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## Abstract

Using a new measure of reactions to friendly favors, the Favor Scale (FS), we tested a model of friendship impairment in social anxiety. Social anxiety related directly to negative reactions to favors, and indirectly to friendship quality via negative (and lack of positive) reactions to favors.

## Introduction

- Individuals higher in social anxiety (SA) report more impaired friendship quality—the mechanism by which this occurs is unclear (Rodebaugh, 2009)

- Higher SA associated with lack of reciprocation in escalating intimacy during role-play interactions (Meleshko & Alden 1993)

- Individuals higher in SA can be characterized by interpersonal styles consistent with low dominance and low warmth (Walters & Hope, 1998)

- **Constrained warmth** in friendships could be studied via responses to friendly behaviors (e.g., favors)

- We suggest three mechanisms for constrained warmth in friendships:

- 1) More likely to believe that friends will expect strict reciprocity (i.e., tit-for-tat) in friendly exchanges (E-TFT)
- 2) More likely to perceive friendly behavior as negative (NEG)
- 3) Less likely to perceive friendly behavior as positive (POS)

## Hypothesis

E-TFT, NEG, and POS will mediate the relationship between social anxiety and friendship impairment.

## Measures

### The Favor Scale

(FS; Fernandez & Rodebaugh, in press)

- 22-item measure measuring how participants would react if a close friend did them a helpful favor they had not asked for

- Cognition: *My friend did the favor with no strings attached.*
- Affect: *[I would feel] guilty until I returned the favor*

- All items are rated on a 1 (*not at all true*) to 7 (*completely true*) Likert-type scale

- Contains three subscales:

- Expectation of strict reciprocity (i.e., tit-for-tat) behavior (E-TFT;  $\alpha = .74$ )
- Negative (NEG;  $\alpha = .82$ )
- Positive (POS;  $\alpha = .79$ )

### Social Interaction Anxiety Scale and Social Phobia Scale

(SIAS and SPS; Mattick & Clarke, 1998)

- **SIAS**: 20-item measure of anxiety related to social interaction situations ( $\alpha = .92$ )

- **SPS**: 20-item measure of anxiety related to being observed in certain situations ( $\alpha = .85$ )

- SIAS used in Sample 1, and both SIAS and SPS were combined in Sample 2 ( $\alpha = .86$ )

### Quality of Life Inventory

(QOLI; Frisch, 1994)

- A 32-item measure of importance given to/satisfaction with different life domains

- Friend subscale used

### Multidimensional Scale of Perceived Social Support

(MSPSS; Zimet et al., 1988)

- A 12-item measure of social support

- Friend subscale used ( $\alpha = .90$ ) and combined with friend subscale of QOLI to create friendship quality variable ( $\alpha = .72$ )

## Samples

Sample	N	Female	Age: M, SD	White	African American	Asian or Pacific Islander	Hispanic	Other
1	630	422, 67%	19.12, 1.103	401, 64%	42, 6.7%	137, 22%	17, 2.7%	27, 6.5%
2	82	49, 60%	19.82, 1.799	40, 49%	5, 6.1%	29, 35%	1, 1.2%	7, 8.5%

## Methods

- We generated a measure (the Favor Scale) that would assess each reaction (E-TFT, NEG, and POS) in regard to close friends.

- Different samples of participants completed the Favor Scale, in addition to other measures of interest.

- A series of statistical analyses were conducted to delineate the relationship between all constructs.

## Results: Sample 1

- The Favor Scale showed excellent model fit with three factors (CFI = .96, TLI = .95, RMSEA = .06, SRMR = .04), and was invariant across gender and ethnicity.

- The final CFA loadings and factor relationships retained represented three relatively distinct ways of reacting to favors.

	E-TFT	POS	NEG	SIAS
E-TFT	(.74)	-.36**	.47**	.25**
POS		(.79)	-.30**	-.10*
NEG			(.82)	.37**
SIAS				(.92)

Note. Due to sporadic missing data, *n* varies from 491 to 502 across correlations. Values on the diagonal indicate internal consistency coefficients. \*\* $p < 0.01$  level \* $p < 0.05$

## Results: Sample 2

	E-TFT	POS	NEG	SSA	SFQ
E-TFT	(.72)	-.42**	.44**	.50**	-.37**
POS		(.87)	-.37**	-.44**	-.58**
NEG			(.83)	.67**	-.42**
SSA				(.94)	-.47**
SFQ					(.72)

Note. Due to sporadic missing data, *n* varies from 81 to 82 across correlations. Values on the diagonal indicate internal consistency coefficients. SSA = Standardized Composite of Social Anxiety; SFQ = Standardized Composite of Friendship Quality. \*\* $p < 0.01$  level \* $p < 0.05$

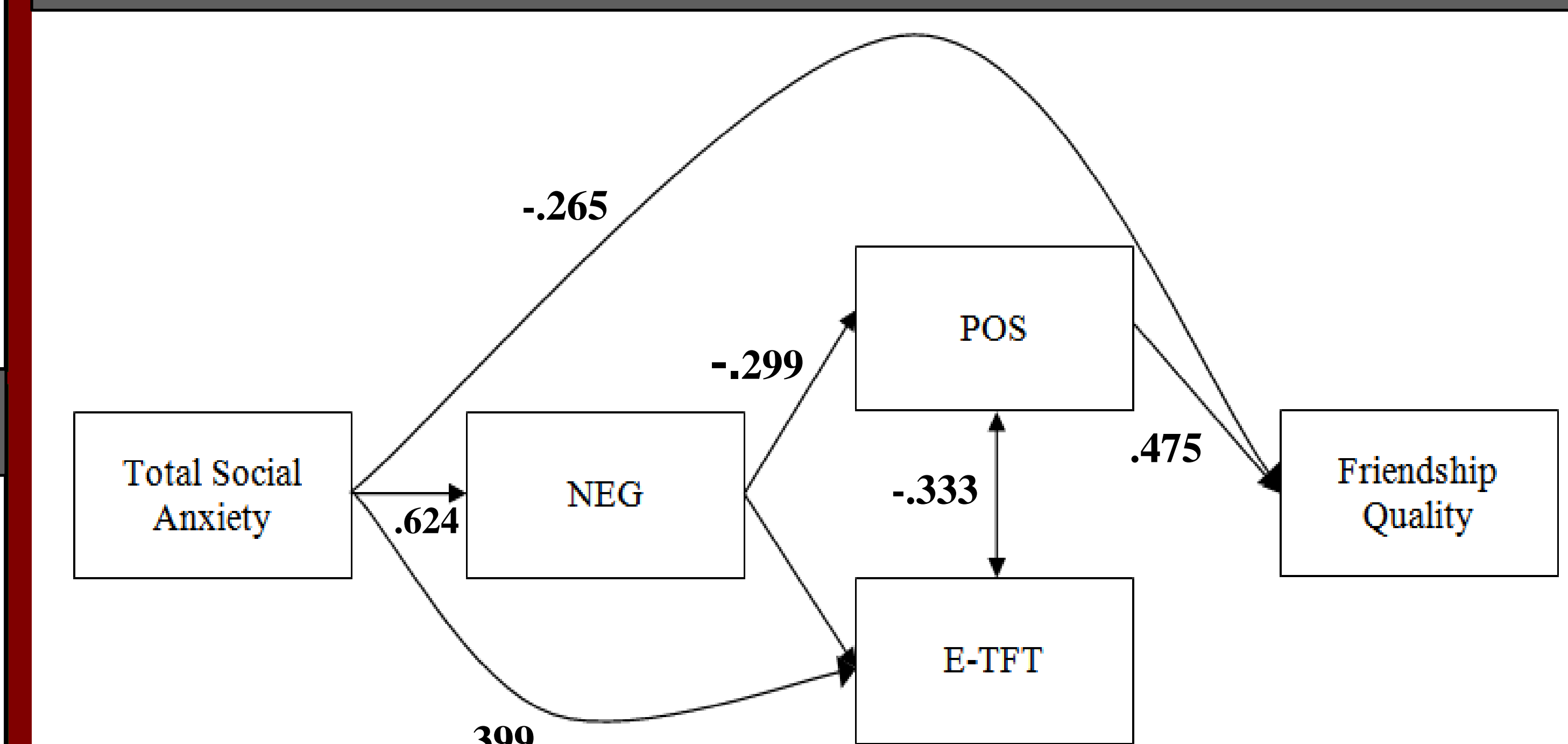
## Results: Sample 2 (cont'd)

- Final model showed excellent fit (CFI = 1.0 TLI = .99, RMSEA = .03, SRMR = .04).

- The indirect path from social anxiety to friendship quality through NEG and POS was also significant (Estimate =  $-.051$ ,  $p = .042$ ).

- POS related directly to friendship quality, and social anxiety had an indirect effect on friendship quality through NEG and POS.

## Final Model



Note. Estimates are standardized estimates (all  $ps < .05$ ); error terms omitted for simplicity.

## Discussion

- Our model indicates that reactions to favors arise out of social anxiety.

- When friends of individuals with higher social anxiety are thoughtful or helpful, the individual feels guilt and a pressure to reciprocate, impairing their ability to experience these events as positive and thereby impairing the friendship.

- Lower warmth may be tied to discomfort with being unable to repay the favor in an equitable way, coupled with anxiety about receiving favors in the future.

- Further research could focus on testing this model with other constructs (e.g., depression), obtaining better measurements of friendship quality, and use behavioral tasks to study how individuals higher in social anxiety respond to favors in person.