



The Correlation Between Anxiety Sensitivity and Eating Disorder Symptoms

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Abstract

It is estimated that 31.3% of U.S. adults have been diagnosed with an anxiety disorder at some point in their lives, making it the most common mental health disorder in the country. With the pervasiveness of anxiety in the U.S. population many have concluded that the comorbidity of anxiety disorders and eating disorders is extremely common. This study seeks to determine the correlation between anxiety symptoms and eating disorder symptoms via an online self-report psychological study using the Anxiety Sensitivity Index (ASI) and the Eating Disorder Examination – Questionnaire Short (EDE-QS). While many studies have been performed on the correlation between anxiety disorders and eating disorders, there is very little research on how the three different factors of ASI, physical, cognitive, and social, correlate separately to eating disorder symptoms. Our analysis found that the EDEQS total score is significantly and positively related to cognitive and social ASI, but not significantly related to physical ASI. Additionally, all three components of ASI are significantly related to each other.

Background

Anxiety disorders are the most common mental health disorders in the United States. With the prevalence of anxiety in the US population, research has routinely concluded that eating disorders and anxiety disorders are frequently comorbid. Some studies have even gone as far as concluding that most people with bulimia nervosa or anorexia nervosa are diagnosed with at least one anxiety disorder (Kaye, 2004).

The ASI is a scale containing 16 items that can assess anxiety disorder symptoms. Anxiety sensitivity is the fear of sensations that arise from anxiety — these fears can be categorized into three factors: physical, cognitive, and social (Reiss, 1986). The ASI can be used to determine which of the three factors a patient's anxiety falls into, and this information can be used to predict and treat their anxiety symptoms.

Previous studies have concluded that physical ASI has been found in higher levels in patients with panic disorder and PTSD, cognitive ASI has been found in higher levels in patients with mood disorders and mental incapacitation concerns and social ASI has been found in higher levels in patients with social phobia (Rodriguez, 2004).

This presentation will evaluate how strongly each of the three components of the ASI relates to eating disorder symptoms. While there is a myriad of research into eating disorders and anxiety co-occurring, there is very little research on the link between anxiety sensitivity and eating disorder symptoms and a minimal amount of understanding of what causes this comorbidity. By more closely examining the relationship between eating disorder symptoms and the three components of ASI, this presentation will better help us understand this comorbidity.

Methods

This study collected information from 121 FSU students recruited via SONA Systems. The mean age of the sample is 19.80 with a standard deviation of 1.52. Participants completed a longitudinal study with two sessions one month apart. During these studies, they completed online self-report psychological study measures. The study then ran a correlation between the Anxiety Sensitivity Index (ASI) and the Eating Disorder Examination – Questionnaire Short (EDE-QS).

The ASI is a self-report questionnaire with 16 items that assesses anxiety sensitivity along three factors: physical, cognitive, and social (Zvolensky, 2018)

The EDE-QS is a self-report questionnaire with 12 items that was developed from the Eating Disorder Examination (EDE), a semi-structured interview (Jennings, 2017). This questionnaire is a shortened measure of eating disorder symptoms meant for use on individuals with anorexia nervosa, bulimia nervosa, binge eating disorder, and eating disorders not otherwise specified.

Correlations between the EDE-QS total score and ASI cognitive, physical, and social concerns were generated. Subsequently, William's Test for correlations (Dunn & Clark, 1971) was used to compare the three correlations and determine which, if any, were significantly stronger than the others.

Results

Figure 1: Correlations between ASI components and EDE-QS

Parameter 1	Parameter 2	R-Value	P-Value
EDE-QS	ASI Physical	0.17	0.059
EDE-QS	ASI Cognitive	0.23	0.024*
EDE-QS	ASI Social	0.24	0.024*
ASI Physical	ASI Cognitive	0.77	<.001*
ASI Physical	ASI Social	.65	<.001*
ASI Cognitive	ASI Social	0.76	<.001*

*indicates significance

Figure 2: Correlation between ASI Physical and EDE-QS

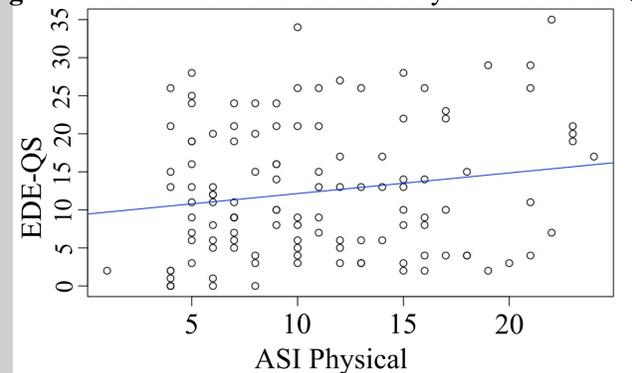


Figure 3: Correlation between ASI Cognitive and EDE-QS

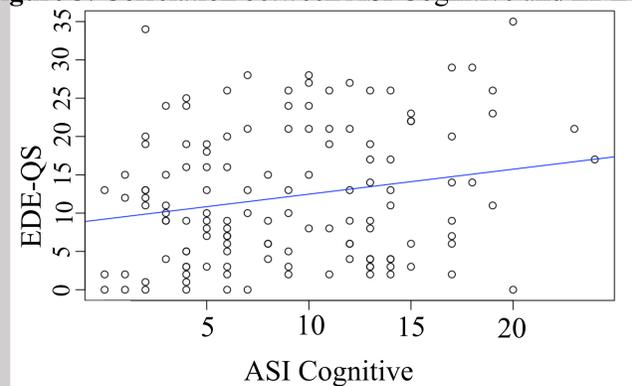
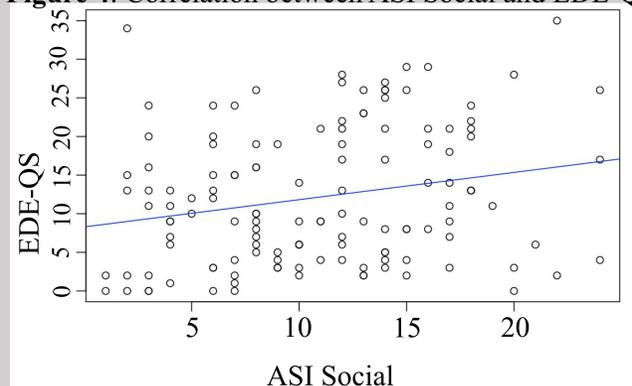


Figure 4: Correlation between ASI Social and EDE-QS

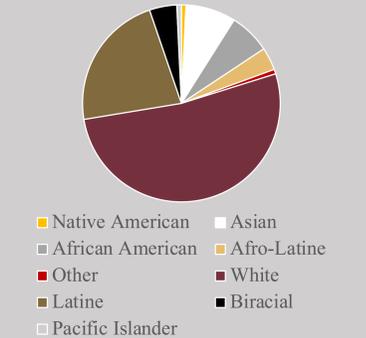


Demographics

Gender of Study Participants



Race of Study Participants



Discussion

After collecting and analyzing the data from the study, it was found that the EDE-QS total score is significantly and positively related to cognitive and social ASI, but not significantly related to physical ASI. However, none of the three correlations were significantly stronger than the others – suggesting that they are not different from each other in how strongly they relate to EDE-QS. Additionally, all three components of ASI were significantly related to each other.

These results suggest that eating disorder (ED) symptoms may be maintained more by social and cognitive processes than physical processes. These results were in contrast to the idea that ED involves many physical symptoms, and therefore, would be significantly related to physical ASI; however, this result could be due to the fact that someone who has ED symptoms may need to be more accustomed or tolerant of physical symptoms to maintain disordered eating, thus being less sensitive to physical anxiety symptoms.

Furthermore, social and cognitive ASI are significantly related to EDE-QS. Social ASI is often characterized by excessive fear of being humiliated, avoidance of social situations, and fear of social interactions (Rodriguez, 2004). This fear of social embarrassment could lead to the maintenance of ED symptoms because it leads to the control of physical appearance. Cognitive ASI is characterized by uncontrolled cognition with the belief that an inability to concentrate could lead to insanity (Reiss, 1986). This fear of an inability to concentrate can lead to obsession, and in the case of ED, it could lead to a maintenance of symptoms with an obsession over body image.

References

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