfectionism traits, Hewitt and Flett, (1991b) described both intrapersonal and interpersonal trait components that include a requirement for the self to be perfect (self–oriented perfectionism), requirement for others to be perfect (other oriented perfectionism) and perceptions that others require perfection of oneself (socially prescribed perfectionism)

### Perfectionistic Self Promotion (PSP)

Three facets of perfectionistic self-presentation are proposed. One factor that distinguishes these facets is whether the focus is on perfectionistic self-promotion designed to attempt to demonstrate one's supposed perfection to others versus an orientation that involves minimizing the public display and/or disclosure of mistakes, flaws, and shortcomings. This distinction derives from the self-presentation and self-regulation literatures that distinguish between proclaiming a desired identity by attempting to promote flawlessly positive aspects of the self in interactions with others and disavowing an undesired identity by concealing or excluding the presentation of any perceived negative aspects of the self (Higgins, 1998; Roth, Harris, & Snyder, 1988). Perfectionistic self–promotion reflects an acquisitive self–presentational style involving a need to promote one's self as perfect by actively and unrealistically presenting one's "perfection," such as positive qualities, accomplishments, successes, and abilities. Second, two protective forms of perfectionistic self–presentation involve concealing or excluding perceived negative aspects of the self from others.

### Nondisplay of Imperfection (NDP)

One facet, known as nondisplay of imperfection, involves individuals' extreme concern over behaviourally demonstrating their imperfections and is expressed in avoidance of situations where perceived flaws and shortcomings might be obvious or in elaborate attempts to hide mistakes from others. The desire to refrain from displaying any imperfections involves attempting to prevent others from seeing the individual behaving in any "less-than perfect" manner. That is, there is a concern with not demonstrating, behaviourally, one's perceived shortcomings and imperfections. Horney (1950) stated that individuals who attempt to live up to their ideal selves not only have an over dependence on others, but also fear making mistakes and have a decided hypersensitivity to criticism. The consequence of this is to "ward off disconfirmation by covering up personal flaws before others become aware of them". Such behaviour is exhibited by individuals with an excessive need to avoid appearing imperfect and can, purportedly, serve to decrease the probability of disapproval.



### Nondisclosure of Imperfection (NDC)

The other facet, known as nondisclosure of imperfection, involves the need not to verbally communicate any imperfection and is manifest in evasion or avoidance of verbal admissions of perceived inadequacies and mistakes. Hewitt et al., (2003) suggested that PSP may be relevant in poor adjustment and, especially, in interpersonal relationship difficulties. The notion that perfectionists are especially unlikely to verbally express concerns and admit mistakes to others is consistent with reports that perfectionistic individuals have a fear of interpersonal rejection that motivates their perfectionistic behaviour (Weisinger & Lobsenz, 1981) and that perfectionists who are concerned about negative evaluation are less verbally expressive in social situations (Flett, Hewitt, & DeRosa, 1996). A tendency to avoid disclosing negative attributes of the self would be in keeping with research suggesting that perfectionists with concerns about social evaluation tend to be anxious (Flett, Hewitt, Endler, & Tassone, 1994) and describe themselves as unwilling to disclose mistakes when in a threatening situation (Frost et al., 1995).

### Anxiety Sensitivity

Anxiety sensitivity (AS) refers to the fear of behaviours or sensations associated with the experience of anxiety, and a misinterpretation of such sensations as dangerous. Bodily sensations related to anxiety, such as nausea and palpitations, are mistaken as harmful experiences, causing anxiety or fear to intensify (Borrego, Ortiz-González, & Gissandaner, 2019). For example, a person with high anxiety sensitivity may fear the shakes as impending neurological disorder, or may suspect light headedness is the result of a brain tumour; conversely, a person with low anxiety sensitivity is likely to identify these as harmless and attach no significance to them (Taylor, 2019). Anxiety sensitivity (AS) is the fear of negative consequences associated with anxious arousal (Reiss, 1991). AS is composed of three lower-order dimensions: physical concerns (fear of physiological anxiety sensations), cognitive concerns (fear of cognitive dyscontrol), and social concerns (fear of publicly observable anxiety symptoms; Taylor et al., 2007). Of the three AS lower-order dimensions, AS social concerns have demonstrated the strongest relations with social anxiety (Allan, Capron, Raines, & Schmidt, 2014; Naragon-Gainey, 2010). Thus, AS social concerns are another potential malleable risk factor of social anxiety. As with PSP, AS social concerns fit well in theoretical descriptions of social anxiety. A tenant of Heimberg et al., (2010) proposed model of social anxiety is that publicly observable anxiety symptoms influence the extent to which socially anxious individuals believe they will be judged negatively in a social situation. In particular, publicly observable responses to anxiety negatively influence individuals' mental self-representation, which creates a positive feedback loop leading to increased awareness of anxious responses and more social anxiety (Heimberg et al., 2010). Thus, publicly observable symptoms of anxiety become feared as these symptoms are associated with social anxiety within and across social situations (Clark & Wells, 1995). Given the theoretical description presented by Heimberg et al., (2010), AS social concerns is an important construct to investigate in the aetiology of social anxiety.

### THEORETICAL REVIEW

### Perfectionism Social Disconnection Theory

The Perfectionism Social Disconnection Theory (Hewitt, Flett, Sherry, & Caelian, 2006, Hewitte, Flett, & Mikail, 2017) was proposed specifically to explain the links between the social aspects of perfectionism and suicide, but it represents a general framework for explicating the links that both socially prescribed perfectionism and perfectionistic self-presentation have with various forms of distress. This model posits that the social components of perfectionism lead to



numerous interpersonal problems, most importantly feelings of social disconnection. This sense of not belonging may then lead to several negative outcomes, including suicidal ideation and attempts. Therefore, a disconnection from others is believed to account for the association between the interpersonal perfectionism dimensions and suicidal outcomes (Hewitt et al., 2006). People who are high in socially prescribed perfectionism have a desire to gain approval and acceptance from others and, as a result, they tend to experience loneliness because they believe they will be rejected unless they are perfect (Hewitt et al., 2006). Thus, socially prescribed perfectionists may create a sense of disconnection and isolation from others, which may in turn lead to negative outcomes, such as psychological distress or suicidal behaviour (Hewitt et al., 2006).

Additionally, individuals high in perfectionistic self-presentation try to appear flawless in public to gain acceptance from others and enhance their self-esteem. This behaviour may lead others to view these perfectionists negatively and even maintain their distance from them. This social disconnection may be perceived as being so distressing that these individuals will contemplate suicide (Hewitt et al., 2006). Therefore, the point at which the social dimensions of perfectionism lead to a persistent disconnection from others may lead to extreme forms of distress and even suicidal behaviours.

According to the Perfectionism Social Disconnection Model, both objective (i.e., severed or impaired relationships) and subjective (i.e., perceived experience of not belonging) types of disconnection from others mediate the relations between social perfectionism and suicidal outcomes (Hewitt et al., 2006). One potential consequence of feeling and potentially projecting a sense of social disconnection is that less support is available to those high in the interpersonal aspects of perfectionism. Indeed, a study confirmed the negative link between socially prescribed perfectionism and perceived support from others (Sherry, Law, Hewitt, Flett, & Besser, 2008). The Perfectionism Social Disconnection Model was extended in this study to incorporate perfectionistic self-presentation, which was examined in the present research.

### Three-System Perspective on Anxiety (Lang, 1993)

Lang's (1993) multi-system view of emotional states has greatly influenced work on anxiety and its disorders. Indeed, this viewpoint has often been referred to as a "three-system perspective of anxiety and fear states." The three systems reflected in this model are grossly characterized by physiology, cognition, and behaviour (Lang, 1993). The three systems, which are characteristic of all anxiety and related states (e.g., fear, panic, worry, stress), differ in regard to their duration and magnitude of response. Additionally, the channels or response systems of "anxiety states" often are independent of one another (Rachman & Lopatka, 1986). As an example, a person who abruptly experiences heart palpitations and feelings of impending doom while in a classroom may not verbally report a panic attack. Yet, she may leave the immediate situation, if possible, and may be more likely to avoid such situations in the future. In this case, physiological and overt behavioural responses are evident, even though verbal reports of anxiety are not present. Thus, there is discordance between response systems (i.e., at one point in time). Additionally, there often is response desynchrony (Rachman & Loptaka, 1986), whereby the relation between two response channels responds to treatment at dissimilar rates (i.e., over time). Often, one channel changes first, and the others change more slowly (Lang, 1994). There are many distinct states that can be categorized under the label of "anxiety." Although the scope of the present investigation will not permit a detailed description of all such states, these negative emotional experiences overlap considerably. That is, all anxiety states are characterized by the aforementioned three channels or response systems, yet differ in regard to the parameters of response (e.g., duration, magnitude, patterning of systems that are activated) and environmental



features (e.g., type of environmental cues associated with the specific form of "anxiety" being studied).

Hence, Perfectionism Social Disconnection Theory (Hewitt, Flett, Sherry, & Caelian, 2006, Hewitte, Flett, & Mikail, 2017) was adopted as the theoretical framework for the study. The theory represents a general framework for explicating the links that both socially prescribed perfectionism and perfectionistic self-presentation have with various forms of distress including anxiety. The theory contends that the interpersonal dysfunction associated with perfectionism tend to experience higher anxiety sensitivity. Furthermore, the theory suggests that perfectionism produces a variety of interpersonal complications such as interpersonal over-sensitivity and hostility (Habke & Flynn, 2002; Neumeister, Fletcher, & Burney; Schuler, 2000), which then result in a distinguishable, social disconnection, alienation, or a sense of not belonging (Hewitt et al., 2006).

# **Empirical Reviews**

# Perfectionistic Self-Presentation and Anxiety Sensitivity

Although both perfectionistic self presentation and anxiety sensitivity social concerns are related to social anxiety (Mackinnon et al., 2014; Naragon-Gainey, 2010), and are relevant to theoretical accounts of social anxiety, only one study, by Flett et al., (2004), has examined the relation between PSP and AS social concerns. They found that PSP was positively correlated with AS social concerns after controlling for other perfectionism constructs (i.e., perfectionistic cognitions, trait perfectionism). Further, extant research has found a positive association between PSP and AS social concerns (Hewitt et al., 2003), which allows for the possibility that the relation between PSP and social anxiety may be influenced by AS social concerns, and vice versa. Therefore, it is plausible that PSP and AS social concerns may be involved in a causal chain (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001). A large-scale study explored perfectionism and social anxiety in two different samples: 324 university students in Mainland China and 333 Caucasian university students in the United States (Xie, Leong, & Feng, 2008). Socially prescribed perfectionism was correlated with social anxiety in both the Mainland Chinese and Caucasian samples with r's of .38 and .21, respectively. Recently, Nepon et al., (2011) found that both socially prescribed perfectionism and perfectionistic self-presentation were associated with social anxiety.

A study explored whether the non-display of imperfection facet of perfectionistic selfpresentation predicts social anxiety using a daily diary method (MacKinnon, Battista, Sherry, & Stewart, 2014). Participants completed various questionnaires each day over the course of 21 days. The results from multilevel regression analyses revealed that non-display of imperfection did indeed predict social anxiety both at the between-subjects and within-subjects levels. These findings remained even after controlling for other personality variables (i.e., socially prescribed perfectionism and perfectionistic cognitions) as well as depressed mood.

Individuals with SAD experience intense distress and anxiety when exposed to fearful situations or anticipating these situations (Association, 2013). Most of the previous studies have propounded a relationship only between AS social concern and SAD, while their relationship seems to be more complicated. Socially anxious individuals experience different kinds of physiological, cognitive, and behavioural symptoms which could be related to different aspects of AS.



## Hypothesis

The hypothesis tested in the study was:

Perfectionistic self presentation (perfectionistic self promotion, non-display of imperfection, nondisclosure of imperfection) will significantly predict anxiety sensitivity among university students.

# METHOD

# **Participants**

A total of 276 participants comprising 118 male and 158 female university students participated in the study. They were between the age range of 19 - 26 with a mean age of 21.50 and a standard deviation of 1.67. They were selected making use of available sample technique from the population of students from faculty of Management Sciences and faculty of Law, Enugu State University of Science and Technology, Enugu State.

### Instrument

Two sets of instruments were used in the study. The instruments are Perfectionistic Self Presentation Scale (PSPS; Hewitt et al., 2003) and Anxiety Sensitivity Inventoryv (ASI-3; Taylor et al., 2007)

# Perfectionistic Self-Presentation (PSPS; Hewitt et al., 2003)

The Perfectionistic Self-Presentation Scale (PSPS; Hewitt et al., 2003) assesses the stylistic personality trait which is associated with a need to appear perfect to others. The scale consists of 27 items and uses 7-point Likert ratings, ranging from 1 (strongly disagree) to 7 (strongly agree). It consists of three subscales; in the current sample, all of the subscales had similar descriptive statistics to that of prior research (Flett & Hewitt, 2015). The Perfectionistic Self-Promotion subscale (*M* = 38.75, *SD* = 12.21) consists of 10 items, (5, 7, 11, 15, 17, 18, 23, 25, 26, 27) and assesses an individual's tendency to continuously promote a positive image (e.g., "It is important to act perfectly in social situations"). The subscale scores had high internal consistency, Cronbach's  $\alpha$  = .91. The Non-display of Imperfection subscale (*M* = 43.70, *SD* = 12.17) consists of 10 items, (2, 3, 4, 6, 8, 10, 12, 20, 22, 24) and refers to the avoidance of behavioural displays of imperfection (e.g., "I hate to make errors in public"). The subscale scores had high internal consistency, Cronbach's  $\alpha$  = .90. Finally, the Nondisclosure of Imperfection subscale (M = 24.96, SD = 8.04) has 7 items, (1, 9, 13, 14, 16, 19, 21) and involves actively withholding verbal admissions of imperfections (e.g., "I try to keep my faults to myself"). The subscale scores also had high internal consistency, Cronbach's  $\alpha$  = .85. Cronbach Alpha of .63, .72 and .57 for Perfectionist self promotion, Non display of imperfection and Non disclosure of imperfection respectively was obtained by the researcher in a reliability study using 50 student of faculty of Law, University of Nigeria Enugu Campus.

# The Anxiety Sensitivity Index-3 (ASI-3; Taylor et al., 2007)

The ASI-3 is an 18-item self-report measure designed to assess the fear of anxiety-related sensations and their consequences (Taylor et al., 2007). The ASI-3 was developed based on the original Anxiety Sensitivity Index (Reiss, Peterson, Gursky, & McNally, 1986). Participants indicate how much each item concerns them on a 5-point Likert-type (very little =0 points; a little=



1 point; some= 2 points; much= 3 points; very much =4 points). No items are reversed coded. The ASI-3 contains three subscales corresponding to the three lower-order facets of AS: AS physical concerns (3, 4, 7, 8 12, 15) (e.g., "It scares me when my heart beats rapidly."), AS cognitive concerns (2, 5, 10, 14, 16, 18) (e.g., "It scares me when I am unable to keep my mind on a task."), and AS social concerns (1, 6, 9, 11, 13, 17) (e.g., "I worry that other people will notice my anxiety."). Subscale (range = 0-16, for the social and cognitive concerns factors; range = 0-32, for the physical concerns factor) and total (range = 0-64) scores are calculated by summing all the 18 items. Internal consistency of each of the three subscales are: physical concern = .87; cognitive concern = .83; social concern = .81, and the total ASI scale = .90 (Bernini et al., 2008). Cronbach Alpha of .74 was obtained by the researcher in a reliability study using 50 student sof faculty of Law, University of Nigeria Enugu Campus. The total score of SAI scale was adopted in current the study.

### Procedure

350 copies of each of the questionnaire were distributed within 2 weeks to the target population. The administration of the questionnaire took the form of group testing in their respective class room. The researchers employed the services of undergraduate students during the administration of the research instruments. At the point of administration, researchers introduced themselves and encouraged the participants to respond to the items of the instruments having assured them of confidentiality. The copies of the instrument were administered and collected at the same time and there was no time limit. The researcher explained any item that is not well understood to the participants. Out of the number distributed 289 were collected while 276 copies (96%) of each of the instrument that were correctly filed by the respondents were score and use for analysis while 13 copies (4%) were discarded.

### **Design and Statistics**

Correlational design was adopted in the study. This is because the researcher is interested to find the relationship between the study variables and the instruments were administered to the target population without manipulation of experimental variables.

Thus, the statistics for the study was Hierarchical Multiple Regression to help the researcher account for the contribution of each of the dimensions of perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) on anxiety sensitivity.



# RESULT

#### Table 1

2 3 5 MEAN 1 4 6 S.D Age 1 21.50 1.67 Gender .57 .50 -.28\*\* 1 PSP 41.58 12.54 -.23\*\* .77\*\* 1 NDP 39.66 11.28 -.29\*\* .73\*\* .93\*\* 1 NDC -.23\*\* .68\*\* .91\*\* 25.79 9.10 .93\*\* 1 .95\*\* .91\*\* ASI 43.78 -.29\*\* .80\*\* .89\*\* 1 12.76 Coefficient Of .90 .83 .79 Determinant (r<sup>2</sup>)

Zero order correlation coefficient matrix showing perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) as a predictor of anxiety sensitivity among university students

\*\*; P<.01, Bold are relevant coefficient for research hypothesis

The result shows that perfectionist self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) correlated significantly with anxiety sensitivity (see Table 1). Table 1 shows that correlation coefficients is, PSP, r = .95, P > .01,  $r^2 =$ .90; NDP, r = .91, P > .01,  $r^2 = .83$ ; NDC, r = .89, P > .01,  $r^2 = .79$ .

 Table 2: Summary of Hierarchical Multiple Regression Analysis for Variables Predicting Anxiety Sensitivity (N=276)

	Step 1		Step 2	
	β	t	β	t
Age	07	-1.91		
Gender	.78	20.72**		
PSP			.64	10.33**
NDP			.14	2.58**
NDC			.13	1.91 <sup>*</sup>
R	.80	.96		
<b>R</b> <sup>2</sup>	.65	.92		
∆ <b>R²</b>	.65	.27		
F	247.59(2,273)	302.82(3, 270)		

Note\*p<.05; \*\*p<.01

Results of the hierarchical multiple regression for the test of the first factors of anxiety sensitivity index is shown in the Table 1 above. The variables were entered in stepwise models. The demographic variable (age) in the Step 1 of the regression analysis and it have no significant relationship with anxiety sensitivity Age,  $\beta = -.07$ , t = -1.91, p<.05. On the other hand, the demographic variable (gender) has a significant relationship with anxiety sensitivity. Gender,  $\beta = .78$ , t = 20.72, p>.05. Hence, the demographic variable (Age and Gender) serves as control variables in the study and that is why they are keyed in step 1

In step 2, perfectionistic self presentation (perfectionistic self promotion PSP, nondisplay of imperfection, NDP, nondisclosure of imperfection, NDC) was entered. All the dimensions of perfectionistic self presentation (PSP,  $\beta = .64$ , t = 10.33, at P > .01; NDP,  $\beta = .14$ , t = 2.58, at P >



.01; NDC:  $\beta$  = .15, *t* = 1.91, at P > .01) significantly predicted anxiety sensitivity among university students. The contribution of perfectionistic self presentation in explaining the variance in anxiety sensitivity was 27% ( $\Delta R^2$  = .27). Therefore, a perfectionistic self presentation is a significant predictor of anxiety sensitivity.

### DISCUSSION

The finding of this study revealed that the hypothesis tested which stated that "perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) will significantly predict anxiety sensitivity among university students", was accepted. This means that there is a significant positive prediction between all dimensions of perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) and anxiety sensitivity among university students. This is based on the fact that the alternate hypothesis stated was accepted. However, there is an existing prediction between perfectionistic self presentation and anxiety sensitivity among university students. This shows that perfectionistic self presentation was found to positively predict anxiety sensitivity among university students.

In relation to the outcome of the investigation, it was found that most researches results show a significant relationship between perfectionistic self presentation and anxiety sensitivity. The two-component model of perfectionism and social anxiety distinguishes between the tendency to hold oneself to exacting standards, as well as the tendency to use maladaptive self appraisals that are focused on not attaining those self-standards (Alden, Ryder, & Mellings, 2002). Flett and Hewitt (2014) have extended this model beyond trait perfectionism to incorporate perfectionistic self-presentation and its role in social anxiety. This revised model has a stronger emphasis on the negative self-appraisals of perfectionistic self-presentation is designed in part to hide these feelings of inferiority and inadequacy about the self. Since individuals high in the interpersonal aspects of perfectionism have a strong desire to receive approval from others and have a fear of negative evaluation, they may be at risk of experiencing social anxiety.

Research has shown that socially prescribed perfectionism has been associated with social anxiety (Hewitt & Flett, 1991). People with high levels of social anxiety tend to adopt a protective self-presentational approach where they avoid making undesirable impressions (Leary & Allen, 2011). This behaviour is similar to the responses of certain perfectionists who defensively hide their imperfections from others. Indeed, perfectionistic self-presentation has been found to be a significant predictor of social anxiety, over and above trait perfectionism (Hewitt et al., 2003). A large-scale study explored perfectionism and social anxiety in two different samples: 324 university students in Mainland China and 333 Caucasian university students in the United States (Xie, Leong, & Feng, 2008). Socially prescribed perfectionism was correlated with social anxiety in both the Mainland Chinese and Caucasian samples with *r*'s of .38 and .21, respectively. Recently, Nepon et al., (2011) found that both socially prescribed perfectionism and perfectionism and perfectionism self-presentation were associated with social anxiety.

A recent study explored whether the nondisplay of imperfection facet of perfectionistic selfpresentation predicts social anxiety using a daily diary method (MacKinnon, Battista, Sherry, & Stewart, 2014). Participants completed various questionnaires each day over the course of 21 days. The results from multilevel regression analyses revealed that nondisplay of imperfection did indeed predict social anxiety both at the between-subjects and within-subjects levels. These findings remained even after controlling for other personality variables (i.e., socially prescribed perfectionism and perfectionistic cognitions) as well as depressed mood.



### Implications of the Finding

The study investigated perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) as a predictor of anxiety sensitivity. The result indicated that all the three dimensions of perfectionistic self presentation (perfectionistic self promotion, nondisplay of imperfection, nondisclosure of imperfection) significantly and positively predicted anxiety sensitivity. This study of perfectionistic self-presentation provided insight into the nature of the construct. Overall, the analyses confirmed that perfectionistic self presentation is associated with higher anxiety sensitivity. University students with high scores on all dimensions of perfectionistic self-presentation reported being sensitive to others' expressive acts and to available social comparison cues. That is, these individuals appear to be overly concerned with the portrayal of appropriate behaviour in social situations. This is because attention to social cues is believed to stem from a sense of self-uncertainty. These findings link the concept of anxiety sensitivity with perfectionistic self-presentation and indicate, more generally, that the expression of perfection clearly involves high anxiety sensitivity and symptoms of anxiety and depression.

Based on the outcome of the study it is clear that participant high on PSP, and high on anxiety sensitivity, seem to experience threat and are more distressed in a social setting. This may have a significant impact on how they relate with others in a public setting. It is certainly consistent with expectations that individuals with this perfectionistic interpersonal style would have difficulty initiating and sustaining relationships especially when it comes to public setting. The current work suggests that it might be the desire to avoid being known as imperfect, rather than perfectionistic dysfunctional attitudes that has a direct impact on the quality of interpersonal relationship.

### Limitations of the Study

There are certain limitations with regards to the assessment of the applicability of the results obtained from this study. First limitation is that the study solely comprised university students in only two faculties (Management Sciences and Faculty of Law) which mean that the study may not reflect the varying experiences and requirements of students in other faculties. Furthermore, the undergraduate students sampled in the study may not have been represented wholly, since the sample size was small.

Also, the result from the study should be cautiously interpreted due to the tendencies of participants to engage in socially desirable responding in psychometric assessments. Finally, the results disproportionately represent gender (females 57%, male 43%).

In conclusion, the findings elucidated that perfectionistic self presentation (perfectionistic self promotion, non-display of imperfection, nondisclosure of imperfection) demonstrated a significant and positively predicted anxiety sensitivity among university students.

Based on the outcome of the study PSP facets are associated with various types of psychopathologies, it has been suggested that PSP may have an indirect impact on psychopathology by influencing inappropriate coping with extant stressors, problems, and shortfalls. Also, persons high in PSP may generate and perpetuate stressful experiences because of their tendency to engage in maladaptive coping responses when faced with stressors and difficulties. Such maladaptive coping may be especially evident in clinical situations whereby the PSP facets influence the entire process of acknowledging one's own distress, seeking appropriate help for that distress, and benefiting from support and professional interventions



#### REFERENCES

- Alden, L. E., Ryder, A. G., & Mellings, T. M. B. (2002). Perfectionism in the context of social fears: Toward a twocomponent model. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 373– 391). Washington, DC: American Psychological Association.
- Allan, N. P., Capron, D. W., Raines, A. M., & Schmidt, N. B. (2014). Unique relations among anxiety sensitivity factors and anxiety, depression, and suicidal ideation. *Journal of Anxiety Disorders*, *28*, 266-275.
- Association, A. P. (2013). *Diagnostic and statistical manual of mental disorders* (DSM-5®). Washengton, DC: American Psychiatric Publication.
- Borrego, J., Ortiz-González, E., & Gissandaner, T. D. (2019). "Ethnic and Cultural Considerations". Pediatric Anxiety Disorders. Elsevier. pp. 461–497.
- Broman-Fulks, J. J., Urbaniak, A., Bondy, C. L., & Toomey, K. J. (2014). Anxiety sensitivity and risk-taking behavior. *Anxiety Stress Coping*, *27*, 619-632.
- Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. Social Phobia: conceptualization, assessment, and treatment. New York, NY: Guilford Press. context: A self-regulation analysis of dysphoria and social anxiety. Cognitive conceptualization, assessment, and treatment. New York, NY: Guilford Press.
- Cox, B. J., Enns, M. W., Walker, J. R., Kjernisted, K., & Pidlubney, S. R. (2001). Psychological vulnerabilities in patients with major depression vs. panic disorder. *Behaviour Research and Therapy, 39*, 567-573
- Ellis, A. (1962). Reason and emotion in psychotherapy. New York: Lyle Stuart.
- Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism: Theory, Research, and Treatment*. Washington, DC: American Psychological Association.
- Flett, G. L., & Hewitt, P. L. (2007). Cognitive and self-regulation aspects of perfectionism and their implications for treatment: Introduction to the special issue. *Journal of Rational-Emotive and Cognitive-Behaviour Therapy*, 25, 227-236.
- Flett, G. L., Besser, A., & Hewitt, P. L. (2014). Perfectionism and interpersonal orientations in depression: An analysis of validation seeking and rejection sensitivity in a community sample of young adults. *Psychiatry*, *77*, 67-85.
- Flett, G. L., Greene, A., & Hewitt, P. L. (2004). Dimensions of perfectionism and anxiety sensitivity. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 22, 39 - 57.
- Flett, G. L., Hewitt, P. L., & DeRosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. Personality and Individual Differences, 20, 143-150.
- Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology*, 75, 1363–1381.
- Flett, G. L., Madorsky, D., Hewitt, P. L., & Heisel, M. J. (2002). Perfectionism cognitions, rumination, and psychological distress. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 20,* 31-45.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14,* 449-468
- Greenberg, J., & Burns, J. W. (2003). Pain anxiety among chronic pain patients: Specific phobia or manifestation of anxiety sensitivity? Behaviour Research and Therapy, 41, 223-240.
- Habke, A. M., Hewitt, P. L., & Flett, G. L. (1999). Perfectionism and sexual satisfaction in intimate relationships. *Journal* of Psychopathology and Behaviour Assessment, 21, 307–322.



Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. Psychology, 15, 27-33.

- Handley, A., Egan, S. J., Kane, R. T., & Rees. C. S. (2014). The relationships between perfectionism, pathological worry and generalised anxiety disorder. *BMC Psychiatry*, *14*, 1-8.
- Hewitt, P. L., & Flett, G. L. (1991a). Perfectionism in the self and in social contexts: Conceptualization, assessment and association with psychopathology. *Journal of Personality and Social Psychology, 60*, 456-470.
- Hewitt, P. L., & Flett, G. L. (1991b). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, *60*, 456–470.
- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to developmental, and social perspectives* (pp. 395–422). Boston, MA: Elsevier
- Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy* (pp. 215–235). Washington, DC: American Psychological Association.
- Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., et al. (2003). The interpersonal expression of perfectionism: Perfectionistic self–presentation and psychological distress. *Journal of Personality and Social Psychology, 84,* 1303–1325.
- Hewitt, P. L., Habke, A. M., Lee-Baggley, D. L., Sherry, S. B., & Flett, G. L. (2008). The impact of perfectionistic selfpresentation on the cognitive, affective, and physiological experience of a clinical interview. *Interpersonal and Biological Processes*, 71, 93–122.
- Horney, K. (1950). Neurosis and human growth: The struggle toward self-realization. London: Routledge and Kegan Paul. <u>https://doi.org/10.1016/B978-0-12-375096-9.00015-8</u>.
- Jain, M., & Sudhir, P. M. (2010). Dimensions of perfectionism and perfectionistic self presentation in social phobia. Asian Journal of Psychiatry, 3, 216–221.
- Johnson, D. P., & Slaney, R. B. (1996). Perfectionism: Scale development and a study of perfectionist clients in counseling. *Journal of College Student Development*, *37*, 29-41.
- Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research*, *25*, 291-301.
- Kraemer, H. C., Stice, E., Kazdin, A., Offord, D., & Kupfer, D. (2001). How do risk factors work together? Mediators, moderators, and independent, overlapping, and proxy risk factors. *American Journal of Psychiatry*, 158, 848– 856.
- Lang, P. J. (1993). The network model of emotion: Motivational connections. In R. S. Wyer, & T. K. Srull (Eds.), Perspectives on anger and emotion (pp. 109-133). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Lang, P. J. (1994). The motivational organization of emotion: Affect reflex connections. In S. VanGoozen, N. E. Van de Poll, & J. A. Sergeant (Eds.), Emotions: Essays on emotion theory (pp. 61-93). Hillsdale, NJ: Erlbaum.
- Leary, M. R., & Allen, A. B. (2011). Personality and persona: Personality processes in Levinson, C. A., Rodebaugh, T. L., Shumaker, E. A., Menatti, ... et al. (2015). Perception matters for clinical perfectionism and social anxiety. *Journal of Anxiety Disorders, 29*, 61-71.
- Mackinnon, S. P., Battista, S., Sherry, S. B., & Stewart, S. H. (2014). Perfectionistic self-presentation predicts social anxiety using daily diary methods. *Personality and Individual Differences*, *56*, 143-148.
- Mackinnon, S. P., Sherry, S. B., Antony, M. M., Stewart, S. H., Sherry, D. L., & Hartling, N. (2012). Caught in a bad romance: Perfectionism, conflict and depression in romantic relationships. *Journal of Family Psychology*, 26(2), 215-225



- McWilliams, L. A., Stewart, S. H., & MacPherson, P. S. R. (2000). Does the social concern component of the Anxiety Sensitivity Index belong to the domain of anxiety sensitivity or the domain of negative evaluation sensitivity? Behaviour Research and Therapy, 38, 985-992.
- Naragon-Gainey, K. (2010). Meta-analysis of the relations of anxiety sensitivity to the depressive and anxiety disorders. *Psychological Bulletin*, 136, 128–150.
- Nepon, T., Flett, G. L., Hewitt, P. L., & Molnar, D. S. (2011). Perfectionism, negative social long-term outcome of depression. American Journal of Psychiatry, 135, 797–800.
- Neumeister, K. L., Fletcher, K. L., & Burney, V. H. (2015). Perfectionism and achievement motivation in high-ability students: An examination of the 2x2 model of perfectionism. *Journal for the Education of the Gifted, 38*, 215– 232.
- Newby, J., Pitura, V. A., Penney, A. M., Klein, R. G., Flett, G. L., & Hewitt, P. L. (2017). Neuroticism and perfectionism as predictors of social anxiety. *Personality and Individual Differences*, *106*, 263–267.
- Pacht, A. R. (1984). Reflections on perfectionism. *American Psychologist, 39*, 386-390. patients with co-existing Social Anxiety Disorder and Substance Use Disorders: A pilot study. *Cognitive Therapy and Research, 34*, 82–91.

Rachman, S., & Lopatka, C. (1986). Do fears summate? III. Behaviour Research and Therapy, 24, 653-660.

- Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioural model of anxiety in social phobia. *Behaviour Research* and Therapy, 35, 741–756.
- Reiss, S. (1991). Expectancy model of fear, anxiety, and panic. Clinical Psychology Review, 11, 141-153.
- Reiss, S., & McNally, R. J. (1985). Expectancy model of fear. In S. Reiss and R.R. Bootzin (Eds.), *Theoretical issues in behaviour therapy*, (pp. 107-121) Academic Press: San Diego, CA.
- Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the prediction of fearfulness. *Behaviour Research and Therapy*, *24*, 1-8.
- Schuler, P. A. (2000). Perfectionism and gifted adolescents. Journal of Secondary Gifted Education, 11, 183-196.
- Shafran, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review, 21*, 879-906.
- Sherry, S. B., Law, A., Hewitt, P. L., Flett, G. L., & Besser, A. (2008). Social support as a self-presentation. *Journal of Personality and Social Psychology*, *101*, 1033–1049
- Sherry, S. B., Sherry, D. L., Macneil, M. A., Smith, M. M., Mackinnon, S. P., Stewart, S. H., & Antony, M. M. (2014). Does socially prescribed perfectionism predict daily conflict? A 14-day daily diary study of romantic couples using self-and partner- reports. *Personality and Individual Differences, 61*, 24-27.
- Stoeber, J., Schneider, N., Hussain, R., & Matthews, K. (2014). Perfectionism and negative affect after repeated failure: Anxiety, depression, and anger. *Journal of Individual Differences, 35*, 87-97.
- Stornelli, D., Flett, G., & Hewitt, P. (2009). Perfectionism, achievement, and affect in children: A comparison of students from gifted, arts, and regular programs. *Canadian Journal of School Psychology, 24,* 267-283.
- Suddarth, B. H., & Slaney, R. B. (2001). An investigation of the dimensions of perfectionism in college students. *Measurement and Evaluation in Counseling and Development, 34,* 157-165.
- Taylor, S. (1999). Anxiety sensitivity: Theory, research, and treatment of the fear of anxiety. Mahwah, NJ: Erlbaum.
- Taylor, S. (2019). "Treating anxiety sensitivity in adults with anxiety and related disorders". The Clinician's Guide to Anxiety Sensitivity Treatment and Assessment. Elsevier. pp. 55–75.



- Teale. S. M. J. N., Carleton, R. N., Mulvogue, M. K., Weeks, J. W., & Heimberg, R. Ttoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319.
- Vargahan, F. A., Gharraee, B., Kazem, M., Vahid, A., & Habibi, M. (2014). The role of perfectionism dimensions and emotion regulation strategies in predicting the severity of depressive and anxiety symptoms of university students. *Iranian Journal of Psychiatry*, 20 (2), 153-161,
- Xie, D., Leong, F. T. L., & Feng, S. (2008). *Culture-specific correlates of anxiety among you sweat:* Silencing and striving to appear perfect among U.S. college women.
- Zavos, H. M., Wong, C. C., Barclay, N. L., Keers, R., Mill, J., Rijsdijk, F. V., Gregory, A. M., & Eley, T. C. (2012). Anxiety sensitivity in adolescence and young adulthood: the role of stressful life events, 5HTTLPR and their interaction. *Depression and Anxiety*, *29*, 400-408.