Published in final edited form as:

Pers Individ Dif. 2011 December ; 51(8): 952–957. doi:10.1016/j.paid.2011.07.030.

Gender Role Traits Among Individuals with Social Anxiety Disorder

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Abstract

The present study investigated differences between individuals with and without social anxiety disorder (SAD) in instrumentality and expressiveness, personality traits traditionally linked to the male and female gender roles, respectively. Based on evolutionary and self-discrepancy theories, it was hypothesized that individuals with SAD would score lower on instrumentality and report a discrepancy between their perceived and ideal level of instrumentality compared to control participants. Sixty-four patients with SAD and 31 non-anxious control participants completed a battery of questionnaires, including ratings of their perceived and ideal gender role attributes and current psychosocial distress. Results supported the hypotheses, and provided initial evidence that a discrepancy between perceived and ideal instrumentality may be linked to social anxiety severity, depression and lower quality of life. No differences were detected between groups in expressiveness. The present findings suggest that individuals with SAD perceive themselves to be deficient in instrumentality. They also suggest that increasing instrumentality among individuals with SAD may be beneficial for treatment.

Keywords

social anxiety disorder; gender role; instrumentality; self-discrepancies; Personal Attributes Questionnaire

1. Introduction

Social anxiety is a fear of being judged negatively by others or a fear of being humiliated or embarrassed in front of others (Schultz, Heimberg, & Rodebaugh, 2008). Individuals with social anxiety disorder (SAD) experience anxiety in social or performance situations to the point that it produces marked interference or distress (American Psychiatric Association [APA], 2000). Women are more likely than men to have a lifetime SAD diagnosis (Weinstock, 1999). A recent study (McLean & Hope, 2010) failed to find reporting biases in

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anxiety symptoms based on gender. As such, it appears that there are other factors that may explain gender differences in social anxiety.

One potential explanatory variable for gender differences in social anxiety may be low perceived instrumentality experienced by individuals with high social anxiety (Trower & Gilbert, 1989). Instrumentality is “an individual’s striving for independence, mastery, task accomplishment, and self-assertiveness” (Stake, 1997, p. 541). Instrumentality is a gender-role linked personality trait, as instrumental traits, such as independence, have been associated with the traditional masculine gender role. Conversely, expressive traits, such as interpersonal relatedness, have been associated with the traditional feminine gender role (Spence & Helmreich, 1978). Expressiveness is “an individual’s striving for connectedness with others and encompasses interpersonal cooperativeness, sensitivity to others’ needs, and emotional openness” (Stake, 1997, p. 542). Instrumentality and expressiveness are unitary constructs that have not been found to be correlated with each other (Spence & Helmreich).

1.1. Theories of Social Anxiety

Trower and Gilbert (1989) proposed a psychobiological/ethological theory of social anxiety, according to which individuals with SAD view social relationships from a competitive framework whereas individuals low in social anxiety view them from a cooperative framework. Gilbert (2001) further elaborated this theory from an evolutionary viewpoint, positing that humans compete for or defend their social resources (e.g., social approval), which are valuable because they predict success in friendships and sexual relationships. Gilbert also posited that individuals with SAD doubt their ability to attain a dominant position in social relationships and, therefore, attempt to retain their lower social status and avoid social rejection. Achieving a dominant position in social relationships often requires independence and assertiveness. Individuals with SAD probably do not believe they can exhibit these traits in social situations (i.e., they have low perceived instrumentality). Walters and Hope (1998) found that non-anxious individuals were more likely than individuals with SAD to exhibit dominant behaviors (e.g., giving commands) but did not differ from socially anxious individuals in submissive or cooperative behaviors (e.g., head nods) during a social interaction.

According to Self-Discrepancy Theory (SDT; Higgins, 1987, 1996), individuals’ self-concept is determined by: an actual self (perceived traits that individuals possess), an ideal self (traits that they wish or hope for), and an ought self (traits they believe they should possess). Higgins and other researchers (e.g., Burke, 1996) hypothesized that a discrepancy between people’s ideal/ought selves and actual self leads to psychosocial distress. Higgins also predicted that a discrepancy between one’s actual and ideal self would result in depression-related symptoms (e.g., sadness), whereas a discrepancy between one’s actual and ought self would result in anxiety-related symptoms (e.g., agitation). Partial support for these predictions has been found in both non-clinical and clinical populations (e.g., Grimmell, 1998; Strauman, 1989). For example, Grimmell (1998) found that actual-ideal discrepancies in instrumentality were related to depression scores in undergraduate women.

However, anxiety may also be related to actual-ideal discrepancies, as there is high comorbidity between depression and anxiety (Kessler, Chiu, Demler, Merikangas, & Walters, 2005). Further, it is possible that researchers are actually measuring the discrepancy between individuals’ actual selves and ideal/ought selves combined, as ideal traits may also be traits that individuals feel obligated to possess. In support of these hypotheses, Grimmell and Stern (1992) found that actual-ideal discrepancies in instrumentality were stronger predictors of both depression and anxiety than a measure of instrumentality alone in a sample of university students.

Identity-Discrepancy Theory (IDT; Large & Marcussen, 2000; Marcussen & Large, 2003) extends Higgins' theory by proposing that individuals possess multiple role-identities (social roles) based on various personal characteristics for which there may be discrepancies between their aspirations and perceived obligations. This leads to distress in different situations in which these roles are enacted. Gender roles can be considered a specific role-identity wherein males and females with high social anxiety may experience actual-ideal or actual-ought discrepancies in gender role traits (e.g., instrumental traits).

1.2. Personality Traits and Social Anxiety

Individuals with high social anxiety report greater perfectionism, including doubts about actions and the perception that others hold high expectations for them (e.g., Antony, Purdon, Huta, & Swinson, 1998). Socially prescribed perfectionism among individuals with social anxiety is associated with more severely maladaptive appraisals of social situations (Laurenti, Bruch, & Haase, 2008). Therefore, individuals with high social anxiety may set higher standards for themselves than do non-anxious individuals, but may also judge their performance in social situations as less than ideal. If so, these individuals would not be satisfied with their perceived social self as compared to their ideal social self.

1.3. Hypotheses

The present study investigated differences between individuals with and without SAD in perceived and ideal instrumental and expressive traits while controlling for gender. We hypothesized that individuals with SAD would score lower on perceived instrumentality than those without SAD. Further, we hypothesized that there would be a discrepancy between perceived and ideal instrumentality scores among individuals with SAD. Finally, we hypothesized that among individuals with SAD, perceived-ideal discrepancies in instrumentality would be associated with severity of social anxiety, depression, anxiety sensitivity, and lower quality of life. Exploratory analyses examined whether individuals with SAD and individuals without SAD differed on perceived and ideal expressive traits.

2. Method

2.1. Participants

Sixty-four patients with SAD (mean age = 31.77; $SD = 9.92$) were recruited from the Adult Anxiety Clinic of Temple University in Philadelphia. All met *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; DSM-IV; APA, 1994) criteria for a principal diagnosis of SAD. Potential participants were excluded if they met criteria for bipolar disorder, psychotic disorder, organic mental disorder, or active substance dependence in the past 3 months. Thirty-one additional participants with no history of SAD or current Axis I disorder (mean age = 33.45; $SD = 11.09$) were recruited from the community via media advertisements. These participants were matched on age, gender, and race with the patients in the SAD group (see Table A.1 for demographics).

2.2. Measures

2.2.1. Anxiety Disorders Interview Schedule for DSM-IV: Lifetime Version (ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994)—The ADIS-IV-L is a semi-structured diagnostic interview that assesses current and lifetime anxiety disorders. The inter-rater reliability for a diagnosis of SAD on the ADIS-IV-L is high ($k = .77$; T.A. Brown, Di Nardo, Lehman, & Campbell, 2001).

2.2.2. Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978)—The PAQ is a self-report questionnaire measuring self-perceived gender role attributes. The

PAQ contains three separate 8-item scales, two of which (self-perceived instrumentality, self-perceived expressiveness) were employed in the present study. Items consist of trait descriptions that are stereotypically more characteristic of a certain gender role. Traits are rated on a 5-point scale from “not at all” (e.g., *not at all independent*) to “very much” like the trait (e.g., *very independent*). The Instrumentality scale assesses positive traits associated with the traditional masculine role (e.g., self-confident, active), and the Expressiveness scale assesses positive traits associated with the traditional feminine role (e.g., warm, understanding). Internal consistencies for the Instrumentality and Expressiveness scales range from $\alpha = .74 - .83$ (Hill, Fekken, & Bond, 2000). In the current sample, internal consistencies for the SAD group were $\alpha = .72$ and $\alpha = .79$ for Instrumentality and Expressiveness, respectively. The internal consistencies for the control group were $\alpha = .80$ and $\alpha = .86$ for Instrumentality and Expressiveness, respectively.

Participants also completed the PAQ a second time to indicate how much they would ideally like to exhibit each trait. Internal consistencies for the SAD group were $\alpha = .66$ and $\alpha = .79$ for the Ideal Instrumentality and Ideal Expressiveness scales, respectively. Internal consistencies for the control group were $\alpha = .57$ and $\alpha = .89$ for the Ideal Instrumentality and Ideal Expressiveness scales, respectively. Despite the low internal consistency in the control group on the Ideal Instrumentality scale, the mean and standard deviation were similar to the SAD group (see Table A.2).

2.2.3. Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS; Mattick & Clarke, 1998)—The SIAS is a self-report measure of anxiety experienced while interacting with other people in dyads and groups. The SPS is a self-report measure of anxiety experienced while being observed by others. Each scale consists of 20 items, and participants are asked to indicate how characteristic each statement is of them on Likert-type scales ranging from 0 (*not at all*) to 4 (*extremely*). The SIAS and SPS have high internal consistencies ($\alpha s = .94$) and high four-week test-retest reliabilities ($r s = .91-.92$; Mattick & Clarke, 1998). In the current sample, internal consistencies for the SAD group were $\alpha s = .88-.91$, and for the control group were $\alpha s = .78-.87$.

2.2.4. Brief Fear of Negative Evaluation (BFNE; Leary, 1983)—The BFNE is a 12-item self-report scale measuring fear of being negatively evaluated by others. Participants rate the items on a 5-point Likert-type scale ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). The BFNE is based on the original Fear of Negative Evaluation Scale (Watson & Friend, 1969) with which it correlates highly ($r = .96$). In undergraduate samples, the BFNE has high internal consistency ($\alpha = .90$) and test-retest reliability ($r = .75$; Leary, 1983). In the current sample, internal consistency for the SAD group was $\alpha = .86$, and for the control group was $\alpha = .70$.

2.2.5. Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979)—The BDI is a 21-item self-report scale assessing depressive symptomatology during the past week. Items are rated on a scale from 0 (e.g., *I do not have any thoughts of killing myself*) to 3 (e.g., *I would kill myself if I had the chance*), with higher scores indicating more depressive symptoms. A meta-analysis of the psychometric properties of the BDI (Beck, Steer, & Garbin, 1988) revealed a mean internal consistency of $\alpha = .81$ and test-retest reliabilities ranging from $r = .62-.90$ (measured 1 week to 4 months apart) among non-psychiatric samples. In the current sample, internal consistency for the SAD group was $\alpha = .85$ and for the control group was $\alpha = .55$. The BDI was not included in analyses with the control group.

2.2.6. Anxiety Sensitivity Index (ASI; Reiss, Peterson, Gursky, & McNally, 1986)—The ASI is a 16-item self-report scale assessing fear of anxiety and panic-related

sensations. The responses are scored on a 5-point Likert-type scale ranging from 0 (*agree very little*) to 4 (*agree very much*), with higher scores indicating more fear. Internal consistencies of the ASI in both clinical and undergraduate samples are high ($\alpha > .81$; Peterson & Plehn, 1999); two-week test-retest reliability among undergraduate students is also high ($r = .75$; Reiss et al., 1986). In the current sample, internal consistency for the SAD group was $\alpha = .99$, and for the control group was $\alpha = .87$.

2.2.7. Quality of Life Inventory (QOLI; Frisch, 1994)—The QOLI assesses life satisfaction in 16 domains (e.g., love, work, play). Participants indicate the importance of each domain for their well-being using a 3-point scale ranging from 0 (*not at all important*) to 2 (*very important*). In addition, participants rate their satisfaction with each domain using a scale ranging from -3 (*very dissatisfied*) to 3 (*very satisfied*). Internal consistency ($\alpha = .79$) and two-week test-retest reliability ($r = .73$) are adequate (Frisch, 1994). In the current sample, internal consistency for the SAD group was $\alpha = .80$. The QOLI was not administered to the control group.

2.3. Procedure—The ADIS-IV-L was administered to all participants by trained doctoral students or postdoctoral fellows in clinical psychology. Participants also completed a battery of self-report questionnaires. Individuals with SAD completed the study as part of their initial assessment at the Adult Anxiety Clinic of Temple University. Control participants received \$40 for participation in the study. This study received ethics approval from Temple University's Institutional Review Board.

3. Results

3.1. Differences Between Groups: Perceived and Ideal Gender Role Traits—

Mean scores on all study measures by group are found in Table A.2. An ANOVA with group and gender as fixed factors and perceived instrumentality as the dependent variable revealed a group difference in perceived instrumental traits, $F(1,91) = 72.50, p < .001$, partial $\eta^2 = .44$, but no effect for gender or the interaction. Individuals with SAD reported lower instrumentality than individuals without SAD. There were no effects in the analysis of ideal instrumental traits for group, gender, or the interaction. Regarding expressive traits, a similarly structured ANOVA revealed a gender difference in perceived expressiveness, $F(1, 91) = 4.63, p = .03$, partial $\eta^2 = .05$, with women reporting higher expressiveness than men. Neither the group main effect nor the group by gender interaction was significant. There were no effects in the analysis of ideal expressive traits for group, gender, or the interaction.

3.2. Differences Between Groups: Perceived Versus Ideal Gender Role Traits

—A repeated measures ANOVA with the scores on the perceived and ideal instrumentality scales as the within-subjects variable and gender and group as the between-subjects variables revealed a difference in perceived versus ideal instrumental traits across participants, $F(1,91) = 145.81, p < .001$, partial $\eta^2 = .62$; participants perceived themselves to be less instrumental than they ideally wanted to be. Further, there was an interaction between the perceived-ideal discrepancy in instrumental traits and group, $F(1,91) = 56.97, p < .001$, partial $\eta^2 = .39$. Selecting by group revealed within-subjects main effects of perceived-ideal discrepancies for both the SAD group, $F(1, 62) = 236.08, p < .001$, partial $\eta^2 = .79$, and the control group, $F(1, 29) = 15.96, p < .001$, partial $\eta^2 = .36$. A *t*-test revealed that the SAD group reported larger discrepancies ($M = -12.06$) than the control group ($M = -2.71$), $t(87.09, \text{unequal variance estimate}) = 9.04, p < .001$ (see Figure A.1). Based on Higgins' SDT, it was of interest to determine whether perceived-ideal discrepancies in instrumentality were related to social anxiety beyond symptoms of depression. Further analyses revealed that the group by discrepancy interaction remained significant while controlling for depression.

Regarding expressive traits, a similarly structured repeated measures ANOVA found a significant difference in perceived versus ideal expressive traits across participants, $F(1,91) = 28.98, p < .001$, partial $\eta^2 = .24$; participants perceived themselves to be less expressive than they ideally wanted to be. Further, there was an interaction between the perceived-ideal discrepancy in expressive traits and gender, $F(1,91) = 4.03, p = .048$, partial $\eta^2 = .04$. Selecting by gender revealed a within-subjects main effect of perceived-ideal discrepancies for both women, $F(1, 40) = 5.07, p = .03$, partial $\eta^2 = .11$, and men, $F(1, 51) = 30.94, p < .001$, partial $\eta^2 = .38$. A t -test revealed a marginally significant difference in discrepancy scores between men ($M = -3.64$) and women ($M = -1.83$), $t(93) = 1.95, p = .054$ (see Figure A.2).

3.3. Discrepancies in Instrumentality and Social Anxiety Severity Among Individuals with SAD—A MANCOVA with gender as a fixed factor, the difference score in perceived-ideal instrumentality as a covariate, and the three measures of social anxiety (SIAS, SPS, BFNE) as the dependent variables, revealed that greater perceived-ideal discrepancies in instrumentality were related to greater severity of social anxiety in the SAD group, $F(3,58) = 14.57, p < .001$, Wilks' Lambda = .57, partial $\eta^2 = .43$. Perceived-ideal discrepancies in instrumentality continued to be related to greater severity of social anxiety while controlling for depression.

3.4. Discrepancies in Instrumentality and Other Psychosocial Distress Among Individuals with SAD—An ANCOVA with gender as a fixed factor, the difference score in perceived-ideal instrumentality as a covariate, and depression scores as the dependent variable, revealed that greater perceived-ideal discrepancies in instrumentality were related to greater severity of depression in the SAD group, $F(1,60) = 9.51, p = .003$, partial $\eta^2 = .14$. A similarly structured ANCOVA revealed that anxiety sensitivity was not related to discrepancies in perceived-ideal instrumentality.

3.5. Discrepancies in Instrumentality and Quality of Life Among Individuals with SAD—An ANCOVA with gender as a fixed factor, the difference score in perceived-ideal instrumentality as a covariate and quality of life as the dependent variable revealed that greater perceived-ideal discrepancies in instrumentality was related to poorer quality of life, $F(1,60) = 22.00, p < .001$, partial $\eta^2 = .27$.

4. Discussion

The present study investigated perceived and ideal gender role personality traits among individuals with and without SAD. The SAD group reported lower perceived instrumentality than the control group but did not differ from the control group on ideal instrumentality. The SAD group also reported greater discrepancies in perceived versus ideal instrumentality than did the control group. It appears that individuals with SAD had similar standards regarding instrumentality to their non-anxious peers. Further, individuals with and without SAD did not differ in terms of perceived or ideal expressiveness. Among individuals with SAD, greater discrepancies in perceived versus ideal instrumental traits were associated with more severe social anxiety and depression, and poorer quality of life. They were not, however, related to anxiety sensitivity, suggesting that discrepancies in instrumentality are not related to all forms of psychosocial distress.

The results from the present study provide support for Gilbert's (2001; Trower & Gilbert, 1989) theory of social anxiety. Data support the notion that individuals with SAD believe that they are insufficiently dominant and may perceive themselves as being in a submissive position relative to others. The present findings also extend previous research (e.g., Walters & Hope, 1998), in that it suggests that people with SAD not only perceive their enactment of

specific social behaviors (e.g., maintaining conversations) to be deficient, but believe their personalities to be deficient as well.

The results also provide partial support for Higgins' SDT (1987, 1996) and the IDT (Large & Marcussen, 2000; Marcussen & Large, 2003), in that discrepancies between perceived and ideal instrumental traits were related to greater psychosocial distress. However, even when controlling for depression, membership in the SAD group was associated with discrepancies in perceived-ideal instrumentality, and these discrepancies were related to severity of social anxiety. Findings suggest a possible revision to Higgins' SDT, in that perceived-ideal discrepancies may not uniquely predict depression, but may also predict social anxiety.

Previous research indicated that men perceive themselves as being more instrumental and less expressive than women (Spence & Helmreich, 1979). However, cultural norms have changed over time, with each generation defining gender roles differently (e.g., Carter, Corra, & Carter, 2009). In the present study, men and women did not differ in perceived instrumental traits, suggesting that classifying instrumental traits as gender role traits may no longer be accurate. However, the present results still suggest differences in expressiveness, with women reporting higher perceived expressiveness than men.

4.1. Clinical Implications

Social anxiety appears to interfere in an individual's perception of instrumentality, but not expressiveness. It may be that low perceived instrumentality is related to a poor self-concept which could stem from common negative core beliefs about being helpless (e.g., weak) or unlovable (e.g., rejected; Beck, 1995). In addition to challenging these core beliefs, clinicians may want to help clients feel more competent in social situations by practicing enacting instrumental traits (e.g., independence, assertiveness).

4.2. Limitations

Participants were not asked to indicate traits they believed they should possess (obligations). As such, it was not possible to distinguish between "ideal" and "ought" traits. The generalizability of the present findings is limited, as the sample was predominantly Caucasian and well-educated. Further, the sample comprised a treatment-seeking group that was recruited through a university clinic and a small non-clinical control group that was compensated \$40 and recruited via media advertisements. This may have biased questionnaire responses or resulted in groups with higher instrumentality than average. Finally, the internal consistency of the ideal instrumentality scale was low in the control group, suggesting that the measure may not be very reliable in this particular sample.

4.3. Future Directions

It would be informative to determine whether individuals with other anxiety disorders (e.g., obsessive-compulsive disorder) perceive themselves as less instrumental than individuals without anxiety disorders. Future research should examine the relationship between depression, social anxiety, and instrumentality given the comorbidity between anxiety and depression. Lastly, SAD treatment research could determine if perceived instrumentality increases with gains made in empirically supported treatments (e.g., cognitive-behavior therapy; Magee, Erwin, & Heimberg, 2009).

Research Highlights

- Instrumentality and expressiveness in social anxiety disorder compared to controls

- Lower perceived instrumentality in social anxiety disorder
- Larger perceived-ideal discrepancy in instrumentality in social anxiety disorder
- Instrumentality discrepancies related to social anxiety severity and depression
- Support for evolutionary and self-discrepancy theories of anxiety

Acknowledgments

Portions of this research were supported by grant R10 MH44119 from the National Institute of Mental Health to Dr. Heimberg. This funding agency had no involvement in the present study. Ms. Roberts is supported by a Canadian Institutes of Health Research (CIHR) Doctoral Research Award. Dr. Hart is supported by a CIHR New Investigator Salary Award.

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Figure A.1.

Perceived and Ideal Instrumentality among Individuals with and without Social Anxiety Disorder (SAD); PAQ = Personal Attributes Questionnaire. Please note that a larger slope indicates a greater discrepancy between perceived and ideal instrumentality.

Figure A.2.
Perceived and Ideal Expressiveness among Men and Women; PAQ = Personal Attributes Questionnaire. Please note that a larger slope indicates a greater discrepancy between perceived and ideal expressiveness.

Table A.1

Demographic Characteristics by Group

Measure	SAD Group (<i>n</i> = 64)	Control Group (<i>n</i> = 31)	Statistic		
	%	%	χ^2	<i>df</i>	<i>p</i>
Gender			0.02	1	.90
Male	56.20	54.80			
Female	43.80	45.20			
Education			4.20	2	.12
High school	7.80	22.60			
College	70.30	61.30			
Post Graduate	21.90	16.10			
Race			0.55	1	.46
White	75.00	67.74			
Other	25.00	32.26			
Marital status			0.52	2	.77
Married	10.90	6.50			
Single/Never married	75.00	77.40			
Separated/Divorced/Widowed	14.10	16.10			

Table A.2

Means (Standard Deviations) of Study Measures by Group

Measure	SAD Group (<i>n</i> = 64)	Control Group (<i>n</i> = 31)
I	22.31 (4.99)	31.70 (4.83)
Ideal I	34.38 (3.11)	34.42 (3.36)
E	29.55 (4.87)	31.35 (5.15)
Ideal E	32.50 (3.85)	33.97 (4.68)
SIAS	49.44 (16.50)	12.55 (9.54)
SPS	31.27 (15.83)	5.00 (6.31)
BFNE	48.78 (8.48)	26.42 (5.10)
BDI	12.36 (7.98)	1.65 (1.98)
ASI	24.03 (12.80)	8.03 (7.01)
QOLI	−0.10 (1.67)	*

Note. I = Instrumentality Subscale of the Personal Attributes Questionnaire; Ideal I = Ideal Instrumentality Subscale; E = Expressiveness Subscale of the Personal Attributes Questionnaire; Ideal E = Ideal Expressiveness Subscale; SIAS = Social Interaction Anxiety Scale; SPS = Social Phobia Scale; BFNE = Brief Fear of Negative Evaluation; BDI = Beck Depression Inventory; ASI = Anxiety Sensitivity Index; QOLI = Quality of Life Inventory.

* QOLI was not administered to the control group