

Introduction

MacFarlane et al. (2016) investigated the role of trait anxiety in the perceptions of clinical supervision among genetic counseling graduate students at the beginning of their 2nd year of training using a semi-structured phone interview. The authors empirically classified participants as having high or low trait anxiety using the trait subscale of the State-Trait Anxiety Inventory (STAI-T; Spielberger et al., 1983) and included a question of whether or not the participant self-identified as an “anxious person.” The previous study did not, however, define the term “anxious person” and it was unclear what criteria participants were using in these classifications. As part of a larger follow-up study 8 months later, the present study asked these participants again if they identified as an “anxious person” but this time asked them to define the term first. The researchers were curious to see how this might affect self-identification patterns. This question can help assess the concurrent validity of self-evaluations of anxiety using empirical classification as the criterion.

Methods

Participants

- Round 1: 28 genetic counseling graduate students (M.S.) interviewed at the beginning of their second year in their program.
 - 95% Female, 85% Caucasian (Pop. ~93% F, 87% Caucasian; Yashar, 2010)
- Round 2: 25 were re-interviewed at the end of the academic year
 - 95% Female, 85% Caucasian

Procedure

- Participants recruited via online invitation distributed through the GC Program Director listserv.
- Participants previously completed an online survey which included the Trait subscale of the STAI-T as part of a larger study (MacFarlane et al., 2016).
- Students completed 30-45 minute semi-structured phone interviews with the first author. The results presented here are a subset of a larger project.
- All interviews were recorded and sent to a professional transcriptionist. The first author checked randomly selected sections of the transcript against the recordings to ensure accuracy.

Analysis

- Consensual Qualitative Research (CQR; Hill, 2012) methods were used to inductively analyze responses. The primary coders were the second through eight authors, who are undergraduate students trained in CQR methods. The first author is an experienced CQR researcher and served as the data auditor. Responses were coded into multiple domains and categories when appropriate. Measures of agreement were calculated for classifications as an “anxious person” between studies.

Results

What Makes an Anxious Person?

Four domains emerged for the responses to “How would you define an anxious person?”

Domain 1: Cognitive Aspects (n = 17)

Responses in this domain focused on the mental aspects of anxiety, referencing things like worry, rumination, focusing on negative things, and catastrophizing. This domain included three categories:

Category 1: Worry (n = 12)

Responses in this category focused on anticipation of future events and concerns regarding the outcomes of those events. *“Someone who...[is] always thinking about the next step, something's always racing in their mind, they're always worried and concerned about something.”*

Category 2: Rumination (n = 5)

Responses in this category focused on the repetitive and sometimes intrusive nature of anxious thoughts. *“...somebody who's maybe too worried or focused on something that's worrying them and kind of locked up in their head worrying about the same thing, kind of that repetitive like thing that's causing you to worry nonstop and you can't stop focusing on it.”*

Results

Category 3: Other (n = 4)

Responses in this category included overall negative thinking, a sense of being overwhelmed, and making problems seem bigger than they are. *“Somebody who focuses more on what could go wrong or what is going wrong rather than the areas that are going right.”*

Domain 2: Emotional Aspects (n = 13)

Responses in this domain focused on the affective aspects of anxiety, referencing things like being nervous, having stress, or feeling uncomfortable. This domain included three categories:

Category 1: Nervous (n = 8)

Responses in this category focused on being nervous or high strung. *“Someone who gets easily nervous...”*

Category 2: Stressed (n = 4)

Responses in this category focused on stress levels, often describing them as unusually high for a given situation. *“...really stressed out about things, not a healthy this is helping me get stuff done, but a more unhealthy stress of being pushed over the edge or being stressed beyond your resources that you have to deal with it.”*

Category 3: Other (n = 4)

Responses in this category included feelings of unease, discomfort, or having emotions that did not fit the situation. *“...[Someone who] is sort of, you know, you're giving them information but you can tell they're not completely comfortable, that type of thing.”*

Domain 3: Behavioral Aspects (n = 8)

Responses in this domain focused on the way anxiety affected behaviors, such as performance, body language, and interaction patterns with others. This domain included two categories:

Category 1: Impedes Performance (n = 5)

Responses in this category focused on detrimental effects of anxiety on personal functioning in a variety of contexts. *“So, if someone were to be constantly worrying about something that they had no control over to the point where it affects their daily living, I think that's the best definition I can think of is for an anxious person.”*

Category 2: Other (n = 3)

Responses in this category included body language (e.g., hand wringing), the need to seek reassurance from others, and asking lots of questions. *“...you can tell, like, they're wringing their hands and they look nervous and they might not be meeting eye contact because they're afraid of what you're gonna say to them so there's a lot of body language that goes with it...”*

Domain 4: Physical Aspects (n = 3)

Responses in this domain including things like muscle tension and the inability to relax. This domain did not include any categories. *“Probably sort of worries in anticipation of something so they sort of get built up before something and maybe they'll [have an] increased heartbeat, maybe get a little sweaty...”*

Self-Classification

The self-classifications were highly similar (see Table 1) regardless of whether participants were asked to provide a definition of an “anxious person” first or not using several metrics. The percentage of agreement was 88%, McNemar's Exact Test found no significant difference between classifications ($p = .99$), and the kappa value was .76. The self-classification was also highly similar to the empirical classification made by the STAI-T on the same metrics (see Table 2; percentage agreement = .80, McNemar's Exact Test $p = .99$, kappa = .60). The empirical classification metrics were also highly similar to the previous study (MacFarlane et al., 2016) which had percentage agreement = .78, McNemar's Exact Test $p = .99$, and kappa = .50.

Results (cont.)

Table 1. *Self-Classification as an Anxious Person With and Without Providing a Definition First.*

		Definition First	
		Yes	No
No Definition First	Yes	11	2
	No	1	11

Table 2. *Self-Classification as an Anxious Person Compared with STAI-T Classification.*

		Empirical Classification	
		Yes	No
Self-Classification	Yes	10	2
	No	3	10

Discussion

Global Findings

- No significant differences emerged between self-classifications when “anxious person” was self-defined beforehand versus when it was not defined at all. This suggests participants' self-classifications in the previous study were based on an internalized model of an “anxious person.”
- The composite description of an “anxious person” provides a fairly comprehensive list of features typical of clinical levels of anxiety and is consistent with common definitions of anxiety (e.g., Barlow, 1991; Spielberger et al., 1983).
- The findings suggest self-classification of overall anxiety level is largely consistent with empirical classification based on the STAI-T. This suggests even studies where overall anxiety levels are only assessed via self-report may have utility, at least in this population. Self-classification still resulted in mismatch with empirical assessment in 20% of cases, so our data do not support moving away from empirical assessment.

Research Recommendations

- These results need to be replicated and compared with additional criterion markers.
- Consistency of self-classification over time needs to be assessed further and replicated.

Limitations

- Even though interviews were conducted approximately 8 months apart, participants may have recalled their previous answers which may have influenced their responses.
- Participants were not re-administered the STAI-T at the end of the year, so changes in self-assessments might reflect true changes in anxiety levels.

References

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