



The Relationship Between Anxiety and Sleep Quality

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Introduction

Low sleep quality commonly co-occurs with anxiety. Although it is most likely a bidirectional relationship, some studies have shown that one variable is a predictor of the other. Most literature has concluded that:

- Women experience more anxiety than men
- Women have lower sleep quality than men
- Anxiety has greater prevalence among younger ages
- Older adults experience lower sleep quality than younger adults

Hypotheses:

1. The higher the anxiety a person reports, the lower their sleep quality is, and vice versa.
2. Women will have higher anxiety and lower sleep quality than men.
3. Younger adults will have more anxiety and lower sleep quality than older adults.

Methods

Participants (Table 1)

- Recruited from psychology subject pool and Facebook
- 126 total participants
- Age range – 18-77

Table 1. Participant Characteristics

Characteristic	M or frequency	SD or percent
Gender		
Female	93	73.8
Male	26	20.6
Race		
White	109	86.5
Black or African American	4	3.2
Asian	3	2.4
Hispanic	3	2.4
Other	2	1.6
Age	29.6	14.0
PSQI	7.7	3.9
STAI		
State anxiety	41.7	12.7
Trait anxiety	46.7	13.4

Procedures

- State-Trait Anxiety Inventory – 80 items
 - Trait anxiety subscale – 40 items
 - State anxiety subscale – 40 items
- Pittsburgh Sleep Quality Index – 9 items
 - 7 components

Results

- Low sleep quality and high anxiety levels are positively correlated
- Women reported higher state and trait anxiety and lower global sleep quality than men
- There was a significant correlation between women’s global sleep quality and their anxiety about low sleep quality
- Age was insignificant as a stand alone

predictor of anxiety or sleep quality ($\beta = .17$, $p = .11$)

Table 2. Correlation between GSQ and Anxiety

Variable	Global sleep quality
Trait Anxiety	.44*
State Anxiety	.43*

* $p < .01$

Discussion

- Results supported our hypothesis that there is a relationship between anxiety and sleep quality.
- Our hypothesis that women have higher anxiety and lower global sleep quality was partially true for the global sleep quality but not anxiety.
- No age differences were found for sleep quality or anxiety, contrasting with our third hypothesis that younger adults would experience lower sleep quality and more anxiety than older adults.