

# **Emotion Processing Moderates the Relationship between** Psychiatric Symptoms of Anxiety and Quality of Life (QoL): Implications for Treating QoL



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#### INTRODUCTION

- Quality of life (QoL) refers to a subjective evaluation of life in general and is represented through multidimensional measurements associated with overall wellbeing. Notably, QoL is inversely related to psychiatric illness, including feelings of anxiety. 1-2
- Emotion processing refers to the ability to detect and respond to emotional triggers, while poor emotion processing is associated with anxiety.

#### **CURRENT STUDY**

 The purpose of this study was to test emotion processing as a moderating factor of the relationship between QoL and anxiety.

#### **METHODS**

#### **Participants:** N = 59 participants were recruited **GEFT task:**

- Participants completed an emotion identification computer task, the Graded Emotional Face Task (GEFT; Figure 1), which consists of emotional stimuli (i.e., fearful and happy faces) that have been morphed with a neutral facial expression to depict varying degrees of emotional intensity (i.e., 20%, 40%, 60%, 80%, and 100%).
- Stimuli were randomly presented, and participants viewed 5 trials of each graded-level and emotion.
- After each face presentation, participants answer a series of questions including asked to indicate which emotion the person is feeling in the picture. Answer options were fixed, displaying one of five basic emotions: fear, sadness, happiness, content, and neutral.
- Accuracy was determined as a binary value of "1" if the correct emotion was selected and "0" if the correct emotion was not selected; scores were averaged within conditions and calculated as a percentage.
- After the task participants completed selfadministered questionnaires for the assessment of anxiety and QoL: the General Anxiety Disorder (GAD) questionnaire and The World Health Organization Quality of Life (WHOQOL-Bref); higher scores indicate more anxiety and better QoL

### **Table 1. Sample Characteristics**

| Age (M/SD)             | 19.53 (2.13  |
|------------------------|--------------|
| Gender (% Female)      | <b>75.0%</b> |
| Race                   |              |
| White                  | 57.50%       |
| Black/African-American | 10.00%       |
| Asian                  | 27.50%       |
| Unknown                | 5.00%        |
| Ethnicity (Latino/a)   | 12.50%       |

| <ul> <li>Accuracy at detecting happy faces at 60%</li> </ul> |
|--|
| threshold was a significant moderator of the                 |
| relationship between anxiety and QoL.                        |
| • Effects were such that at accuracy scores 1                |
| SD below the mean (20% accuracy; b =52                       |
|  |

-5.00

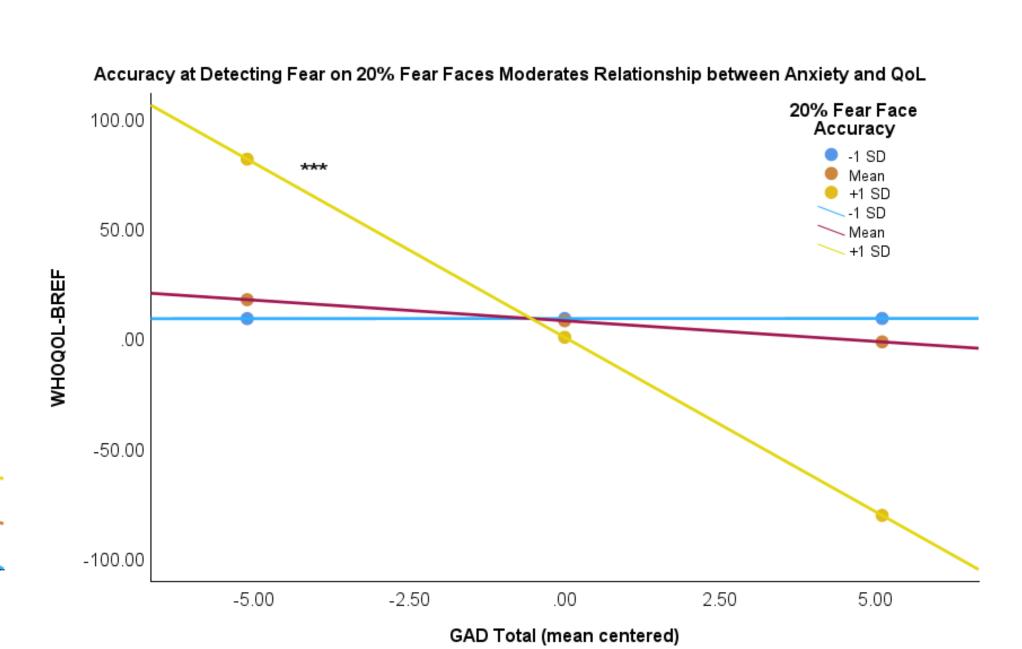
Accuracy at Detecting Happiness on 60% Happy Faces Moderates Relationship between Anxiety and QoL

0 = -.52SE = .11, p < 0.001) and at the mean (60%) accuracy; b = -028, SE = .07, p = 0.003), greater anxiety severity was associated with lower quality of life.

#### **RESULTS**

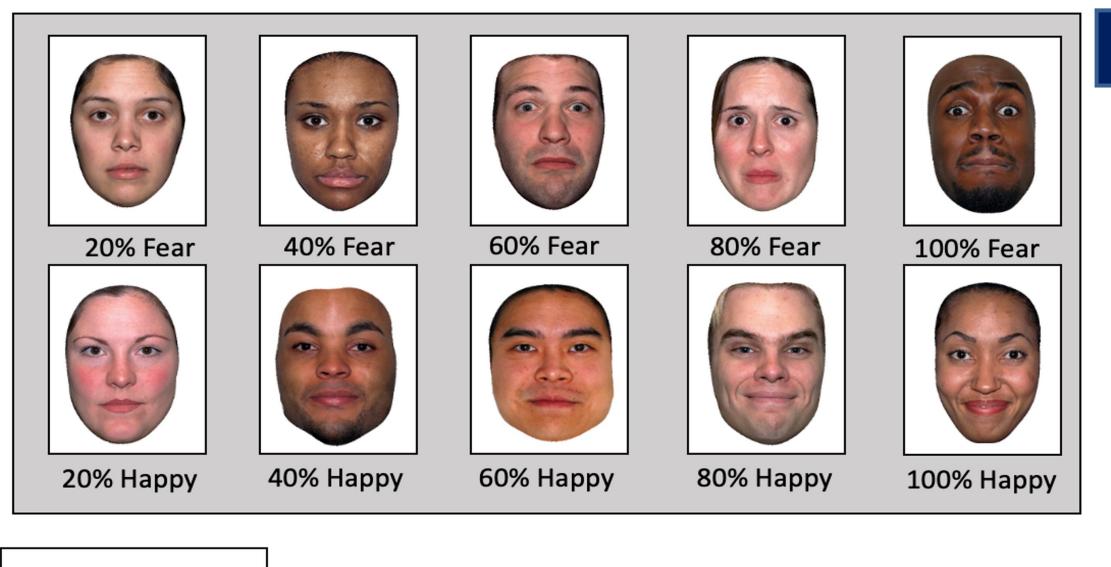
60% Happy Face Accuracy

2.50



 Accuracy at detecting fear faces at 20% threshold was a significant moderator of the relationship between anxiety and QoL, such that at accuracy scores 1 SD above the mean (20% accuracy; b = -.10, SE = .03, p = 0.003), greater anxiety was associated with lower quality of life.

Figure 1. Graded Emotional Face Task



## What emotion is the person feeling? Please indicate the level of AROUSAL of this face Please indicate the

level of PLEASURE

of this face

**Analyses:** 

 Moderated linear regressions using the SPSS PROCESS macro were used to test emotion accuracy scores as moderators of the relationship between anxiety symptoms (GAD) and QoL (WHOQOL-Bref).

## CONCLUSION

- The relationship between anxiety and quality of life may be associated with under-detection of positive emotions and over-detection of negative emotions.
- Data suggest that emotion detection may be an important construct linking mental health with overall quality of life.
- Results underscore that emotional processing may be an important linking variable between anxiety and quality of life.

#### REFERENCES

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