Honors Thesis Proposal

for

An Examination of Psychological Disorders, Social Anxiety, and Perfectionism in Honors Undergraduate Students

Amy L. Elliott

Michael Rovito, Ph.D.
Thesis Committee Chair
Department of Health Professions

Suha Saleh, Ph.D., M.T.
Committee Member from Major
Department of Health Professions

Jeffrey Bedwell, Ph.D.
Thesis Committee Chair
Department of Psychology

Kristen Schellhase, Ed.D., ATC, LAT, CSCS
Department Chair
Department of Health Professions

Kelly Astro, M.S., Ed.
Director of Research and Civic Engagement
The Burnett Honors College
An Examination of Psychological Disorders, Social Anxiety, and Perfectionism in Honors Undergraduate Students

Abstract:
There is a long standing debate on whether academically talented students experience a better or worse psychological well being than their peers. This proposed retrospective cohort study aims to add to the current literature by examining the differences in rates and correlation of psychological disorders among honors (high-achieving) and non-honors undergraduate students. A convenience sample will be gathered from the University of Central Florida. Participants will be asked to fill out a brief survey including questions about demographics, GPA, ACT scores, enrollment in the honors college, inclusion in any childhood gifted/honors programs, diagnosis of psychological disorders, social anxiety, and perfectionism. T-tests will be used to compare group means of social anxiety and perfectionism. Logistical and linear regressions will also be used to determine predictors of psychological disorders, social anxiety, and perfectionism. The researchers expect to find a statistically significant correlation between honors (high-achieving) students and psychological disorders. They also suspect this correlation to be statistically greater than the correlation found between non-honors students and psychological disorders.

Keywords: mental health, undergraduates, social anxiety, perfectionism, high achievement
I. Background:

**Gifted Learners versus High-Achieving Students**

Honors programs are typically composed of at least two types of students: gifted students and high-achieving (or bright) students. It is important to note the difference. According to Szabos (1989), a high achiever generates advanced ideas whereas a gifted learner generates complex, abstract ideas. A high achiever works hard to achieve, memorizes well, knows the answers, and consistently receives A’s. Gifted learners, on the other hand, know without having to work hard, guess and infer well, ask the questions, and may not be motivated by grades. Bright learners seem to prefer routine whereas gifted learners tend to rebel against routine. Gifted learners also tend to be self-critical while high achievers tend to be pleased with their own learning. It is also important to note that many gifted individuals are also high-achieving.

**Mental Health in the United States**

According to the U.S. Department of Health and Human Services (1999), only 17% of adults in the United States are considered to be in a state of optimal mental health. Mental health disorders such as Major Depressive Disorder and Generalized Anxiety Disorder are chief among the reasons that adults may experience a poor state of mental health. In any given year, 26% of adults and 20% of children and adolescents in the United States suffer from one or more mental disorders (Kessler et al., 2005).

College students are certainly not exempt from mental health problems. Every year the American College Health Association (2011) surveys thousands of undergraduate students from around the United States and assembles an extensive report on college health trends. In 2011, they found that 23% of female and 17% of male undergraduate students had a diagnosable
mental health condition. A little more than half of surveyed undergraduate students reported feeling overwhelming anxiety in the last 12 months and 13% of males and 17% of females reported feeling hopeless in the last 2 weeks. The report also showed that about 31% of undergraduates reported being so depressed that it was difficult to function at least once in the last 12 months. (American College Health Association, 2011)

**Mental Health of Gifted and High-Achieving Individuals**

Do gifted/high-achieving individuals experience better psychological well-being than their peers? Or, does giftedness/high achievement increase vulnerabilities for psychological issues? There is a long history of research debating this topic and there is evidence to support both sides. Some researchers claim that “the gifted are capable of greater understanding of self and others due to their cognitive capacities and therefore cope better with stress, conflicts, and developmental dysynchrony than their peers” (Neihart, 1999, p.1). Other researchers claim that as a result of these cognitive capacities, “the gifted are more sensitive to interpersonal conflicts and experience greater degrees of alienation and stress than do their peers” (Neihart, 1999, p.1).

Most studies on the psychological well-being of gifted and high-achieving individuals have focused on children and have shown that gifted and high-achieving children are at least as well, and possibly better, adjusted than their peers (Bracken, 1980; Gallucci, 1988; Nail & Evans, 1997). Despite the literature attesting to the strengths of giftedness and high achievement in childhood, Peterson and his team (2009) found that gifted youth expressed that they felt self-conscious and inadequate, experienced social awkwardness and social deficits, got worked up over minor issues, let emotions build up inside, worried too much, and were too uptight.
There has also been some evidence that when compared to non-gifted peers, both gifted and high-achieving adolescents and adults experience a greater number of psychiatric disorders and specific psychological symptoms (Carman, 2011; Lewis et al., 1992; Suldo et al., 2008; Yadusky-Holahan & Holahan, 1983). An extensive literature review by Neihart (1999) shows that gifted individuals are a diverse population and that no conclusion on emotional well-being can be drawn for the group as a whole. Neihart (1999) suggests that the psychological well-being of gifted individuals is a multidimensional construct - related to the age of the individual, the type of giftedness, the educational fit, the temperament and personality of the individual, and their specific life circumstances.

In 1983, Clark came up with an extensive list of characteristics that differentiate gifted individuals from their non-gifted peers. She suggests that the same things that make an individual superiorly intelligent may also create a potential for concomitant problems such as being misunderstood by peers (as reported by Lewis et al., 1992). Another individual, Dabrowski, defined five categories of “overexcitabilities” – emotional,imaginational, intellectual, psychomotor, and sensual (as reported by Lewis et al., 1992). (See Table 1). Carman (2011) defines overexcitabilities as “a greater responsiveness and intensified sensitivity to sensory stimuli” (p. 415).

<table>
<thead>
<tr>
<th>Table 1: Dabrowski’s Overexcitabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overexcitability</strong></td>
</tr>
<tr>
<td>Intellectual</td>
</tr>
<tr>
<td>Imaginational</td>
</tr>
<tr>
<td>Emotional</td>
</tr>
<tr>
<td>Sensual</td>
</tr>
<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>Psychomotor</td>
</tr>
</tbody>
</table>

Note: Based on information from Carmen (2011) and Lewis et al. (1992).

Research shows that gifted individuals consistently score higher on sensual, intellectual, imaginative, and emotional overexitabilities (Lewis et al., 1992; Piechowski, 1986). Research also shows that high-achieving individuals score higher on some overexitabilities than their peers. Lewis and his team (1992), for example, found that high-achieving college students often experience strong, extreme emotions and often feel isolated because they believe they have to keep these emotions in check in order to maintain positive social interactions.

**History of Research on Perfectionism**

Perfectionism is a trait commonly associated with both gifted and high-achieving individuals (Adderholt-Elliott, 1991; Dixon et al., 2004; Neumeister, 2004). Academically talented students are often influenced by high personal standards to strive for absolute excellence and by perceived pressure from peers, teachers, and parents to excel academically. These extra stressors may make them particularly vulnerable to perfectionistic tendencies (Adderholt-Elliott, 1991).

Traditionally, perfectionism was seen as a unidimensional personality defect that caused affected individuals to be extremely self-critical and to strive for unrealistic and unattainable goals (Dixon et al., 2004). Several studies have focused on the negative aspects of perfectionism – its role in the development of personality disorders, eating disorders, depression, anxiety, obsessive compulsion, self-esteem issues, etc (Blatt, 1995; Kring et al., 2010; Peterson et al., 2009).
Recently researchers have come to view perfectionism as being a multidimensional construct, capable of producing positive and negative functioning. Hamachek (1978) introduced two different types of perfectionism: normal and neurotic. Neurotic perfectionists hold themselves up to impossibly high standards. No matter how great their performance, they are never satisfied with their efforts because nothing they do is ever good enough. Neurotic perfectionists have low self-esteem and find little pleasure in life. Normal perfectionists, on the other hand, strive for excellence and get a feeling of satisfaction from the effort they put forth. They focus on their strengths and on organization, whereas neurotic perfectionists focus heavily on their weaknesses and demonstrate excessive concern over making mistakes (Hamachek, 1978).

Dixon and her associates (2004) claimed that dysfunctional (or neurotic) perfectionists are “socially detached, anxious, moody, hostile and overly competitive” whereas healthy (or normal) perfectionists were “agreeable and conscientious, goal-oriented, socially at ease, well adjusted, and not neurotic” (p. 97).

Hewitt and Flett (1991) further broke down dysfunctional perfectionists into two categories: self-oriented perfectionists and socially prescribed perfectionists. Self-oriented perfectionists set excessively high standards for themselves whereas socially prescribed perfectionists perceive a pressure from significant others to live up to lofty standards (Hewitt & Flett, 1991). Both self-oriented and socially prescribed perfectionism have been correlated with multiple mental health issues such as hypomania, depression, anxiety, Type A personality, avoidant and passive-aggressive tendencies, dysthymia, and learned helplessness (Hewitt & Flett, 1991; Neumeister, 2004).
Gifted Learners, High Achievers, and Perfectionism

Most previous research studies on perfectionism and high achieving or gifted individuals have focused on children (Peterson et al., 2009) and adolescents (Dixon et al., 2004; Flett et al., 2011; Peterson et al., 2009). Dixon and his associates (2004) studied a group of gifted high school juniors and seniors. They discovered four types of students as it pertains to perfectionism: pervasive, mixed-adaptive, non-perfectionist, and mixed-maladaptive. Pervasive and mixed-maladaptive types were associated with poor adjustment and mental health. Students with the pervasive type of perfectionism were well organized but had strong doubts about their ability to complete tasks. Students with the mixed-maladaptive form of perfectionism were overly concerned about making mistakes, were not well organized, and consistently set lower standards for themselves because they doubted their abilities. Both types complained of psychiatric problems such as obsessive compulsive tendencies, depression, anxiety, and somatic symptoms (Dixon et al., 2004).

There is very little research on the relationship between perfectionism and honors undergraduate students. One study focused on the development of perfectionism in high-achieving college students (Neumeister, 2004). Neumeister (2004) found that socially prescribed perfectionists held the belief that others had stringent expectations for them. From a young age, they experienced a strong fear of disappointing others. This belief led them to think that their self-worth was based entirely on academic achievements. As a group, socially prescribed perfectionists strove to be perfect in order to not disappoint others and to protect their self-image. Self-oriented perfectionists, on the other hand, did not feel external pressures to achieve academically. They placed high standards on themselves regardless of the concerns their families expressed that they were placing too much pressure on themselves. As a group, self-
oriented perfectionists noted that their perfectionism seemed to be a sort of inborn tendency and they attributed most of the development of their perfectionism to having been relatively unchallenged in school (Neumeister, 2004).

The present study hopes to expand the current literature on perfectionism in undergraduate students in general and hopes to focus specifically on honors undergraduate students.

**Social Anxiety, Perfectionism, and Undergraduate Students**

Social Anxiety Disorder (also known as social phobia) is defined as “a persistent, unrealistic intense fear of social situations that might involve being scrutinized by, or even just exposed to, unfamiliar people” (Kring et al., 2010, p.122). Persons with Social Anxiety Disorder often feel extremely anxious in situations like eating in public, meeting new people, attending parties, using public restrooms, using the telephone, giving a speech, etc. Feared situations are often avoided altogether or are endured with great anxiety and distress. Social anxiety exists on a continuum ranging from severe, clinical levels to mild shyness. It can be limited to one specific situation (such as talking on the phone) or it may affect all aspects of life. Social anxiety has high rates of comorbidity and has been found to be highly correlated with perfectionism (Juster et al., 1996; Wheeler et al., 2011).

Beidel and her colleagues (1989) found that prevalence of social phobia among undergraduate college students may be as high as 19%. Strahan (2003) reports that social anxiety may contribute to considerable amounts of dissatisfaction and discomfort in the overall undergraduate experience of honors students. She also states that socially anxious
undergraduates may be likely to engage in alcohol consumption in order to decrease anxious feelings (Strahan, 2003).

**Honors Undergraduates and Mental Health Concerns**

Research shows that most lifetime mental disorders first appear before age 24 (Hunt et al., 2009). College provides a great opportunity to identify and treat these disorders - teaching adults successful ways to cope in the future and helping them reach their full potentials.

However, Eisenberg and his team (2007) found that less than half of undergraduate students who tested positive for major depression or anxiety disorders received mental health services in the previous year. Despite the fact that attitudes toward seeking mental health treatment seem to have improved steadily in the last few years (Hunt et al., 2009), almost 30% of undergraduate students said that they would not consider seeking help from a mental health professional even if they were really bothered by a personal problem (American College Health Association, 2011).

Honors undergraduates may be particularly at risk for mental health problems. In addition to the evidence that they may experience a higher incidence of psychological issues, studies have shown that even when high-achieving students are highly distressed, they did not reveal their problems to trusted adults (Peterson & Ray, 2006). Peterson (2000) found that adults are often unaware of a high-achieving students’ level of distress because they tend to maintain high grades even during distressing life events. Equally as troubling, Sowa and May (1997) found that gifted individuals may claim to be well adjusted even when their behavior shows the exact opposite. If academically talented students hide that they have a problem, don’t seek help
for a problem, or don’t even know that they have a problem, how will they reach their optimal mental health, academic, and career potentials?

While there are a handful of studies that have focused on the mental health of undergraduate students in general, the researchers were unable to find any studies that focused specifically on honors undergraduates or on the mental health differences between honors and non-honors undergraduates. The present study hopes to add to the literature by examining the presence of psychological disorders, social anxiety, and perfectionism among honors and non-honors undergraduate students.

II: Methodology:

Study Design

This proposed study is a retrospective cohort study. The researchers aim to examine the association between a risk factor (high achievement) and the development of a disease (psychological disorder). This will be accomplished by looking at the relationship between two different groups of undergraduate students and the incidence of reported psychological disorders from both groups. Two primary groups will be examined: honors (high-achieving) and non-honors students. Students will be placed in these two groups based upon enrollment in the UCF Burnett Honors College, GPA, and ACT scores (See Table 2 below). The researchers aim to answer two primary questions: Is there a positive correlation between psychological disorders and undergraduate honors (high-achieving) students? And, is this correlation stronger than that between psychological disorders and non-honors students?

A secondary research goal will be indentifying any patterns in social anxiety and perfectionism among and between these two groups of undergraduate students. Demographic
information such as ethnicity, age, gender, GPA, ACT scores, and year of college will also be examined as possible predictors of psychological disorders, social anxiety, and perfectionism.

The researchers expect to find many specific trends among the data collected.

Experimental and Null Hypotheses:

H₁: There will be a statistically significant, positive correlation between the UCF honors student population and the incidence of psychological disorders.

H₀: There will be no correlation between UCF honors students and the incidence of psychological disorders.

Alternative Hypotheses:

Hₐ₁: The UCF honors student population will have statistically significant, higher rates of reported psychological disorders than the non-honors student population.

Hₐ₂: The UCF honors student population will have higher rates of social anxiety than the non-honors student population.

Hₐ₃: Perfectionism will be a statistically significant predictor of psychological disorders.

Sampling Methodology

This study is designed to determine if there is a correlation between high scholastic achievement and psychological disorders. The sample will be taken from the University of Central Florida (UCF) and two groups will be formed. Group placement will be based on enrollment in the Honors College, GPA, and ACT test scores. Since entrance into the UCF Honors College is based partially on factors including GPA and ACT scores, we assume that all students in the Burnett Honors College fit our definition of being high-achieving individuals. We also assume though, that there will be some students with high test scores or high GPAs who
are not enrolled in the Honors College. Questions will be placed in a survey in order to identify these students.

The average composite ACT score of students enrolled at UCF is a 27. For the purposes of this study, a student with a composite ACT score that falls in the top 90 percent nationally (a 28 or higher) will be classified as high-achieving. Since some students are very smart and driven but do not perform well on standardized tests, GPA scores will also be considered as a measure of high-achievement. For the purposes of this study, a student will be considered a high-achiever if they have a 3.8 or higher GPA. If a student fits any number of the above three criteria, they will be included in the honors (high-achieving) group.

The non-honors group will include UCF students who are not enrolled in the Burnett Honors College and who have a GPA less than 3.8 or an ACT score less than 28.

<table>
<thead>
<tr>
<th>Table 2: Description of Study Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors (High-Achieving)</td>
</tr>
<tr>
<td>All students enrolled in the Burnett Honors College and non-honors students with a GPA $\geq$ 3.8 OR an ACT score $\geq$ 28.</td>
</tr>
<tr>
<td>Non-Honors</td>
</tr>
<tr>
<td>Students not enrolled in the Burnett Honors College, who have a GPA $&lt; 3.8$ and an ACT score $&lt; 28$.</td>
</tr>
</tbody>
</table>

Both males and females will be included in the study and the percentage of each should reflect the overall percentage of males (46%) and females (54%) at UCF. All represented ethnicities will be included in the study and the percentages of ethnicities included should reflect the overall percentages of UCF student ethnicities.

The initial question this study will examine is whether or not there is a positive correlation between honors (high-achieving) students and psychological disorders. The second question is whether or not this correlation is statistically significant when compared to the correlation between non-honors students and psychological disorders. The study will also look
for patterns in social anxiety and perfectionism within and between groups. The instrument of data collection will be a survey. We will employ non-probabilistic convenience sampling. All students will be targeted through UCF Sona Systems, an online research system that allows students to participate in psychological studies in return for participation credits or for money. UCF offers more than 250 psychology classes over the summer. Many psychology professors (for both General Psychology courses and upper division courses) use Sona Systems for “academic credit” by either requiring students to earn a certain number of credits for their course or by using it as an extra credit opportunity. Hopefully these incentives will encourage a large number of students to participate.

UCF has about 50,000 undergraduate students. The researchers will aim to have a 95% confidence level with a plus or minus 5% confidence interval. Using the formula: \( n = \frac{N}{1 + N(E)^2} \) (with N being the population size of 50,000, E being the confidence interval of 0.05, and n being the necessary sample size), the researchers concluded that a sample of at least 397 students should included in this study. Therefore, the researchers aim to have at least 200 participants from both groups for a total of at least 400 participants. If more than 200 students from both groups respond, their responses will also be included in the analysis.

**Instrumentation and Measurement**

The instrumentation of measurement for this proposed study is a 60-item survey. The survey will include both original questions developed by the researchers and professionally developed and widely accepted scales. The original questions on the survey will include questions that target things such as: demographics, GPA, ACT scores, enrollment in the honors
college, inclusion in gifted programs, and diagnosis of psychological disorders. These questions will be examined by a panel of experts (persons who hold PhDs in psychology) for their validity.

Social anxiety will be measured using the Social Phobia and Anxiety Inventory – 23 (SPAI-23). The SPAI-23 is a widely used and accepted measurement scale. The SPAI-23 is a shortened version of the original SPAI that consists of 23 Likert-scale items ranging from never (0 points) to always (5 points). It can be completed and scored in under three minutes. It includes two subscales: Social Phobia (16 items) and Agoraphobia (seven items). The overall score is calculated by adding up the total Social Phobia points and subtracting the total Agoraphobia points. A score of 28 or greater falls above the clinical threshold and is indicative of possible social anxiety disorder. The SPAI-23 has been found to demonstrate strong psychometric properties (Schry et al. 2012).

Perfectionism will be measured using the Almost Perfect Scale-Revised (APS-R). The APS-R consists of 23 self-report items measured on a 7-point scale that fall into one of three subscales: high standards (7 items), order (4 items), and discrepancy (12 items). The subscales measure adaptive (high standards, order) and maladaptive (discrepancy) perfectionism. Reliability and validity estimates are in the moderate to high range. For example, Slaney (2002) and his associates found the APS-R to have excellent convergent validity and strong internal consistency.

**Analysis Plan**

To test the previously mentioned hypotheses, the researchers will perform several statistical tests. Pearson-R tests will be run on both of the groups to find their correlation with rates of psychological disorders. T-tests will be used to compare group means of social anxiety
and perfectionism. Logistical and linear regressions will also be performed to determine which variables are predictors of psychological disorders, social anxiety, and perfectionism.

Regressions will also be used to determine if any of the three subscales of perfectionism are good predictors of social anxiety.

Chi-squared tests will be used to see if honors and non-honors students differ in the incidence of psychological disorders. Exploratory analysis will be run to see if different results are obtained based on the specific class of disorder (mood disorders, anxiety disorders, eating disorders, etc).

The stated alpha value for every test is 0.05. Any p-value less than 0.05 will be accepted as statistically significant.

III. Limitations:

Although the results from this proposed study may yield some unique information and insights, the results should be interpreted in the context of several limitations. First of all, the study will not produce statements of causality because it will be correlational in nature.

Data collection as a whole will be a large limitation to the proposed study. The sample is a non-probabilistic, convenience sample and data will be collected from only one large university. It is unknown if findings will be generalizable to students at all sizes of universities in all geographic locations. Furthermore, data will be collected during a summer semester, meaning the on-campus sample pool will be significantly smaller than that of spring or fall semesters. Also, use of Sona Systems may present some issues. First of all, research shows that those who major in psychology have more psychopathology. Thus, overall psychopathology rates may be higher than expected from a university sample. Also, the Burnett Honors College
does not offer and honors psychology courses over the summer, so the survey return rate may be particularly low for Burnett Honors College students.

Another limitation is that the results will be based entirely on self-report and some of the survey questions will be retrospective in nature. This introduces and increases the likelihood of false data based on faulty recall. The survey will include several original questions that have not been tested for psychometric properties. It will also include several screening measurements. Although the measurements have fairly good psychometric properties, it is unknown if a different approach, such as personal interviews, will yield the same results.

**IV. Ethical Considerations:**

The participant’s autonomy will be upheld at all costs. Individuals will be told that they can withdraw from the study at any time and that if they do complete the survey, their responses will be kept completely confidential.

In addition, the researchers do not expect any significant risks with this proposed study. They do understand, however, that participants may come across a question or answer choice that makes them feel uncomfortable or upset. For example, a question about levels of depression may introduce negative emotional states. These issues will be addressed in the survey consent form.

**V. Implications:**

If the above listed hypotheses are supported by the results of the proposed study, several important implications may be drawn. For example, findings might suggest that honors (high-achieving) students may benefit from some sort of screening and intervention/counseling
program aimed at limiting the effects of psychological disorders among this specific group of students. Students could be taught several adaptive coping mechanisms and could be fostered and encouraged to reach their full potentials. Findings may also suggest that interventions should be set early on in the academic careers of gifted students in order to prevent the maladaptive thoughts and behaviors associated with perfectionism.
References


