

Social Appearance Anxiety Mediates and Moderates the Relationship between Loneliness and Eating Dysfunction

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ABSTRACT

INTRODUCTION: Research supports the idea that loneliness leads to disordered eating. Loneliness has also been associated with social anxiety. We examined the relationship between loneliness, social appearance anxiety, body dissatisfaction, and drive for thinness.

RESULTS: Our results indicated that the relationship between loneliness and body dissatisfaction was mediated by social appearance anxiety. Additionally, there was a significant interaction between social appearance anxiety and loneliness predicting drive for thinness.

DISCUSSION: Loneliness may exert its effect on disordered eating partially through social appearance anxiety. Exposure therapies that address social appearance anxiety may decrease both loneliness and disordered eating.

PURPOSE

- We examined the relationship between loneliness, social appearance anxiety, body dissatisfaction, drive for thinness, gender, and body mass index (BMI)
- We also tested for mediation and moderation among these variables

MEASURES

UCLA Loneliness Scale (Russell, 1996)

- 20 item-measure assessing loneliness (e.g., *How often do you feel that you are no longer close to anyone*)
- Demonstrates high test-retest reliability, and excellent convergent and divergent validity (Russell, 1996)
- Has been shown to correlate negatively with life satisfaction and perceived social support (Russell, 1996)

Social Appearance Anxiety Scale (Hart et al., 2008)

- Contains 16 items regarding anxiety about one's appearance in social situations
- SAAS demonstrates a unifactorial structure with high test-retest reliability, and excellent convergent and construct validity (Levinson & Rodebaugh, in press)
- It is positively associated with measures of social anxiety and is a unique predictor of social anxiety over and above body image measures

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Eating Disorder Inventory-2 (Garner et al., 1983)

- 91-item measure; assesses symptoms of bulimia and anorexia nervosa
- In the current study the body dissatisfaction and drive for thinness subscales were used
- High levels of body dissatisfaction and drive for thinness are risk factors for development of an eating disorder

PARTICIPANTS

- 118 undergraduates at Washington University
- Participants were
 - Mostly female ($n=73$; 62%) & white ($n=84$; 71%)
 - Mean age of 19 ($M = 19.31$, $SD = 1.19$)

ANALYSES

- Tests of indirect effects (i.e., mediation) were conducted using bootstrapping in the Mplus program Version 5.21 (Muthén & Muthén, 1998-2009)
- For figures, the maximum likelihood estimator was used to report standardized path estimates

RESULTS

Table 1. Zero-Order Correlations

	SAA	Lonely	BD	DT
SAA	-			
Lonely	.52**	-		
BD	.59**	.46**	-	
DT	.36**	.19*	.47**	-

Multiple Regression Analyses

- Social Appearance anxiety (part $r = .41$) and loneliness (part $r = .31$) predicted body dissatisfaction over and above BMI (part $r = .43$) and gender (part $r = .52$), all $ps < .001$
- Social Appearance anxiety (part $r = .24$, $p = .011$) predicted drive for thinness over and above loneliness, gender, and BMI. Loneliness was not a significant predictor (part $r = .05$, $p = .188$)

Moderation by Social Appearance Anxiety

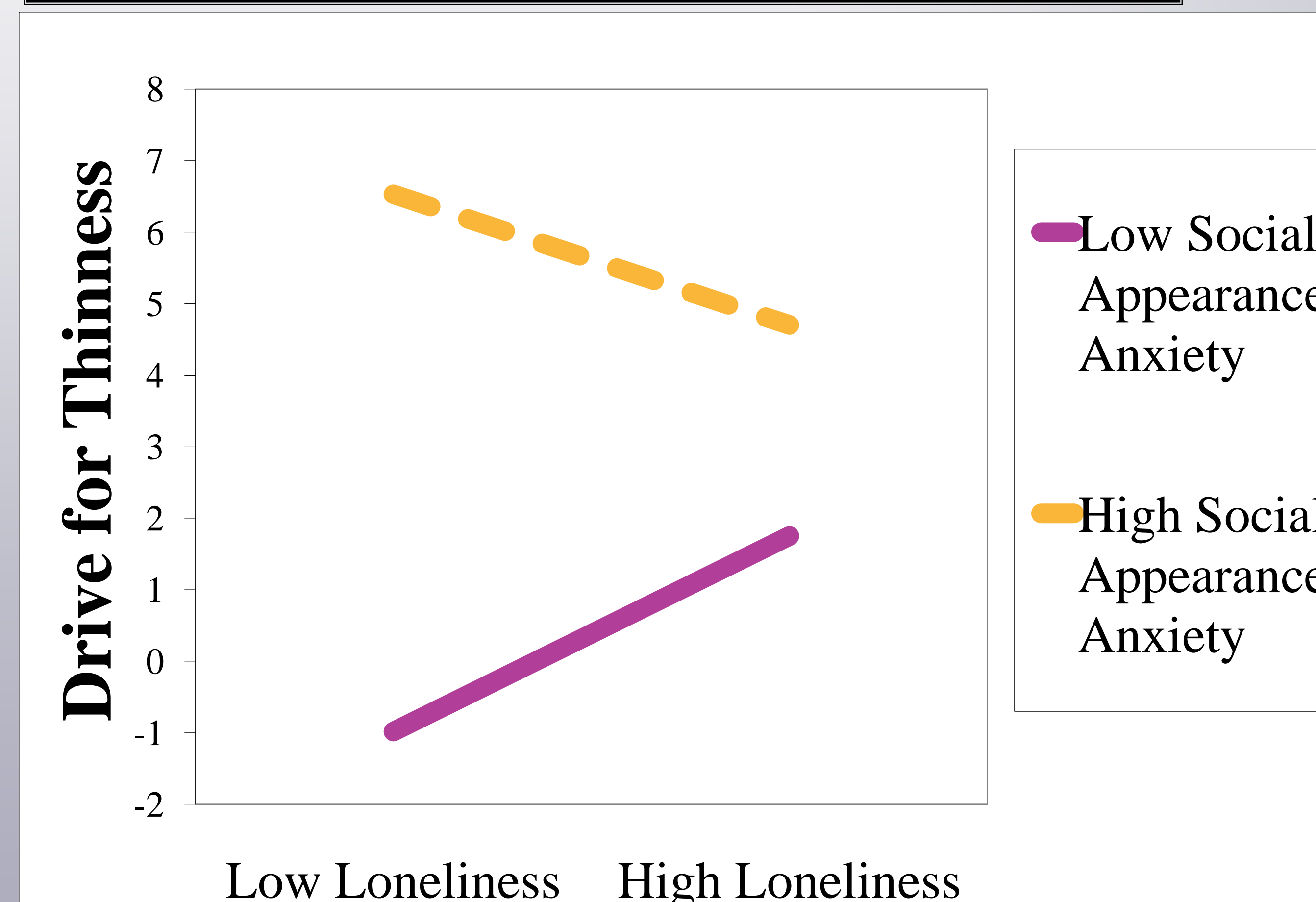


Figure 1. Drive for thinness predicted by the interaction between social appearance anxiety and loneliness

Mediation Analyses

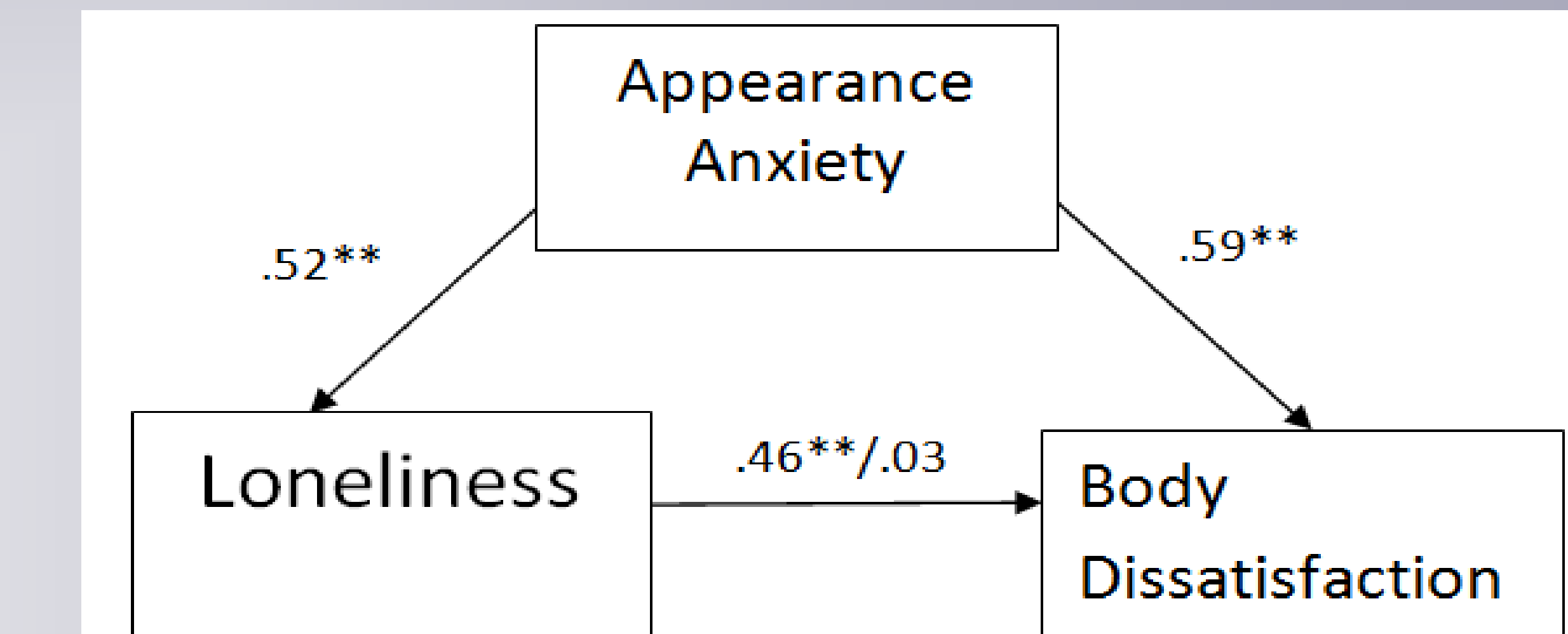


Figure 2. Model of relationship between social appearance anxiety, loneliness, and body dissatisfaction with anxiety as mediator. Standardized Coefficients are shown. ** $p < .01$

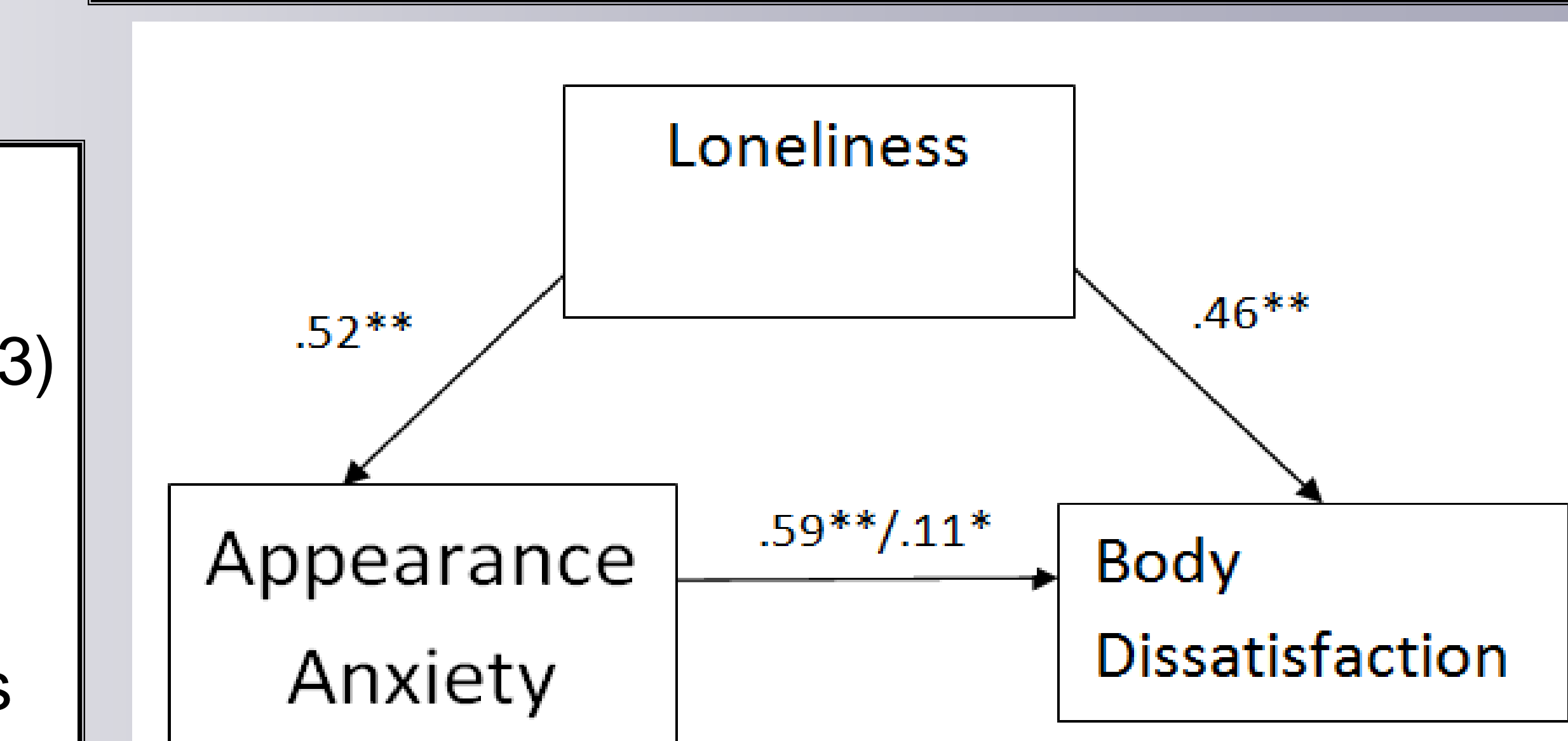


Figure 3. Model of relationship between social appearance anxiety, loneliness, and body dissatisfaction with loneliness as mediator. ** $p < .01$, * $p < .05$

DISCUSSION

- Individuals high in social appearance anxiety and low in loneliness are at the highest risk for drive for thinness
- Social appearance anxiety mediated the relationship between loneliness and body dissatisfaction
- Loneliness partially mediated the relationship between social appearance anxiety and body dissatisfaction
- Future longitudinal research should determine the direction of this relationship
- Exposures to reduce social appearance anxiety may decrease both loneliness and disordered eating

INTRODUCTION

Loneliness

- Form of interpersonal stress in which individual perceives social relationships are not living up to a desired expectation (Heinrich & Gullone, 2006)
- Loneliness is associated with disordered eating (Masheb & Grilo, 2006; Tuschen-Caffier & Vögele, 1999)
- Loneliness may contribute to relapse in patients with an eating disorder (Stewart, 2004)
- Loneliness has been associated with social anxiety (Leary, 1990)

Social appearance anxiety

- Fear of negative evaluation of one's appearance (Hart et al., 2008)
- Construed as a form of social anxiety that contributes unique variance over and above other social anxiety constructs (Levinson & Rodebaugh, 2011)
- Uniquely predicts disordered eating over and above other social anxiety constructs (Levinson & Rodebaugh, 2011B)