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Original Research

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Perceived Anxiety Disorder Stigma: A Predictive Analysis

Shawn Nabors, PhD
Walden University, Minneapolis, Minnesota, United States
https://orcid.org/0009-0002-3213-1163

Rick J. Cicchetti, PhD
Walden University, Minneapolis, Minnesota, United States

Srikanta Banerjee, MPH, MBA, MD, PhD
Walden University, Minneapolis, Minnesota, United States

G. Michael Szirony, PhD
Walden University, Minneapolis, Minnesota, United States

Craig R. Blum, PhD
Walden University, Minneapolis, Minnesota, United States
https://orcid.org/0000-0002-0111-0338

Contact: shawn.nabors@anxietykalamazoo.com

Abstract

Anxiety remains one of the most commonly diagnosed mental health disorders. Systemic barriers to mental health treatment persist. Research on anxiety is robust, although research on perceived anxiety disorder stigma is limited. The purpose of this quantitative analysis was to determine whether factors including age, gender, level of education, and presence of a diagnosable anxiety disorder condition would predict perceived anxiety stigma in a population of adults from the Midwestern region of the United States who were in treatment for anxiety. Based on Goffman's framework, we used the Generalized Anxiety Stigma Scale (GASS) to determine the presence and level of anxiety disorder stigma. We evaluated data using multiple regression to predict factors that contribute to the dependent variable of perceived anxiety stigma. We found significance in the independent factors of age (p = 0.017), gender (p = 0.002), and level of education (p = 0.018) in the prediction of anxiety disorder stigma. This study may help the counseling profession limit the impact of perceived anxiety disorder stigma as a barrier to mental health treatment for persons with anxiety disorders who are vulnerable to this type of stigma. In this paper, we discuss the results and suggest future research.

Keywords: *anxiety, mental health, stigma, perceived anxiety stigma, allostatic load*

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Introduction

Anxiety disorders constitute one of the most prevalent mental health conditions worldwide (Hoge et al., 2023; WHO, 2023; Yang et al., 2021). Anxiety disorders may also have a profound effect on the physical health of individuals. Anxiety disorders have become a major public health problem associated with significantly increased mortality rates (Meier et al., 2016), chronic physical conditions (Scott et al., 2007), and higher rates of disability (Hendriks et al., 2014). Dr. Tedros Ghebreyesus, Director General of the World Health Organization (WHO), noted, "There is no health without mental health" (WHO, 2022, p. vi). Anxiety disorders may also have exacerbating effects on families and have been associated with suicidal ideation (Ariapooran et al., 2022; Hoge et al., 2023). Although significant research exists on anxiety disorders, little research has been conducted on perceived anxiety disorder stigma. Therefore, our study focused on this specific disorder.

Anxiety disorders overall are characterized by feelings of anxiety and fear, including phobias, generalized anxiety, panic, and social anxiety disorder (WHO, 2017). The *DSM-5-TR* (American Psychiatric Association, 2022) defines generalized anxiety disorder (GAD) as excessive worry and apprehensive expectations, occurring more days than not for at least 6 months about several events or activities, such as work or school performance. The duration of symptoms experienced by individuals with anxiety disorders across the spectrum characterizes the disorder as a chronic condition (Cheng et al., 2020). According to the American Psychiatric Association (2022), anxiety disorders consist of a subgroup of mental health conditions that share standard features, such as unwarranted levels of fear and anxiety-related behavioral and emotional disturbances. Individuals impacted by anxiety disorders may experience disrupting symptoms, including but not limited to intrusive anxiety-provoking thoughts, along with physiological manifestations such as increased heart rate, sweating, chills, hot flashes, and dizziness (Karthikeyan et al., 2020). For individuals with anxiety disorders, the fear of experiencing anxiety symptoms could further impact their ability to function (De Jonge et al., 2016). People with anxiety disorders that are unaddressed may experience a loss of personal and work productivity and reductions in quality of life (Langley et al., 2018).

The COVID-19 pandemic has also had an impact on anxiety disorder conditions. Before 2020, mental disorders were among the leading causes of the global health-related burden, with depressive and anxiety disorders serving as leading contributors (Santomauro et al., 2021). COVID-19 has been linked to feelings of uncertainty, disruptions in activities of daily living, and concerns for the health and well-being of the family and loved ones (Delpino et al., 2022). Santomauro further noted that such conditions are likely associated with increases in generalized anxiety. Societal experiences from the COVID-19 pandemic led to everything from loneliness to social anxiety (Banerjee et al., 2021). Societal experience and lack of social capital, such as shared values, trust, and cooperation, can increase allostatic load (Prior, 2021), a condition referring to the body's physiological response to chronic stress (Rodriguez et al., 2019).

Stigma

According to Goffman (1963), society identifies specific attributes expected of its members. Those with attributes differing from those of normative categories are more susceptible to being negatively evaluated or stigmatized. Goffman defined stigma as an "attribute that is deeply discrediting" and as something that reduces its bearer "from a whole and usual person to a tainted, discounted one" (1963, p. 3). Historical correlations exist between socially stigmatized individuals and a lower quality of life (Garbin et al., 2015; Reinka, 2020). Individuals who are assigned a stigmatized role may be socially discredited. For example, those diagnosed with diabetes may be socially discredited as deserving of blame for their diabetic condition and obesity (Nabors, 2022). Stigmatization leads to further marginalization of individuals who are often members of lower socioeconomic status groups. Stigma may also play a role in determining health-seeking behaviors and can affect access to societal resources (Hibbert, 2018). Stigma is a way to strengthen identity by

castigating the out-groups, and, whether internal or external, it can cause an exacerbation of stigma (Banerjee, 2023). When internalized, this may be considered self-stigma. Self-stigmatization can serve to diminish self-worth. The harm of self-stigma manifests through intrapersonal processes, poor health outcomes, and a lowered quality of life (Corrigan & Rao, 2012). Historically, mental health disorders have been associated with negative stigmatizing labels and identities (Nearchou et al., 2018). Social stigma remains a significant concern in mental health conditions (Bharadwaj et al., 2017; Bracke et al., 2019; Thornicroft et al., 2022). There are myriad studies on the deleterious effects of stigma on well-being, physical health, and mental health.

A degree of consistency exists among critical factors in the definition of stigma, consisting of a combination of six necessary conditions of labeled differences, stereotypes, separation, status loss and discrimination, power, and emotional reaction (Andersen et al., 2022; Link & Phelan, 2001). Many of these necessary conditions have embraced Goffman's ideas, which have served as a foundation for more recent work, including aspects of this current study. Goffman's Theory of Social Stigma (Goffman, 1963) posits that social stigma can and often does lower a person's quality of life. Individuals who experience social stigma may find it harder to receive support from fellow societal members (Ramaci et al., 2020). Social stigma may negatively affect the health outcomes of individuals with highly stigmatized medical diagnoses and, subsequently, may then face discrimination in social relationships and healthcare (Gredig & Bartelsen-Raemy, 2017; Hibbert et al., 2018). Moreover, social stigma appears to have similar adverse effects on mental health outcomes for persons with mental health disorders (Benjenk et al., 2019), including increases in anxiety.

Mental Health Stigma

Mental health stigma has been described as a condition in which people or society hold negative beliefs about individuals with mental health disorders, mental illness, or mental health treatment (DeFreitas et al., 2018). This can often be exacerbated when it involves individuals or groups who are already marginalized. The detrimental effects of stigma on the determination to use mental health services are well-established in the literature (Bracke et al., 2019). The concept of self-stigma may serve as a deterrent to seeking mental health treatment, affecting willingness to seek counseling (Schomerus et al., 2009; Vogel, 2007). In a study of individuals with depressive disorders (Schomerus & Angermeyer, 2021), self-stigma was determined to be a more significant factor than external or societal stigma. Individuals are then more likely to face additional challenges (Batterham et al., 2013).

Anxiety has typically been seen as a sign of weakness and inferiority (Pedersen & Paves, 2014). As a result, those who have been diagnosed with a mental health disorder such as anxiety may be stigmatized (Coles & Coleman, 2010). Adults with anxiety disorders have historically been segmented outside the predominant American culture's normative categories since such disorders may result in non-normative traits and behaviors. More specifically, symptoms of anxiety may include somatic symptoms, restlessness, aggression, psychomotor agitation, fatigue, sleep disturbance, concentration issues, and more (Nicoară et al., 2023). Such non-normative traits and behaviors may disproportionally include fear, worry, and avoidance (McKnight et al., 2016).

Anxiety disorder stigma occurs when observable non-normative behaviors create unfavorable belief systems toward people with anxiety disorders (Michaels et al., 2017). Ociskova et al. (2015) found that high levels of anxiety disorder stigma were associated with more intense anxiety disorder symptoms, higher rates of dissociation and harm avoidance, higher levels of depression, and comorbid personality disorders. Negative public and professional attitudes toward anxiety disorders may lead to poor treatment outcomes for people with anxiety disorders (Davies, 2000; Nabors, 2022). Individuals who perceive that others have damaging beliefs regarding their anxiety disorder experience perceived anxiety disorder stigma (Grant et al., 2016; Nabors, 2022). Significant research exists on anxiety disorders, although little research has been conducted on perceived anxiety disorder stigma in a population of adults diagnosed with anxiety in the United States.

Perceived Anxiety Disorder Stigma

People experiencing anxiety may be reluctant to seek help for their mental health problems (Nearchou et al., 2018). Several reasons have been proposed to explain why adolescents and adults in the general population do not seek professional help for common mental disorders (Gulliver et al., 2010; Aguirre Velasco et al., 2020). Reluctance in help-seeking behavior appears more common among men than women (Seidler et al., 2018; Staiger et al., 2020). Negative attitudes towards seeking help may include concerns about cost, transportation or inconvenience, confidentiality, other people finding out, feeling like they can handle the problem independently, and the belief that the treatment will not help. The stigma associated with anxiety appears to be a barrier to mental health treatment (Calear et al., 2021). Clement et al. (2014) observed that perceived anxiety disorder stigma might restrict help-seeking activity in an adult population and found that the amount of reduction in help-seeking behavior in their study was significant. This current study highlights the consideration that adults seeking mental health therapy may be significantly impacted by perceived anxiety disorder stigma.

According to Clement et al. (2014), stigma can contribute to delays in help-seeking behaviors. Perceived anxiety disorder stigma was most often associated with the notion that a personal flaw caused a mental condition. Individuals who made negative stigmatizing remarks were also more likely to have unfavorable feelings about seeking mental health treatment (Clark et al., 2020). Additionally, specific demographics of adults, such as age, gender, level of education, and having an anxiety disorder, could make individuals more vulnerable to perceived anxiety disorder stigma.

Perceived Anxiety Disorder Stigma and Gender Differences

Baxter et al. (2016) found that males, more than women, experienced higher levels of shame about mental health. Men were more likely to perceive that others may view them more shamefully concerning their mental health. Men appear to have a higher perceived stigma toward anxiety than women (Grant et al., 2016). In a sample of collegiate athletes, for example, the authors found that student-athletes were more willing to seek mental health treatment. In contrast, women were more likely to seek treatment at higher rates than men. In addition, men generally tended to experience higher levels of perceived mental health stigma than women (Moreland et al., 2018; Staiger et al., 2020). For men, Baxter et al. (2016) found that shame related to mental health status and accompanying perceived stigma could diminish help-seeking behavior for mental health issues. Perceived stigma was found to reduce the likelihood that males seek assistance for mental health concerns. Premature treatment dropout rates were found to be an additional concern (Seidler et al., 2018).

Perceived Anxiety Disorder Stigma and Age Differences

Age demographics appear to predict perceived mental health stigma. Sarkin et al. (2015) noted that stigma and stigma levels differ due to gender, diagnosis, and age. Nearchou et al. (2018) found that older adolescents are more vulnerable to perceived mental health stigma than middle-aged adolescents, concluding that older adolescents with high levels of perceived mental health stigma were less likely to engage in help-seeking behaviors for anxiety and depression than middle-aged adolescents. Negative perceptions of peers toward mental health conditions were a common factor that discouraged older adolescents from seeking mental health assistance. Older adults appeared to be more vulnerable to perceived mental health stigma than early adults or middle-aged adults (Benjenk et al., 2019). As adults enter later life and old age, they can develop negative attitudes about aging perpetuated by social stereotypes (Stewart et al., 2015). Studies have shown that older adults can be affected by a double stigma, the stigma associated with being old and the stigma of having a mental health disorder (Sarkin et al., 2015). Older adults impacted by double stigma may perceive that society would view them negatively if they were to develop a mental health disorder (González-Domínguez et al., 2018).

Perceived Anxiety Disorder Stigma and Education differences

A person's level of education may serve as a protective factor against perceived anxiety stigma (Parcesepe & Cabassa, 2013). Regarding depression, the level of education may serve as a protective factor against perceived depression stigma (Grant et al., 2016). However, level of education did not appear to predict reduced levels of perceived anxiety stigma (Griffiths et al., 2011). The higher one's level of formal education, the less they are affected by perceived depression stigma. Griffiths et al. (2008) found that adults with bachelor's or master's degrees were more likely to have lower levels of perceived depression stigma than adults with a high school education. Lower levels of perceived depression stigma may also reduce delays in help-seeking behavior for adults with depression.

Parcesepe and Cabassa (2013) added support for the premise that individuals with a college degree were more willing to engage in mental health treatment than adults without a college degree. Currently, little research exists in the literature that addresses the level of education as a protective factor specifically for perceived anxiety stigma. Some authors' findings suggested that perceived anxiety stigma levels were less influenced by protective factors, such as higher levels of education, compared with other mental health disorders, such as depression (Grant et al., 2016; Griffiths et al., 2008)

Purpose of the Study

The purpose of this study was to determine whether factors including age, gender, level of education, and presence of a diagnosed anxiety disorder would predict perceived anxiety stigma in a population of adults in the United States as measured by the Generalized Anxiety Stigma Scale (GASS). A quantitative design was used on an existing data set of adults diagnosed with anxiety disorders at a midwestern anxiety treatment clinic in the United States.

Method

To determine factors affecting perceived anxiety disorder stigma, the following question served as the research hypothesis: Do factors including age, gender, level of education, and presence of an anxiety disorder predict perceived anxiety stigma in a population of adults as evinced by the Perceived Stigma Subscale of the GASS (Griffiths et al., 2011). The GASS was designed to assess perceived anxiety stigma in adults with generalized anxiety disorder (GAD) and addressed the perceived variable in this study for the research question. The GASS is divided into two subscales that evaluate two forms of stigma: personal and perceived. The perceived anxiety stigma subscale assesses a respondent's view of others' attitudes toward anxiety disorders. For this study, only the perceived anxiety stigma subscale was used. The scale for perceived anxiety stigma consists of 10 Likert-type questions divided into distinct ordinal categories: (a) strongly agree, (b) agree, (c) neither agree nor disagree, (d) disagree, and (e) strongly disagree. Higher scores on the GASS reflect higher levels of anxiety disorder stigma in general. The GASS was assessed for reliability using Cronbach's alpha (Faherty, 2007). Scores that fell between $0.7 < a < 0.8$ were deemed acceptable. For this study, the perceived anxiety stigma scale yielded a Cronbach's alpha score of .787.

Data Collection and Analysis

Permission was obtained to use the GASS as an assessment instrument for this study. Following IRB approval, we used an existing dataset for the study. No external funding was used for this study. The data set consisted of completed assessment packets. Individuals who had completed intake assessments and who had been past clients at a Midwest anxiety treatment center had provided prior approval to release data anonymously. Demographic data were collected as a normal part of the standardized intake process at the Midwest center.

Data were checked for accuracy. All were complete. The sample (N = 82) consisted of adults who were diagnosed with an anxiety disorder. Ages ranged between 18 and 65. Level of education ranged from no school up to having earned a doctorate. The alpha level was set to 0.05. Once we verified and checked the data for accuracy and the absence of any identifying information, we analyzed it in SPSS using multiple regression analysis to quantitatively assess for relationships between and among variables of the perceived anxiety disorder stigma scale of the GASS, age, gender, and level of education in a population of adults diagnosed with anxiety disorders. Gender was identified on the data form as male, female, or non-binary.

Results

A multiple linear regression analysis was used to examine if the predictor variables of age, gender, and level of education predicted perceived anxiety stigma attitudes in individuals from the sample. Data were first checked for multicollinearity and linearity. Homoscedasticity requirements were met. The alpha level was set to 0.05, and a medium power level with an effect size of .80 or greater was met (.82).

The multiple linear regression analysis supported the study's hypothesis. All three predictor variables had significant levels of correlation with the dependent variable of perceived anxiety disorder stigma as measured by the GASS anxiety disorder stigma scale. The findings of this study suggested that age, gender, and level of education are significant predictors of perceived anxiety disorder stigma (ˆ < .001). The overall regression was statistically significant. Among all predictor variables, gender predicted the greatest amount of variance for the dependent variable of perceived anxiety disorder stigma R^2 = .30, F (12,639) = 81, p = .002; Age generated the second highest amount of variance R^2 = .26, F (12,639) = 81, p = .017; and education contributed to the third highest level of variance R^2 = .25, F (12,639) = 81, p = .018. Descriptive data can be found in Table 1, with coefficients and beta values in Table 2.

Table 1. *Descriptive Statistics for Study Variables*

Variable	N	Minimum	Maximum	M	SD
Perceived anxiety disorder stigma	82	10	35	22.72	5.56
Age	82	1	4	2.70	1.02
Gender	82	0	1	.70	.46
Level of education	82	2	7	5.12	1.56

Table 2. *Predictors of Perceived Anxiety Disorder Stigma Coefficients*

Variable	*B*	*SE*	β	*t*	*p*
Age	1.394	.569	.257	2.449	.017
Gender	3.715	1.129	.309	3.290	.002
Level of education	.911	.376	.255	2.421	.018

Discussion

The purpose of this quantitative study was to determine whether age, gender, and level of education predicted perceived anxiety disorder stigma as measured by the GASS in a population of U.S. adults diagnosed with anxiety disorders. Depression and schizophrenia stigma have received a great deal of attention in the literature (Corrigan et al., 2014). However, anxiety disorders are under-represented in stigma research and account for fewer than 3% of that research (Clement et al., 2014). Various studies have assessed predictors of depression stigma and anxiety stigma in non-clinical populations. However, to date, no study has assessed

predictors of anxiety stigma in a clinical population such as adults with anxiety disorders. Based on the significance of the findings, further research is warranted.

For example, low socioeconomic status increases allostatic load, resulting from life events and chronic diseases (Banerjee et al., 2021). From a geospatial perspective, we note that anxiety is experienced differently based on cultural and potentially geospatial information, which is a method of understanding the topic using geographic features and relationships. For instance, Banerjee found, through an analysis of the Healthy People dataset (U.S. Department of Health and Human Services, 2023), that many common factors, such as physical and mental health, are spatially distributed. This necessitates a more thorough look at anxiety as a spatially distributed variable. From an educational perspective, institutions may be encouraged to produce educational content related to anxiety stigma content to assist clients with anxiety disorders and encourage participation in treatment as well as encourage engagement in community psychoeducational events.

Perceived anxiety disorder stigma may serve as a significant barrier to treatment. Perceived anxiety disorder stigma may also contribute to premature treatment dropout rates. The results of this analysis may serve to clarify how gender, age, and level of education can differentially predict the level of perceived anxiety disorder stigma for individuals diagnosed with anxiety disorders. The findings of this study may have positive social change implications for individuals experiencing anxiety disorder stigma. Moreover, the results of the present study may help counselors and other clinicians better advocate for individuals diagnosed with anxiety disorders.

Limitations

A limited sample size geographically centered on adults in the Midwest diagnosed with anxiety disorders may have impacted the generalizability of this study. Although the sample size was adequate, a larger, more geographically diverse sample would enhance generalizability. In addition, we had no assessment of social determinants such as cultural or socioeconomic factors and their potential influence on perceived anxiety disorder stigma. Also, the study focused only on generalized anxiety. More research is needed to distinguish among the different kinds of anxiety conditions relative to stigma, as results may differ. Additionally, this study only addressed traditional gender roles. Further work is needed to assess for additional factors such as sexual identity and clarify the use of terms like gender and sex (Kaufman et al., 2023). Minority and historically marginalized populations may bear the brunt of the lack of resources. Additionally, as minority populations in the United States continue to expand, socially discredited stereotypical behavior appears to be justified for individuals who may not be part of the non-normative culture (Banerjee, 2023).

Conclusion

Studies have highlighted the importance of mental health stigma in healthcare (Nugent et al., 2021; Clark et al., 2020; Holder et al., 2019; Kaiser et al., 2020). This study found perceived anxiety disorder stigma to be related to important social and demographic factors. The study's hypothesis was supported. The three predictor variables of age, gender, and level of education accounted for significant levels of variance with the dependent variable of perceived anxiety disorder stigma, with gender being the most significant. To our knowledge, this was the first time researchers have found risk factors associated with anxiety stigma. Further studies are recommended.

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