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An Examination of the Relationship Between Fear of Evaluation, Social Anxiety, and Depression

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Abstract

This study explores fear of negative evaluation (FNE) and fear of positive evaluation (FPE) across social anxiety and depression. The following assessment tools were used to measure fear of positive evaluation, fear of negative evaluation, social anxiety, and depression: Fear of Positive Evaluation Scale, Brief Fear of Negative Evaluation - Straightforward, Liebowitz Social Anxiety Scale – Self Report, The Center for Epidemiological Studies Depression Scale – Revised. A sample of two hundred and thirty-one participants completed forms online via Amazon Mechanical Turk. Social anxiety was correlated positively with both FNE and FPE; likewise, depression was correlated positively with both FNE and FPE. There was a stronger correlation between depression and FNE than social anxiety and FNE, and the same correlation strength between social anxiety and FPE and depression and FPE.

Fear of Evaluation Across Social Anxiety and Depression

Evaluation consists of feedback to an individual about themselves or their performance, which can alter a person's behavior or thoughts. Evaluation is not always welcomed and can have an effect a person, particularly emotionally, especially when it is negative. Indeed, fear of evaluation and judgment play a primary role in the development or maintenance of numerous outcomes. For example, Clark & Wells, 1995 found a positive relationship between fear of negative evaluation (FNE) and social anxiety. In addition, more recent research by Weeks, Heimberg, and Rodebaugh (2008) has focused on a concept named as fear of positive evaluation. The current study further examines the relationship of FNE and FPE with social anxiety and depression.

Social Anxiety and the Fear of Evaluation

The construct of FNE includes "feelings of apprehension about negative evaluation from others, distress over these evaluations, and the expectation that others will evaluate one negatively" (Watson & Friend, 1969, p. 448). A cognitive behavioral framework of social anxiety developed by Rapee and Heimburg (1997) identifies FNE as a core feature of social anxiety. Rapee & Heimberg (1997) theorized that socially anxious individuals often focus on their social environments; thus, they frequently assess for threats from others, such as possible negative evaluation. This tendency toward vigilance utilizes psychological resources and can lead to negative outcomes (Rapee & Heimberg, 1997).

Persons with social anxiety often think that others expect them to perform to unrealistically high standards in social situations. This can lead to anticipation of negative evaluation, which can in turn can create or worsen anxiety (Rapee & Heimberg, 1997).

Because individuals high in FNE tend to be preoccupied with how they are perceived, they want to avoid being judged negatively by others (Watson & Friend, 1969).

In addition, studies have shown that socially anxious individuals tend to underestimate their performance in social situations (Alden & Wallace, 1995; Glasgow & Arkowitz, 1975). So, when asked to evaluate how well they did in a social situation, they are more likely to report problems than are observers. This tendency to expect a more negative outcome may lead to this anticipatory anxiety when entering social situations. Likewise, socially anxious people may leave a social interaction feeling poorly, or worse off, due to the perception that they were judged negatively (Alden & Wallace, 1995).

Weeks, Heimberg, and Rodebaugh (2008) developed the concept of fear of positive evaluation (FPE). Persons high in FPE are concerned that others will evaluate them in a positive manner, especially in a public setting. To measure FPE, Weeks and colleagues (2008) constructed the Fear of Positive Evaluation Scale (FPES). The scale includes items such as "I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them", "It would make me anxious to receive a compliment from someone that I am attracted to", etc.

Why would those with social anxiety fear positive evaluation? The person who receives positive evaluation may be concerned about the attention, and this "spotlight" is often unwanted for someone with social anxiety (Heimberg et al, 2010). Positive evaluation may also be perceived negatively by a person with social anxiety because it may make them think that their past performance was not adequate (Heimberg et al, 2010). For example, someone with social anxiety may experience discomfort after being complimented about a new haircut. The individual may perceive that this compliment

implies that their haircut was previously less desirable or unflattering. Another example

of this could be someone with social anxiety after receiving positive evaluation at work

(e.g., a boss noting in front of others that their latest report was excellent). A compliment

now seems to imply that in the past they had a poor performance (e.g., your last report

was not good).

Adding to this problem, after positive social feedback persons with social anxiety

have the propensity to believe they will always need to live up to these expectations.

(Wallace & Alden 1997). Wallace and Alden (1995, 1997) found that persons with social

anxiety who rated their social performance positively also worried that others would

expect more of them. Socially anxious individuals also reported that they did not think

that their typical performance would improve, creating fear that they would be unable to

meet these elevated expectations and would thus disappoint themselves and others

(Wallace & Alden 1997), turning a positive event into a negative in their eyes. In sum,

Wallace and Alden's work demonstrated that positive social feedback is not necessarily

likely to improve the socially anxious individuals' perception of themselves in social

situations, and can leave the socially anxious individual feeling worse not better.

The current study aims to look at both FNE and FPE together in hopes of gleaning

more about their similarities and differences. Findings suggest that FNE and FPE are

cognitive components of social anxiety that are also correlated with each other (Weeks et.

al, 2012; Weeks et al., 2008). Kane et al. (2018) found that FNE may be more important

than FPE in the development and maintenance of depression and anxiety symptoms.

Weeks and colleagues (2008) helped to further distinguish FPE from FNE. Specifically,

scores from the Fear of Positive Evaluation Scale account for unique variance in social

anxiety above and beyond that accounted for by FNE in a variety of samples (Fergus et al., 2009; Weeks, Heimberg, & Rodebaugh, 2008; Weeks, Heimberg, Rodebaugh, & Norton, 2008).

The continued study of FNE and FPE may provide much needed information on what occurs on a cognitive level in those with behavioral health concerns – particularly social anxiety and depression. Whereas the existing research has examined the relationship between social anxiety and evaluation, the current study also seeks to understand the relationship between depression and evaluation, which is less documented in the current body of research.

Depression and Fear of Evaluation

Wang and colleagues (2012) suggest that negative evaluation can lead to or worsen a sense of personal failure, which can be linked to depression. Certainly negative feedback that may make someone feel worse about themselves could contribute to negative mood and related symptoms. For example, Adams and colleagues (2011) found a positive correlation between FNE and depressive symptoms in a study on weight loss. FNE was strongly related to depression for persons who lost a greater amount of weight during the study; they hypothesized that those individuals may be fearful that FNE may imply that they could not maintain their weight loss. Thus, the anticipation of possible negative evaluation may leave these individuals to internalize this feedback, feel worse about themselves, and experience negative mood.

According to a prominent Cognitive Theory of Depression by Beck (1976), negative thoughts are central to depression. Specifically, this model hypothesizes that people with depression are more likely than others to select negative and distorted

interpretations of events. Indeed, studies have shown that depressed people tend to minimize their success and instead focus on their failures or perceived failures. It thus could be expected that negative evaluation from others would add on to and reinforce the person's negative perceptions about themselves. Koval and Kuppens (2011) found that depression, FNE, and low self-esteem were associated with higher emotional inertia, which is how much a person's feelings persevere over time and across situations. Thus, depression and FNE are linked, and can be influenced by outside evaluation.

It is important to note that depression and anxiety often co-occur. For example, one-quarter of individuals diagnosed with major depressive disorder also meet criteria for social anxiety disorder (Kessler et al., 1999). Many individuals also experience subclinical symptoms for both disorders. Thus, examining commonalities and overlap between the two is important in understanding depression and social anxiety better overall.

Across different samples, studies have frequently found weak or moderate correlations between FPE and depression scores. Furthermore, these same studies mostly support the idea that FPE measures predict social anxiety better than depression measures (Fergus et al., 2009; Lipton et al., 2014; Weeks et al., 2008, Weeks et al., 2012). Reichenberger and colleagues (2017) found that depression was correlated negatively to the pleasantness of responses in reaction to positive evaluation. For example, if someone with depression receives positive evaluation, they are not likely to respond pleasantly by saying thank you and so forth. One may assume in this situation that positive evaluation might actually improve depression symptoms, but it appears to be more complex.

In a longitudinal study Jordan, Winer, Salem, and Kilgore (2017) found a link between anxiety and depression through the concept of anhedonia (i.e., a loss of interest in activities). Specifically, anxiety may change into depression through anhedonia. Anxiety may lead a person to lose pleasure in activities that they find anxiety provoking. This avoidance of activities may in turn lead to symptoms of depression. Fear of positive evaluation, a concept strongly related with social anxiety, might contribute to the avoidance of social events where evaluation may be expected, leading the individual to experience a loss of interest and pleasure and an increase in depression.

Is FNE different than FPE?

FNE and FPE are similar in several aspects, including relevance to the etiology and maintenance of social anxiety, the involvement of negative emotion (fear), and feedback from the social group or environment. Both FNE and FPE have been positively correlated with negative mood and emotion states in a social situation, negative automatic thoughts in typical social situations, self-consciousness, and disqualification of positive social outcomes (DPSO). Negative correlations between both FNE and FPE and positive mood and emotion states in social situations and positive automatic thoughts have also been documented and demonstrated (Weeks et al., 2012). As will be discussed, though, FNE and FPE are unique constructs that contribute to social anxiety.

The Bivalent Fear of Evaluation (BFOE) model of social anxiety theorizes that those with social anxiety fear both positive and negative evaluation with both types of evaluation functioning as a threat to the individual (Weeks & Howell, 2012). Within this theory, positive evaluation is implicated with increases in social status, leading to possible conflict with others in a social group. In contrast, negative evaluation could pose

an issue with diminished social status within the social group. Both FPE and FNE prevent people from moving within social rank, which can maintain the social status quo (Yap et al., 2016).

Weeks and colleagues (2012) examined the BFOE model in relation to FNE and FPE. Findings further distinguished FNE and FPE by demonstrating FPE's role in what they refer to as "positivity impairment" within social anxiety. That is, FPE uniquely predicted positive affect and positive automatic thoughts (Weeks et al, 2012). Another finding in this study related to how people with social anxiety appear to disqualify positive social outcomes. Specifically, FPE encourages submissive social behavior; thus, people with FPE seem to seek to demote themselves socially to avoid conflict within a social group. For example, if a person high in FPE is given praise by a supervisor in front of their co-workers, they may fear that their co-workers will perceive that they are rising in their supervisor's evaluation and thus taking their place in the social hierarchy. Finally, bolstering support for the BFOE model, Weeks and colleagues (2012) found support that FPE is connected to concerns of appearing "too good" and that concerns of social retaliation substantiate the need to disqualify one's abilities and talents in the face of positive social outcomes. Highly anxious people would be more likely to attribute these positive social outcomes to the qualities and experiences of others.

Finally, to test the BFOE model, Weeks and colleagues (2012) used structural equation modelling to examine whether FNE and FPE load on separate factors. Specifically, they tested a 3-factor model, with FNE, FPE, and a third variable, fear of social reprisal. This model demonstrated good fit, further documenting that FNE and FPE overlap but are distinct variables.

In addition, Kane, Bahl, and Ouimet (2018) examined how FPE and FNE may interact to predict depressive symptoms and emotion reassurance seeking (ERS). ERS is a dysfunctional coping strategy where the individual seeks reassurance from others in order to reduce anxiety, beyond what would be considered typical. FNE may be more important than FPE in perpetuating mood and anxiety symptoms through its impact on ERS and its short-term anxiety-reducing effects.

Weeks and colleagues 2008 study demonstrated a positive correlation between FPE and positive social feedback, and a negative correlation between FPE and perceived accuracy of social feedback (Weeks, Heimberg, Rodenbaugh, & Norton 2008). FNE did not correlate in the same way as both of the stated FPE findings.

In sum, the literature seems to support that FNE and FPE are conceptually separate constructs, and the findings so far help provide evidence for this hypothesis. Thus, the current study aims to examine both FNE and FPE as they related to social anxiety and depression.

Current Study & Hypotheses

Numerous studies have documented the links among FNE, FPE and social anxiety. However, far less is known how these constructs are linked to depression. In documenting that FNE and FPE are linked, it is important to start differentiating how these are associated with depression, especially given the strong overlap between social anxiety and depression. Thus, the current study seeks to understand the unique relationship between depression and fear of both negative and positive evaluation.

Hypothesis 1 examined social anxiety and evaluation, predicting that social anxiety would be correlated positively with both FNE and FPE. This hypothesis is based

on prior findings that individuals with social anxiety think that positive feedback will

draw unwanted attention to themselves (Gilbert, 2001) and increase the likelihood of

future poor performance (Wallace & Alden, 1997). Consistent with this hypothesis,

Weeks and colleagues (2008) found that FPE was positively associated with discomfort

in response to receipt of positive social feedback and negatively associated with

perceived accuracy of the feedback received. Additionally, cognitive behavioral

framework of social anxiety developed by Rapee and Heimburg (1997) identifies FNE as

a core feature of social anxiety, as social anxiety is a possible consequence of perceived

negative evaluation by others and a belief that others are intrinsically critical.

Hypothesis 2 examined depression and evaluation, predicting that depression

would be correlated positively with both FNE and FPE. This hypothesis is based on prior

findings and theory. Specifically, individuals with depression often display significant

cognitive distortions, which are negatively biased errors in thinking (i.e., an individual's

wrong or rationalized attitudes towards, opinions of, and beliefs in, their own social

behaviors) (Dozois & Beck, 2008). Additionally, in the face of positive feedback

individuals with higher depressive score were less likely to report a pleasant response and

FPE was found to mediate the relationships between pleasant response to positive

feedback and depressive symptoms (Reichenberger, 2017).

Hypothesis 3 proposed that FNE and FPE would be more highly linked to social

anxiety than to depression. A study conducted by Fergus and colleagues (2009) supported

the discriminant validity of FPE, in that FPE was more highly predictive of social anxiety

than of depression.

Method

Participants

Participants were recruited via Amazon Turk, an online survey platform. The majority of participants were 'Master' workers in MTurk which is a designation given to users who have participated and been successful in a wide variety of tasks on the site for many requesters. The participants were U.S. residents ages 18 years or older and were not selected based on gender or race. An a priori power analysis suggested that at an alpha level of .05, approximately 102 participants were needed to find a medium effect (Cohen's $d = .5$). A total of 249 participants started the study. Eighteen participants were deleted from the dataset due to incomplete data. Thus, a final sample of 231 was used. The age range of participants was 22 to 74 years with the mean age of 41 years and a median age of 39 (see Table 2). The sample identified as 51.9% (119) male, 47.7% (111) female, and .4% (1) transgender. The breakdown of race/ethnicity for the same is as follows: 74% Caucasian, 9% Black/African, 9% Hispanic/Latinx, 6% Asian, and 2% American Indian.

Materials

Liebowitz Social Anxiety Scale – Self Report (LSAS-SR)

Social anxiety was measured using the LSAS-SR (Liebowitz, 1987), a commonly used scale to assess symptoms of social anxiety. The LSAS-SR measures fear and avoidance in situations that are likely to elicit social anxiety, with good internal consistency and satisfactory levels of internal consistency (Heimberg et al., 1999). The LSAS-SR is a 24-item rated scale where the respondent answers each of the questions once in relation to Fear and each of the questions once in response to Avoidance, giving

48 answers total. Answer options range from 0 to 3 for each item for both Fear and Avoidance. Related to fear 0 = None, 1 = Mild, 2 = Moderate, and 3 = Severe. Related to Avoidance 0 = Never, 1 = Occasionally, 2 = Often, and 3 = Usually. Scores range from 0 to 144, with high scores indicating greater social anxiety symptoms. In Baker and colleagues (2002) study on psychometric properties, the LSAS-SR presented excellent internal consistency with the Chronbach's alpha for total score of .95. In this same study by Baker and colleagues the 12-week re-test reliability for total score was also judged to be good for the LSAS-SR, and the self-report (SR) version of the LSAS was highly correlated to the clinician administered version.

Regarding divergent validity, correlations were performed using scales that evaluate depression and general anxiety symptoms. In both cases the correlations were classified as weak to moderate (Baker et al, 2002). For example, two studies conducted with clinical samples in the USA, using the Beck Depression Inventory, found similar correlations at r= 0.25–0.46 (Levin et al, 2002) and r = 0.44–0.48 (Baker et al, 2002).

Fear of Positive Evaluation Scale (FPES)

The Fear of Positive Evaluation Scale was designed to assess FPE (Weeks et al, 2012). The 10-item FPES (Weeks, Heimberg, & Rodebaugh, 2008) uses a rating scale, ranging from 0 (not at all true) to 9 (very true) with higher scores indicating higher levels of fear of positive evaluation. A sample question from the FPES is as follows, "I feel uneasy when I receive praise from authority figures." Also included within the 10 items are two reverse scored questions to detect response bias that are not used in calculating the overall score.

FPES scores relate more strongly to measures of social anxiety than to measures of depression and generalized anxiety symptoms/worry (Fergus et al., 2009; Weeks, Heimberg, & Rodebaugh, 2008; Weeks, Heimberg, Rodebaugh, & Norton, 2008) or to measures of anxiety sensitivity, perfectionism, and self-compassion (Weeks, Heimberg, Rodebaugh, & Norton, 2008), supporting the scale's discriminant validity (Weeks, 2012). The FPES has demonstrated good internal consistency with a Chronbach's alpha of .86 and adequate discriminant validity as seen in higher magnitude correlation between the FPES and SIAS (Social Interaction Anxiety Scale) than the FPES and BDI (Fergus et al, 2009). The factorial validity, test-retest reliability, construct validity, and treatment sensitivity of the FPES were strongly supported by the findings in Weeks and colleagues (2012).

When the current study questionnaires were put onto Qualtrics, an error was made for the Fear of Positive Evaluation Scale. Specifically, the possible range of responses was 1 to 9; whereas it should have been 0 to 9. Only 9 potential responses to choose from, written '1 to 9', were given to participants.

Brief Fear of Negative Evaluation Scale Straightforward (BFNE-S)

The BFNE-S (Rodebaugh et al., 2004) is an 8-item revised version of the Brief Fear of Negative Evaluation scale (Leary, 1983) used for measuring fears of negative evaluation. An example of fear of negative evaluation item is "I am usually worried about what kind of impression I make." Unlike the original version, the BFNE-S does not include any of the previously included reverse-scored items, of which there were 4. The items are rated on a 5-point likert scale ranging from 0 (not at all characteristic of me) to 4 (extremely characteristic of me). The score is calculated by adding together the

individual 8 items. Liu and Lowe (2016) found the internal consistency of the BFNE-S to be .97.

The Center for Epidemiological Studies Depression Scale – Revised (CESD-R)

The CESD was created by Radloff (1977) and later revised (CESD-R) by Eaton and colleagues (2004) to reflect the diagnostic criteria in the DSM-5. The CESD-R is a 20-item measure that asks the respondent to rate how often they experienced symptoms associated with depression, such as loss of interest in usual activities, feeling sad, and sleeping more than usual. There are 5 response options that are scored 0 to 3 for each item, with two individual response options given the same score of 3 (0 = Not a all or Less than 1 day last week, 1 = 1-2 days last week, 2 = 3-4 days last week, 3 = 5-7 days last week, 3 = Nearly every). Scores range from 0 to 60, with high scores indicating greater depressive symptoms. A score of 16 or more indicates someone who is at risk for clinical depression, and the scale has been known for its sound psychometric properties. The CESD-R has good sensitivity and specificity and high internal consistency (Lewinsohn, Seeley, Roberts, & Allen, 1997). The CES-D has also been used successfully across wide age ranges (Lewinsohn et al., 1997).

Procedure

Participants were recruited on the online platform, Amazon Mechanical Turk, with a link that routed them to a survey hosted on Qualtrics. Participants were asked to provide consent for the study and then completed the packet of questionnaires, which were presented in random order to avoid order effects. Participants completed a Demographic Form, which requested the following information: age, gender, income, education, location, and race/ethnicity. They then completed the questionnaire packet.

At the completion of the survey, they were asked to return to Amazon Turk to submit their form and receive compensation of $0.50. All participants who submitted their form, regardless of survey completion, were compensated for their time.

Results

Cronbach's alphas (see Table 1) for the FPES, BFNE-S, CESD-R, and LSAS-SR ranged from .95 to .99, indicating excellent internal consistency. In this study, FNE and FPE were correlated positively, $r(227) = .76$, $p < .001$. Additionally, social anxiety and depression were also correlated positively, $r(219) = .76$, $p < .001$.

Results from the CESD-R showed that 113 of the 228 (50%) participants scored high enough on the measure to meet the cut-off criteria for major depressive disorder or probable depressive episode. Results from the LSAS-SR displayed that the following percentages of participants fell into elevated social anxiety categories: 16% marked social anxiety, 17% severe social anxiety, 29% very severe social anxiety. Thus, although this sample was from the general population, a large number displayed high levels of symptoms.

Hypothesis 1 was supported, as social anxiety was correlated positively with both FPE , $r(217) = .76$, $p < .001$, and FNE, $r(217) = .74$, $p < .001$. Hypothesis 2 was supported, as depression was correlated positively with both FPE, $r(224) = .76$, $p < .001$, and FNE, $r(225) = .78$, $p < .001$.

Hypothesis 3, which stated that both FNE and FPE would be more highly linked to social anxiety than to depression, was not supported in this study. The correlation of FPE was of the same magnitude for depression and social anxiety, $r = .76$. The correlation between depression and FNE ($r = .78$) was of slightly greater magnitude than the

correlation between FNE and social anxiety (r=.74). However, Lenhard & Lenhard's

(2014) calculation tool for the comparison of correlations from dependent samples

demonstrated that this difference between these correlations was not significant, z(226)

=-1.158, p =.123.

Given that Hypothesis 3 was not supported, follow-up exploratory analyses were

conducted to further examine the relations of FNE and FPE to social anxiety and

depression. First, multiple regression analysis was used to test whether FNE and FPE

significantly predicted social anxiety. FNE significantly predicted social anxiety (β = .39,

p = < .001) as did FPE (β = .46 p = <.001). Then, multiple regression analysis was used

to test whether FNE and FPE significantly predicted depression. FNE significantly

predicted depression (β = .47, p = < .001) as did FPE (β = .41, p = <.001).

Discussion

This study examination the relationship between fear of evaluation, social anxiety

and depression. As anticipated, Hypothesis 1 was supported in that social anxiety was

associated with both fear of negative and positive evaluation. Fear of evaluation is

included in the DSM-5 diagnostic criteria for social anxiety in that the individual fears

that he or she will act in a way that will be embarrassing or humiliating (American

Psychiatric Association, 2013). Embarrassment or humiliation would most commonly

occur when others are evaluating or judging the individual in question, and it does not

come as a surprise that fear of evaluation and social anxiety were related.

Self-conscious emotions like shame, guilt, and shyness are akin to social anxiety

and the state of being afraid of evaluation (Gilbert, 2000). Gilbert found that these self-

conscious emotions are linked to the tendency for the affected person to be worried about

what others think about them and assume a more submissive role socially. This propensity to be submissive leaves the individual less likely to challenge others within their social group for resources or power, and less likely to be physically dominated or even injured. This evolutionary perspective in viewing social anxiety and fear of evaluation is a unique lens with which we can better understand the biological purpose of social anxiety.

Hypothesis 2 was supported as depression was positively correlated with both FNE and FPE. It is worth nothing that the strongest relationship found in this study was between depression and FNE. It is interesting that an interpersonal concern such as FNE is so strongly correlated with depression, which is characterized by low mood or loss of interest or pleasure. Wang and colleagues (2012) suggest that negative evaluation from others could bring on or worsen a sense of personal failure, contributing to depressive symptoms. Additionally, negative evaluation from others could produce or worsen cognitive distortions (e.g., a schema of personal failure), which in turn could cause or maintain depressive symptoms (Wang et al., 2012). This sequence could help explain the strong link between FNE and depression. Additionally, Gilbert (1992) examined self-conscious emotions such as embarrassment, social anxiety, shyness, and guilt and noted that they can become pathological and have been linked to depression. Self-conscious emotions therefore may be underestimated in understanding mood problems.

Hypothesis 3, that both FNE and FPE would be more highly linked to social anxiety than to depression, was not upheld in this study. The association between FPE and social anxiety was of a similar magnitude as it was for FPE and depression. In fact,

the correlation between FNE and social anxiety was slightly lower than the correlation between FNE and depression, although this was not significant.

This finding is surprising given that evaluation, more specifically concerns of embarrassment or humiliation, is a core feature of social anxiety. Perhaps the experience of negative evaluation is significantly more impactful on depression where the negative schema of self and general negativity may be more salient or pervasive than with social anxiety, where eventual removal from the social situation may alleviate the discomfort and dread associated with negative evaluation. Thus, further study of the role of FNE in both social anxiety and depression is merited.

Fear of positive evaluation, specifically, is not a concept that may seem a relevant concern for depression but may be a fruitful area for future research and contribute to our overall understanding of depression. Perhaps the isolation and loss of pleasure and interest that often accompanies depression, when confronted with incongruent experiences, such as positive evaluation, is particularly uncomfortable or difficult to process for the depressed individual.

Study Limitations

The use of Amazon Mechanical Turk (MTurk) for data collection has inherent limitations. MTurk makes recruitment easy and painless for the researcher, and workers tend to represent a wider variety of the population than studies who use only undergraduate participants (Jacquet, 2011). Rand (2011) studied the accuracy of MTurk worker's self-reported location and demographic variables and found MTurk workers to be reliable reporters, 97% and 81-98% respectively. Within the research field there are concerns about MTurk offering cheap labor at the expense of the workers, sometimes

offering less compensation per hour than the minimum wage. Additionally, a number of

MTurk workers have reported that they were not paid adequately for tasks that they did

indeed complete (McInnis et a, 2016). In the current study, all participants who started

the survey were compensated the full amount within 24 hours, regardless of completion

status. The average time spent by the participants who completed the survey was 4

minutes and 36 seconds, which translates to about 7.6% of one hour. The current federal

minimum wage sits at $7.25, which warrants a compensation of or around $.56.

Future Directions

The average age of participants in this current study was 42 years old, and this

study was only conducted with participants age 18 and above. It would be beneficial to

conduct this study in adolescents to see whether evaluation and depression correlate

similarly or differently across the life span. Fluctuations in the prevalence and severity of

depression across the lifespan have been documented. Recent data on depression indicate

that individuals ages 18 to 29 years and those 65 years and over were most likely to

experience mild symptoms of depression. This same study showed that it was more likely

that adults aged 45 to 64 years experience moderate symptoms of depression compared

with those aged 30 to 44 years and 65 years and over (Villarroel & Terlizzi, 2020).

Additional research should aim to explore the relationship between depression

and FNE and FPE further, looking closer into what features of depression (e.g., sadness,

anhedonia, fatigue) link to the concerns of evaluation. Anhedonia, for example, is

characterized by the loss of pleasure or interest in once pleasurable experiences, which

positive evaluation may have once been. Low mood and fatigue, also features of

depression, may blunt the experience of negative evaluation as the individual may not

think highly of themselves already or may not have the emotional or physical energy to allocate to negative feedback concerns.

Finally, given that the strongest correlation in this current study was seen between FNE and depression, future research should continue studying interpersonal feedback in those with depression, and continue to study how interpersonal feedback, particularly critical or negative feedback, can support those undergoing treatment for depression.

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Table 1

Descriptive Statistics for Assessment Tools

Measure	α	Mean Scale Score	Standard Deviation	Score Range
FPES	.95	44.42	17.78	8-72
BFNE-S	.96	15.69	9.78	0-32
LSAS-SR	.98	72.48	35.12	0-144
CESD-R	.99	29.44	22.83	0-60

FPES = Fear of Positive Evaluation Scale; BFNE-S = Brief Fear of Negative Evaluation
Scale – Straightforward; LSAS-SR = Liebowitz Social Anxiety Scale – Self-Report;
CESD-R = Center for Epidemiological Studies Depression Scale – Revised.

Table 2

Participant Age Frequency

Age (in years)	Number of Participants
20-30	62
31-40	70
41-50	41
51-60	42
61-70	15
71-80	1

Appendices

Appendix A: Liebowitz Social Anxiety Scale Self-Report (LSAS-SR)

This measure assesses the way that social phobia plays a role in your life across a variety of situations. Read each situation carefully and answer two questions about that situation. The first question asks how anxious or fearful you feel in the situation. The second question asks how often you avoid the situation. If you come across a situation that you ordinarily do not experience, we ask that you imagine 'what if you were faced with that situation', and then rate the degree to which you would fear this hypothetical situation and how often you would tend to avoid it. Please base your ratings on the way that the situations have affected you in the last week. Circle your response with the most suitable answer provided below.

1. Telephoning in public.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

2. Participating in small groups.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

3. Eating in public places.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

4. Drinking with others in public places.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

5. Talking to people in authority.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

6. Acting, performing or giving a talk in front of an audience.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

7. Going to a party.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

8. Working while being observed.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

9. Writing while being observed.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

10. Calling someone you don't know very well.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

11. Talking with people you don't know very well.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

12. Meeting strangers.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

13. Urinating in a public bathroom.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

14. Entering a room when others are already seated.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

15. Being the center of attention.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

16. Speaking up at a meeting.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

17. Taking a test.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

18. Expressing a disagreement or disapproval to people you don't know very well.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

19. Looking at people you don't know very well in the eyes.
    Fear: None   Mild   Moderate   Severe
    Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

20. Giving a report to a group.
Fear: None   Mild   Moderate   Severe
Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

21. Trying to pick up someone.
Fear: None   Mild   Moderate   Severe
Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

22. Returning goods to a store.
Fear: None   Mild   Moderate   Severe
Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

23. Giving a party.
Fear: None   Mild   Moderate   Severe
Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

24. Resisting a high pressure salesperson.
Fear: None   Mild   Moderate   Severe
Avoidance: Never(0%)   Occasionally(1-33%)   Often(34-66%)   Usually(67-100%)

Appendix B: The Center for Epidemiological Studies Depression Scale Revised (CESD-R)

Below is a list of the ways you might have felt or behaved. Please check the boxes to tell me how often you have felt this way in the past week or so.	LAST WEEK				Nearly every day for 2 weeks
	Not at all *or* Less than 1 day	1-2 days	3-4 days	5-7 days	
My appetite was poor.	☐	☐	☐	☐	☐
I could not shake off the blues.	☐	☐	☐	☐	☐
I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐	☐
I felt depressed.	☐	☐	☐	☐	☐
My sleep was restless.	☐	☐	☐	☐	☐
I felt sad.	☐	☐	☐	☐	☐
I could not get going.	☐	☐	☐	☐	☐
Nothing made me happy.	☐	☐	☐	☐	☐
I felt like a bad person.	☐	☐	☐	☐	☐
I lost interest in my usual activities.	☐	☐	☐	☐	☐
I slept much more than usual.	☐	☐	☐	☐	☐
I felt like I was moving too slowly.	☐	☐	☐	☐	☐
I felt fidgety.	☐	☐	☐	☑	☐
I wished I were dead.	☐	☐	☐	☐	☐
I wanted to hurt myself.	☐	☐	☐	☐	☐
I was tired all the time.	☐	☐	☐	☐	☐
I did not like myself.	☐	☐	☐	☐	☐
I lost a lot of weight without trying to.	☐	☐	☐	☐	☐
I had a lot of trouble getting to sleep.	☐	☐	☐	☐	☐
I could not focus on the important things.	☐	☐	☐	☐	☐

Appendix C: Fear of Positive Evaluation Scale (FPES)

Fear of Positive Evaluation Scale

Read each of the following statements carefully and answer the degree to which you feel the statement is characteristic of you, using the following scale. For each statement, respond as though it involves people that you do not know very well. Rate each situation from 0 to 9. Please fill in only one bubble for each statement.

The Fear of Positive Evaluation Scale

0	1	2	3	4	5	6	7	8	9

Not at all True   Somewhat true   Very True

1. I am uncomfortable exhibiting my talents to others, even if I think my talents will impress them.

2. It would make me anxious to receive a compliment from someone that I am attracted to.

3. I try to choose clothes that will give people little impression of what I am like.

4. I feel uneasy when I receive praise from authority figures.

5. If I have something to say that I think a group will find interesting, I typically say it.

6. I would rather receive a compliment from someone when that person and I were alone than when in the presence of others.

7. If I was doing something well in front of others, I would wonder whether I was doing "too well".

8. I generally feel uncomfortable when people give me compliments.

9. I don't like to be noticed when I am in public places, even if I feel as though I am being admired.

10. I often feel under-appreciated, and wish people would comment more on my positive qualities.

Appendix D: Brief Fear of Negative Evaluation Scale Straightforward (BFNE-S)

Brief Fear of Negative Evaluation, Straightforward Items

Please circle the number that best corresponds to how much you agree with each item.

	Not at all characteristic of me	A little characteristic of me	Somewhat characteristic of me	Very characteristic of me	Entirely characteristic of me
1. I worry about what other people will think of me even when I know it doesn't make any difference.	1	2	3	4	5
2. I am frequently afraid of other people noticing my shortcomings.	1	2	3	4	5
3. I am afraid that others will not approve of me.	1	2	3	4	5
4. I am afraid that other people will find fault with me.	1	2	3	4	5
5. When I am talking to someone, I worry about what they may be thinking about me.	1	2	3	4	5
6. I am usually worried about what kind of impression I make.	1	2	3	4	5
7. Sometimes I think I am too concerned with what other people think of me.	1	2	3	4	5
8. I often worry that I will say or do wrong things.	1	2	3	4	5

Score:_____