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College Students with Claustrophobia in the Classroom
and Quality of Life: A Literature Review

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Master's Thesis

Master of Arts in Professional Counseling

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Certification of Authorship: I certify that I am the author of this paper and that any assistance I received in its preparation is fully acknowledged and disclosed in the paper. I have also cited any sources from which I used data, ideas, or words, either quoted directly or paraphrased. I also certify that this paper was prepared by me specifically for the purpose of this assignment.

Your Signature: _____

Abstract

Claustrophobia can be defined as the fear of enclosed spaces such as small rooms, tunnels, elevators, and basements. Some of the symptoms a student with claustrophobia may experience are both physiological and psychological. Claustrophobia affects three out of every one hundred people. For example, a college with a population of 2500 undergraduate students could have on average 75 students that would be claustrophobic. Of those 75; there is a chance that some may not even be aware of their claustrophobia. One of the purposes of this thesis is to assess if alleviating the occurrence of claustrophobic incidents could possibly improve the overall ability for a student to achieve in the classroom. A literature review was conducted to evaluate claustrophobia and the Quality of Life (QOL) of the classroom environment and yielded no results. A student with claustrophobia in the classroom setting is a topic that is not researched. A study is proposed to address claustrophobia in the classroom and the student's reported (QOL).

Keywords: claustrophobia, classroom, quality of life, college

College Students with Claustrophobia in the Classroom and Quality of Life: A Literature Review

Introduction

A man sits in the middle of a classroom listening to his professor lecture. As the lecture continues he realizes a need to urinate and decides he can restrain from going until the end of class. After a few minutes have passed he begins to feel nervous, but he does not know why. While he is thinking about it, he discovers he is feeling pressure from those sitting behind him. He looks over both his shoulders and notices classmates listening to the lecture. As his fear of those sitting behind him intensifies, his heart rate begins to rise. At this point, he experiences gastrointestinal symptoms. He wonders if he should leave the room or stay. As he is contemplating his options, he worries that if he gets up to leave the room, he may have an embarrassing incident. Thoughts begin racing through his mind such as; “If I were to attempt to leave the room, could I have an embarrassing moment?” “Are those in front of me and behind me closing in on me?” “Are my classmates behind me a threat to me, or am I paranoid?” Now he starts to sweat as his heart rate continues to accelerate. This lasts for several minutes until the class eventually ends.

As the students exit the classroom, he hurries out to go to the restroom. As he enters the restroom, his symptoms subside. He sits down and starts to think about what just occurred. He comes to the conclusion that he was so focused on his thoughts and fears that he failed to concentrate on the lecture.

What you just read could be a reaction a person with claustrophobia may have if they are in a classroom environment. This could be even more confusing and stressful if the student is unaware they have claustrophobia.

This thesis will define claustrophobia, recognize the different types of claustrophobia, as well as identify the purpose of the thesis. In addition, an extensive literature review was conducted to ensure any relevant research and find gaps in the literature. Finally a study will be proposed to address claustrophobia in the classroom and quality of life (QOL).

Definition

Claustrophobia originated from the Latin word *claustrum*, which means to “bolt” or “lock” (Wiebe, 2004). Garcia-Palacios, Hoffman, Richards, Seibel, and Sharar (2007) define claustrophobia as “the fear of enclosed spaces such as small rooms, tunnels, elevators, and basements.” (p. 485). To further define claustrophobia, Radomsky, Quiment, Ashbaugh, Paradis, and Lavoie (2006) believe it is best to break claustrophobia into two sub-categories; fear of suffocation and fear of restriction. They came to this conclusion because they believe when confronted with a situation that restricts their movement; claustrophobics may not understand their phobia. This can lead to a belief that their breathing may be restricted.

According to LeBeau et al, (2010) claustrophobia is listed as a specific phobia (situational type) in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). The authors further state that specific phobias can be described as an irrational or unreasonable fear of an object or situation. Prior to the DSM-IV-TR, the DSM III and the DSM-III-R used the term simple phobia. Situational phobias have a lifetime prevalence of 5.2 to 8.4 percent, with fear of enclosed spaces averaging between 3.2 and 3.3 percent. Females represent between 87 and 90 percent of the specific phobia population. The age-of-onset for situational phobias is between 13.4 and 21.8 years of age. The DSM-IV-TR states there is a bi-modal age-of-onset for specific phobias, with peaks in childhood and the late twenties (American Psychiatric Association, 2000). According to LeBeau et al, there are different categories of fears that people with specific

phobias will experience when confronted with their fear. The categories consist of: 1). fear of danger or harm, 2). being trapped, 3).physical symptoms, 4).being disgusted, and 5).or being unable to describe a primary focus of their fear. More than half of those with situational phobias focus on fear or being harmed.

Situational type phobias which include subjects like flying, driving, public transport, and enclosed spaces are included in this section. In addition, when someone is confronted with or anticipates a situation that they have an extreme or irrational fear of, they may respond with anxiety, panic, fear, and/or thoughts of losing control. With that in mind, the anxiety disorder section of the DSM-IV-TR includes the following topics; panic attack, agoraphobia, panic disorder without agoraphobia, panic disorder with agoraphobia, agoraphobia without history of panic disorder, specific phobia, social phobia, obsessive-compulsive disorder, posttraumatic stress disorder, acute stress disorder, and generalized anxiety disorder. (American Psychiatric Association, 2000). It is this author's assumption that people who suffer from claustrophobia may also experience anxiety and panic symptoms. Rachman and Levitt (1988) conducted a qualitative study to evaluate panic, fear reduction, and habituation in claustrophobic patients. Results of the study showed common themes claustrophobic participants experienced were shortness of breath, choking or smothering, chest pain, faintness, dizziness, nausea, hot flashes, chills, trembling, fear of passing out, acting foolish, suffocating, losing control, panic, death, and running out of air.

This author was 38 years old when he began his undergraduate work. He completed two classes a semester for a year before he discovered he had claustrophobia. Once he understood his phobia, steps were taken to alleviate stress. He discussed his phobia with his professors before each semester began and with his classmates as the semester progressed. Sitting in the back of

the room, preferably nearest the door, and when possible, leaving the curtains in the room open were effective. These actions are similar to a study conducted by Deacon, Sy, Lickel, and Nelson (2010). They evaluated the efficacy of utilizing safety behaviors in exposure therapy. They stated that actions taken to evade, avert, or dodge a feared situation are considered safety behaviors. Deacon et al, found that safety behaviors may be effective, but more research needs to be completed before they can make a sound decision. This author believes that taking the actions he did were invaluable to improving his classroom experience.

Purpose

This thesis has many purposes. The first purpose is to identify students who may have claustrophobia, especially those who are unaware of it. The second purpose of this study is to improve the Quality of Life (QOL) of the classroom experience for claustrophobic students. As this author experienced episodes of claustrophobic panic in class, he found that his attention would drift away from the lecture. A third and final purpose would be to assess if alleviating these incidents could possibly improve the overall ability for a student to achieve. This could be accomplished by evaluating the grade point average (GPA) of claustrophobics before and after they take steps to prevent attacks.

This author would like to note that he was distracted at times by panic in the classroom, but it did not affect his ability to achieve. In addition, according to this author, it may seem strange that someone could have claustrophobia and not be aware of it. This author was unable to find data addressing this issue in the classroom; however Wiebe (2004) addressed claustrophobic patients in a magnetic resonance imaging (MRI) department. He stated “I have brought many patients out of the magnet prematurely who have said, ‘Wow, that’s a small space. I didn’t know I was claustrophobic.’” (p. 26).

Benefits and Deterrents of a College Education

This author believes that every college student should be afforded the opportunity to achieve academically at the highest level so they can acquire the benefits that an education can get them. Some benefits of an education are earning potential and employment. The following are rates of employment and annual earnings by level of education, as reported by the Bureau of Labor Statistics, Washington, DC, 2007 (As cited in Sharf, 2010, p. 72):

1. Some High School, No Diploma, 46.6%, \$22,256.00.
2. High School Graduate, 62.8%, \$31,408.00.
3. Some College, No Degree, 69.9%, \$ 35,516.00.
4. Associate's Degree, 76.1%, \$38,480.00.
5. Bachelor's Degree, 77.5%, \$51,324.00.
6. Master's Degree, 77.6%, \$60,580.00.

Other than employment and earning potential, other benefits may be experienced through a college education. For example, health can improve in many ways. Those who gain post high school educations are more likely not to smoke. Smoking percentages decrease as education attainment increases (Troupoucis, 2004). As cited in Belfield and Bailey (2011), Cutler and Lleras-Muney (2010), used the National Health Interview Surveys from 1990 to 2000 and determined that for every year of additional education, health risks decreased; smoking by 3 percentage points, obesity by 1.4 percent, and heavy drinking by 1.8 percent. They further reported that people who achieve a higher education are more likely to wear a seatbelt, and get a colonoscopy, mammogram, or flu shot.

According to an article (Benefits of Higher Education, 2011), children of college educated parents benefit as well. For example, mothers are more likely to take their children to a dentist or

doctor and they are more involved in their children's educations. In addition, they are also more likely to participate in community services with a participation rate of 43 percent as opposed to high school graduates only participating at a 19 percent rate. Vila (2005) (as cited in Murray, 2009), states that long term benefits of higher education include better health care, less hazardous jobs, less stress from financial issues, and better job satisfaction. Bynner and Egerton (2001) (as cited in Murray, 2009) state that college graduates believe they are in better health, display less depression, and are less likely to be assaulted or in an accident. Laura Perna points out that besides long term benefits of a college education, people can benefit immediately. She states that students may enjoy extracurricular activities, engage in social and cultural events, enjoy their learning experience, and hopefully enhance their social status (2005).

With the benefits of a college education stated above, there are deterrents from achieving an education as well. Some are social economic status and race:

African Americans and Hispanics are underrepresented among degree recipients at all levels relative to their representation in the eligible population. In 1999-2000 African Americans represented 13% of all public high school graduates, but only 11% of associate's degree recipients, 9% of bachelor's degree recipients, 8% of master's degree recipients, 7% of first-professional degree recipients, and 5% of doctoral degree recipients (NCES, 2003). Similarly, Hispanics received 11% of all public high school diplomas, but only 10% of associate's degrees, 6% of bachelor's degrees, 5% of master's degrees, 5% of first-professional degrees, and 3% of doctoral degrees (NCES, 2003).

Although college enrollment rates have generally been increasing over time for all groups, the approximately 30 percentage point gap in college enrollment between low- and high-income students is comparable in size to the gap that existed in the 1960s

(Gladieux & Swail, 1999). In 1999, 57% of low-income students enrolled in college, compared with 86% of high-income students (Gladieux & Swail, 1999.)

(Gladieux and Swail, 1999, and National Center for Educational Statistics, 2003, as cited in Perna, 2005, pp. 23-24).

Anxiety is another issue that may impede a student's ability to achieve. The DSM-IV-TR states "Specific Phobias may also involve concerns about losing control, panicking, somatic manifestations of anxiety and fear (such as increased heart rate or shortness of breath), and fainting that might occur on exposure to the feared object" (American Psychiatric Association, 2000, p. 444). This author believes that symptoms such as these can be debilitating to a student. Wilhelm (2003) addressed the American's with Disabilities Act (ADA) as it applies to mental disabilities in higher education. The ADA has three categories called titles. The first title addresses employers with a minimal of 15 employees, the second title includes public entities, and the third title concerns public accommodations. Institutions of higher education that are bound by this act would be included in Title III. The ADA definition of a disability is as follows; "(A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such impairment; or (C) being regarded as having such impairment." (p. 221).

Wilhelm addressed all three criteria, starting with the first criteria are mental impairments. The Equal Employment Opportunity Commission (EEOC) includes mental illnesses in their definition of mental impairment. A few of these illnesses are bipolar disorder, major depression disorder, and anxiety disorders such as panic disorder. Wilhelm pointed out that college students frequently ask for assistance with issues such as Dyslexia, Attention Deficit Disorder (ADD), and Anxiety Disorders. The second criteria; what is a major life activity is next. Major life

activities include walking, hearing, seeing, learning, reading, and thinking to name a few. The third criteria; addresses what is considered substantially limiting. Referring to the EEOC, Wilhelm states you are substantially limited when you are unable to perform an activity that an average person can or when the method, length of time required, or environment are constrained.

Review of the Literature

A literature review was conducted to evaluate how claustrophobia affects college students in the classroom setting. With a focus on finding the most current information available, an extensive review was conducted between the years of 2007 to 2012. Due to a lack of research studies in the aforementioned search, this author extended the literature review as far back as 1983. With the extended search, this author was still unable to locate any relevant research and had to look at how anxiety affected the students in the classroom.

There were six general areas focused on during the search, and they are as follows: claustrophobia, anxiety, benefits of an education, detractors from being able to earn an education, industrial/organizational journals, and assessment instruments or psychometric devices. This author would like to combine the claustrophobia, anxiety, benefits of an education, and detractors from earning an education into one section; and address industrial/organizational and assessment instruments or psychometric devices as separate sections. Throughout this section, Benner Library will be mentioned. This is the main undergraduate and graduate library at Olivet Nazarene University.

There were 32 total search engines and 16 total keyword searches utilized, which provided a total of 1,693,675 results. Let it be noted; using the keyword *claustrophobia*, this author located 977,000 results under Google and 291,500 results under Google Scholar. There were a total of

425,175 articles available to this author after subtracting the results from Google and Google Scholar. Please see table below.

Search Engine	Articles Found
Psych Articles	5
Psych Info	294
Eric	2
Education Research Complete	1
Academic Search Premier	47
Medline with Full Text	267
PubMed-com	8764
CINAHL Plus with Full Text	52
Wilson Select (Omni File Full Text)	62
Wilson Select Plus	48
Dissertations and Thesis (Full Text)	32
Health and Psychosocial Instruments	38
Soc Index with Full Text	17
PubMed-gov	15,282
GPO access-gov (this site had several government databases available that were also searched)	7,393
ingentaconnect-com	55
Google	977,000
GoogleScholar	291500
CINAHL	1
Under the Benner Library, School of Graduate and Continuing Studies (SGCS), Credo Reference: Psychology	126
Proquest Education Journals	339,881
Pubmed Central	3865
Education Research Complete	48941
dictionary.com	2

The following is a list of the search engines yielding no articles: GPO Monthly Catalog, Guide to Social Science and Religion in Periodical Literature, GILS-net, Eric.ed.gov., Eric (First Search), GPO, Eric First Search (Government Products), and Funk and Wagnall’s New World Encyclopedia.

The following is a list of the keyword searches utilized and the amount of articles available: Claustrophobia-18,941 (With Google and Google Scholar added, the number of available results

increased to 1,287,441), Claustrophobia and Acquisition-3149, Claustrophobia and Onset & Claustrophobia and Age-of-Onset-1156, Claustrophobia and Symptom(s)-5607, Claustrophobia and Questionnaire & Claustrophobia and Scale(s)-1624, Claustrophobia and Student(s)-5285, Fear and Phobias-818, Fear and Phobias and Anxieties-75, Claustrophobia and Academic(s)-179, Claustrophobia and Grades-76, Claustrophobia and College-324, Claustrophobia and Classroom(s)-20, Education and Benefits-163640, Education and Health-146683, Education and Income-71975, Education and Handicaps-5625.

Due to the lack of available literature, this author accessed three industrial/organizational journals made available on the Benner Library Full Text E-Journals site. The goal was to find studies that may have been conducted with a focus on how claustrophobia might affect a person in an environment that is similar to a classroom. The journals reviewed were The Journal of Applied Psychology, Personnel Psychology, and Occupational Psychology. This author reviewed every article, of every journal from the time of the review until either 2005 or 2006. There were no articles in any of the journals that addressed claustrophobia in any manner. Exclusionary criteria for these articles included foreign language papers, papers that predated articles of the same nature, and papers that addressed claustrophobia and the college student, but did not address the classroom environment.

In the proposed study section of this paper, this author suggested assessing students self-reported Quality of Life (QOL) in the classroom environment. Two book sites and six web sites were reviewed. Mental Measurements Yearbook with Tests in Print provided a total of 857 results. The keyword searches utilized and the amount of results for each are as follows: Claustrophobia-0, Classroom and Environment-27, Classroom and Quality of Life-1, Quality of Life-16, Quality of Life and College-6, Classrooms-123, Claustrophobia and Classroom(s)-0,

Claustrophobia and Quality of Life-0, Surveys-367, Anxiety-294, Surveys and Anxiety-8, Panic-15, Surveys and Panic-0. The following web sites are individual companies that provide a variety of instruments. Most of these have a-z listings of instruments. Every available instrument was reviewed. www.psychologicalassessmentinc.com, www.assessmentpsychology.com, www.ipat.com (Institute for Personality and Ability Testing), www.mindgarden.com, www.pearsonassessment.com.

The first book site reviewed was World Cat, which provided 670 total books. The keyword searches utilized and the amount of books available are as follows: Psychometrics and Classroom-44 total, with 40 in English, Psychometrics and Claustrophobia-0, Psychometric and College-335, Instruments and Claustrophobia-0, Psychometrics and Anxiety-155, Phobias and College-129, Phobias and Instruments-7. The second book site reviewed was Barnes & Noble, which provided a total of 2713 books. The keyword searches utilized and the amount of books available are as follows: Psychometrics-700, Psychological-Surveys-1644, College-Surveys-340, Claustrophobia-Surveys-0, and Anxiety-Surveys-29. Exclusionary criteria for the instruments included surveys with too many questions, surveys with multiple irrelevant sections, or surveys that addressed different classroom issues. However, there were no surveys that focused on the quality of life for the student with claustrophobia in the classroom. The Beck Anxiety Inventory is a survey that could possibly be utilized, but it would require restructuring the questions to address a classroom environment. This in-turn would require verifying the reliability and validity of the instrument.

As a result of the literature review, there were no articles identified that addressed claustrophobia and college students in the classroom environment. Several articles were located that addressed the physiological and psychological reactions students experience when placed in

situations that would normally be stressful to a claustrophobic. The participants were primarily recruited from different social science classes and were offered partial course credit for their involvement. This author would like to detail a few of these articles.

The first study by Powers, Smits, Whitley, Bystritsky, and Telch, addressed whether psychotropic medications were a factor in relapse/return of fear under claustrophobic circumstances. The participants included college students and community volunteers. The college students (N=95) were Introduction to Psychology students at the University of Texas at Austin. They were given partial course credit in return for their participation. The researchers developed a wooden box, painted black and lined with foam for the participants to lie down in. The box had a hinged door. They were asked to remain as long as they could inside the box. They were unaware that a two minute maximum was established prior to their involvement (2008).

The second study utilized 33 Introduction to Psychology students from the University of Wyoming who were given partial course credit for their involvement. In this study, Deacon et al. assessed whether safety behaviors increase the effectiveness and acceptability of exposure therapy for claustrophobic anxiety. A two stage screening process was conducted with one being a likert scale questionnaire focusing on fear of enclosed spaces and the next being exposure to a claustrophobia chamber consisting of a wooden box they were asked to lie down in. The participants that survived the screening process were offered a Behavioral Approach Test (BAT) prior to beginning the intended test. The BAT was not mandatory, but was designed to garner claustrophobic reactions from participants in settings other than the planned situation. These environments consisted of a small windowless room, entering sleeping bags, either zipped or unzipped, covering oneself with one, two, or three blankets, and being placed in handcuffs. The

intended test involved five stages of increasing difficulty for a claustrophobic. The first being entering a chamber and laying down with the top closed, but not latched. The next stage the top was latched. The third included the first two stages, but the participant was asked to wear a white dust mask. Next they were asked to wear a scarf around their neck as well. Finally, they were asked to combine the first four stages and wear handcuffs. Participants were assessed after each stage, addressing issues such as maximum fear, claustrophobic cognitions and coping self-esteem, and their opinions of the treatment and aversive stimuli employed (2010).

The final study detailed was prompted by a six and a half percent refusal or early termination rate of scheduled MRI procedures. McGlynn, Smitherman, Hammel, and Lazarte (2006), recruited 64 undergraduate psychology students that survived exclusionary tests. They were given partial course credit in return for participating in a mock MRI scan. During the mock exam they measured how far the participants allowed themselves to be inserted into the tube. After completion of the test, psychometric questionnaires, subjective levels of fear, and psychophysiological data were gathered.

Due to the lack of literature available to this author, a Benner Library and Learning Center School of Graduate and Continuing Studies librarian was contacted and a secondary literature review was conducted. A few articles that addressed claustrophobia were found, but none were relevant to the study.

Proposed Study

This author believes a study should be conducted to assess the effects claustrophobia may have on a student's perceived quality of life of the classroom experience and their ability to achieve academically. Another issue to consider is the ability to identify possible claustrophobics

that are unaware of their phobia. Besides the main purposes of the proposed study, there are several additional reasons to support the proposed study.

The first matter is the significant lack of literature on this topic. As this literature review progressed, the subject claustrophobia and how it may affect a student in the classroom was an untouched area for research. As multiple articles were located that addressed the signs and symptoms that claustrophobic college students presented; it was clear that there is an awareness of this concern. What is not clear is if people realize that a classroom environment can trigger a claustrophobic event. Claustrophobia seems to be a mental health issue that does not garner the attention or respect this author believes it commands.

Based upon the current trends in the literature, combined with the lack of literature on claustrophobia, the next logical step in the literature would be a study to evaluate the effects claustrophobia may have on a student's perceived quality of life of the classroom experience.

The DSM-IV-TR (American Psychiatric Association, 2000) addresses claustrophobia as a situational phobia, a sub-category of specific phobias. Fear of enclosed spaces is mentioned only a few times in the eight pages the DSM-IV-TR allotted for specific phobias in the anxiety disorders section. Another purpose for a study is the fact that claustrophobia in a classroom environment can lead to anxiety issues. Anxiety in the classroom can be detrimental in several ways. According to Head and Lindsey (1983), a student's learning potential is influenced by anxiety. As anxiety increases, learning capacity decreases. Anxiety combined with higher task complexity led to diminished production. Females tended to display more anxiety issues than males. They further state that anxiety may grow to be so extreme, that students may not only ponder taking their lives, but may very well complete the act. Suicide may be an extreme product of a student's anxiety, but Head and Lindsey believe anxiety needs to be considered, stating

“Anxiety and its effect on college students’ experiences must become a major concern for all higher education personnel” (p. 176). How prevalent is anxiety on college campuses? According to Vye, Scholljegerdes, and Welch (2007):

The National Institute of Mental Health reports that research indicates 40 million adult Americans (18.1%) currently suffer from an Anxiety Disorder. And these 18% of Americans with an Anxiety Disorder may be just the tip of a growing iceberg of individuals experiencing problematic worry. (pp. 4-5).

The authors further stated that more students are seeking assistance for more complicated and increasingly stressful issues. Lastly they mention that anxiety and stress surpassed relationship issues in the mid-nineties as the primary reason for seeking assistance at college counseling centers. The DSM-IV-TR (American Psychiatric Association, 2000), states that panic attacks due to phobias are spontaneous and sometimes they develop while exposed to the feared situation. If people cannot avoid these circumstances, they will endure with immense anxiety. It also points out that one in five adults with a phobia will successfully overcome it. It appears to this author that the DSM-IV-TR expresses that claustrophobic anxiety can be intense and that 80 percent of adults need to identify their phobia and learn to manage it. In Briggs’ (1995) article addressing agoraphobic and claustrophobic anxieties; students exhibiting claustrophobic anxiety often wanted to leave their university, but a desire to complete their educations prevented this. They also expressed a desire to separate themselves from new students and they looked forward to vacations and the end of their courses as a means to get them through a semester. Another issue to address is whether anxiety plays a role in the decisions future students are making pertaining to their choice of learning format. Lei and Gupta (2010), report that the population of online learners has increased from 745,000 in 1995 to 3,900,000 in 2007. They further report that this

has not affected enrollment at traditional in house college campuses. According to Gould (2003), (as cited by Lei and Gupta, 2010), enrollment is expected to continue to grow and as a result of this, classroom space is decreasing. This author wonders if any portion of those choosing an online education is doing this to avoid a claustrophobia event. If in fact they are; then identifying claustrophobics and learning how to handle the feared environment may allow some to attend a traditional campus. A reduction in available classroom space could be a nightmare for people with claustrophobia; which this author believes further enhances the need to identify claustrophobics. Lastly, LeBeau et al, (2010) state that the age-of-onset for situational phobia is between 13.4 and 21.8 years of age. This author realized that students as old as 22 could develop claustrophobia, which means that these students could be into their sophomore or junior year of college. This strengthens a need to identify claustrophobics who participate in a classroom environment.

Finally, this author has explained that he has claustrophobia and experienced anxiety while attending classes during his undergraduate and graduate course work. He has also articulated that during his first year he was unaware of the cause of this anxiety. Once he identified his phobia, he took steps to help ease his anxiety. One of these steps was to converse with his professors before the beginning of each semester. His goal was to inform them of his phobia, request seating accommodations, and alert those to the possibility that he may need to leave class quickly at times. Although all of them accommodated his needs; only two of them expressed their awareness that claustrophobia can lead to a traumatic event in their classroom.

The lack of available literature addressing claustrophobia and its effects on the classroom environment, the level of anxiety students may experience in the classroom, and this author's

personal experiences combine to validate a need for a study. The following is the proposed study suggested.

The proposed study will be conducted at a small Christian University in the Midwest. The participants will be a random sample of college students from a traditional undergraduate program. All participants will complete a short questionnaire to evaluate whether they experience claustrophobia. Each participant will be placed equally either in a control group or in an experimental group. The control group would not receive the education, while the experimental group will receive the education. After a year, the participants would complete the same questionnaire to see if there is an improvement in their overall QOL.

First, a random sample of participants from sophomore and junior classes would be recruited from a traditional undergraduate program. Informed consent will be obtained prior to the start of the study. Participants will be made aware that their involvement in the study is voluntary and their grade will not be affected by lack of participation. Anonymity and confidentiality will be maintained throughout the study. Student names will be assigned a code and will be kept in a secure cabinet that this researcher will only have the key. Although this author believes that any college student could be used in this study, he would like to avoid using freshman and seniors for a couple reasons. Freshmen have the added stress of adjusting to college life and seniors have the stress of preparing to graduate. LeBeau, et al. (2010), stated the age-of-onset for claustrophobics is 13.4 to 21.8. It would be a goal of the proposed study to find enough participants to utilize only those older than 21.8 years of age.

Next, the participants should be assessed to identify signs of possible fear of suffocation and fear of restriction. This author chose the Claustrophobia Questionnaire (CLQ). Ost reported the CLQ was developed by Rachman and Taylor in 1993 that consisted of 36 questions on a one

through five anxiety scale. In 2001, Radomsky, Rachman, Thordarson, McIsaac, and Teachman reduced the amount of questions from 36 to 26. Fourteen of these address fear of suffocation and twelve address fear of restriction (2007). Radomsky, et al. (2001) with a desire to reduce the CLQ, performed four interrelated studies that included community adult and undergraduate questionnaire responses and behavioral testing. The results were as follows:

Results indicate that the CLQ has good predictive and discriminant validity as well as good internal consistency and test-retest reliability. The CLQ appears to be a reliable and sensitive measure of claustrophobia and its component fears. We encourage the use of the CLQ in a variety of clinical and research applications. The scale is provided in this paper for public use (Radomsky et al. 2001, p. 287).

In addition, Radomsky et al. (2001) recommend using the CLQ to measure claustrophobic fear in multiple anxiety studies including panic disorder, social phobia, stress disorder, and claustrophobia. In another study, Radomsky et al. (2006) evaluated the efficacy of a French version of the CLQ. They began by stating that the English version of the CLQ displayed exceptional psychometric properties. And they believe the CLQ is the only validated self-report measure of fears of restriction and suffocation. Lastly, they pointed out the CLQ is also available in Swedish, Spanish, and soon to be German. Although this author was able to find a few other instruments to assess signs or symptoms of claustrophobia, the CLQ was the most prevalent survey located. Further, every study this author located that addressed the CLQ endorsed its use. This author suggests administering the CLQ to students through electronic means, with hopes of gathering results from as many students as possible. Let it be noted: Example One will provide an example of the CLQ.

Upon completion of the CLQ, results should be collected and possible claustrophobics identified. Those identified should be invited to participate further in the study. There should be as many non-claustrophobics as claustrophobics invited to participate as control subjects. Prior to meeting with any of these students, a survey needs to be developed to assess the self-reported QOL of a student's classroom experience. This survey would consist of demographic information such as name, age, gender, class, GPA, major, questions assessing the physiological and psychological experiences students have in a classroom environment, and a question asking if they were aware of their possible claustrophobic tendencies. The physiological and psychological questions would consist of signs and symptoms of claustrophobic fear. This author attempted to locate a survey that would accomplish this but was unable to do so. Prior to administering this survey, it will need to be evaluated for reliability and validity.

Once participants are identified, three groups would be determined and all three groups need to be invited to separate meetings. One group, the control group, would consist of participants that did not display claustrophobic tendencies. Those identified as possible claustrophobics would be divided into two equal groups, Group A and Group B. Each group would be addressed separately. The Control Group would have as many participants as Group A and Group B combined. All participants completing the survey will sign a letter of informed consent electronically.

The Control Group would be advised that their requested participation will consist of one meeting. During this meeting, they would be informed of the reason for the study, complete the QOL survey, and be offered the opportunity to ask any questions.

Group A and Group B need to meet separately. At their initial meetings, each group would be informed of the reason for the study. Next they need to be advised that the results of their CLQ

exhibited signs and symptoms that a claustrophobic may display. Note: The administrator of this study needs to be familiar with claustrophobia, and its' signs and symptoms. They should also be prepared and qualified to address any issues that may arise because of the information the participants have been presented. At this time, the presenter should address the issue of claustrophobia in a classroom environment by educating them on steps they could take to avoid or decrease stress related matters. If this author is the administrator, he would provide the information as well as self-disclose his personal experiences. At this time, the QOL survey would be administered.

Group A would be released with a request that they convene again a year later. This second meeting will consist of a few things. There would be a discussion of the year and how they perceived it went. Each participant would complete the QOL survey a second time. Prior to releasing them, they would be offered the opportunity to ask any questions.

Once Group B completes the QOL survey, they would be offered the opportunity to meet with this group and a qualified counselor/facilitator (for example this author) on a monthly or bi-monthly basis for the academic year. Upon completion of the year, one last meeting would be conducted. At this meeting, there would be a discussion of the year and how they perceived it went. Each participant would complete the QOL survey a second time. Prior to releasing them, they would be offered the opportunity to ask any questions.

Statistical analysis will be conducted using statistical package for the social sciences (SPSS). A *t-test* will be used to evaluate if education improves the students QOL or if education and group therapy increases the QOL for students that have claustrophobia in the classroom.

This author is aware that proper release forms and explanations as to the rights of the participants need to be provided and signed. This author would seek Institutional Review Board

approval prior to the start of this study. Lastly, this author suggests that possible individual referrals are available to those participants that request them. This can be either through their insurance, school counseling centers, or possibly graduate counseling programs.

Conclusion

Claustrophobic fear can be traumatic. Experiencing an attack and not knowing its source can be frightening and frustrating. It is unknown to this author how many people if any endure claustrophobic anxiety and do not know it. Those who knowingly suffer from claustrophobia frequently think about possible situations in their lives that may induce panic. A college classroom is one of those situations. This author's search for literature that addressed the issue of claustrophobia in a college classroom yielded no results. This proposed study could discover students that may be unaware of their claustrophobia. Once identified, they may take steps to ease their fears. This author believes that if only one person could benefit from this proposed study, then it was worth the effort. Fortunately, this author recognizes that the college classroom environment can generalize to any classroom, whether it is a grade school, high school, or even a Sunday school. This study may also benefit any environment similar to a classroom such as a workplace, theatre, church, and coffee shop. This author is unsure why he was unable to locate literature addressing claustrophobia and the classroom environment. It is hoped that claustrophobic anxiety in the classroom will be recognized as an issue that needs exploring.

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Example One

The Claustrophobia Questionnaire (CLQ), by Radomsky, Rachman, Thordarson, McIsaac, and Teachman, (2001), (p. 292). Each participant is asked to answer questions on a 0 to 4 scale.

The values of these scores are as follows:

0 = Not at all Anxious

1 = Slightly Anxious

2 = Moderately Anxious

3 = Very Anxious

4 = Extremely Anxious

Participants are asked how anxious they would feel in these places or situations, and asked to circle the most appropriate response.

The fourteen questions for the Suffocation Survey (SS) are as follows:

1. Swimming while wearing a nose plug.
2. Working under a sink for 15 minutes.
3. Standing in an elevator on the ground floor with the doors closed.
4. Trying to catch your breath during vigorous exercise.
5. Having a bad cold and finding it difficult to breathe through your nose.
6. Snorkeling in a safe practice tank for 15 minutes.
7. Using an oxygen mask.
8. Lying on a bottom bunk bed.
9. Standing in the middle of the third row at a packed concert realizing that you will be unable to leave until the end.
10. In the center of a full row at a cinema.

11. Working under a car for 15 minutes.
12. At the furthest point from an exit on a tour of an underground mine shaft.
13. Lying in a sauna for 15 minutes.
14. Waiting for 15 minutes in a plane on the ground with the door closed.

The 12 questions for the Restriction Survey (RS) are as follows:

1. Locked in a small DARK room without windows for 15 minutes.
2. Locked in a small WELL-LIT room without windows for 15 minutes.
3. Handcuffed for 15 minutes.
4. Tied up with hands behind back for 15 minutes.
5. Caught in tight clothing and unable to remove it.
6. Standing for 15 minutes in a straight jacket.
7. Lying in a tight sleeping bag enclosing legs and arms, tied at the neck, unable to get out for 15 minutes.
8. Head first into a zipped up sleeping bag, able to leave whenever you wish.
9. Lying in the trunk of a car with air flowing through freely for 15 minutes.
10. Having your legs tied to an immovable chair.
11. In a public washroom and the lock jams.
12. In a crowded train which stops between stations.