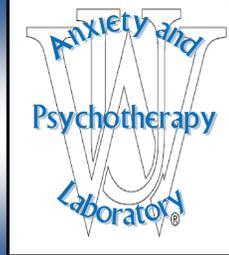# Does social appearance anxiety and maladaptive perfectionism predict restrained eating over time?

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Abstract

Introduction: Social appearance anxiety (SAA) and perfectionism may be common pathways between social anxiety and eating disorders (Hart et al., 2008; Levinson & Rodebaugh, 2012; Stice, 2002)

Method: Participants completed measures of social appearance anxiety, perfectionism, eating restraint, and body mass index (BMI) at two time points, two to three months apart

Results: SAA and maladaptive perfectionism at Time 1 both uniquely predicted restrained eating at Time 2. Restraint at Time 1 significantly predicted BMI at Time 2 over and above BMI at Time 1

Discussion: SAA and maladaptive perfectionism predict restrained eating. Restrained eating predicts BMI; this is the first study to demonstrate that this relationship holds over time

Introduction

• Social appearance anxiety (SAA) is the fear that one will be negatively evaluated because of one's appearance (Hart et al., 2008)

• SAA predicts disordered eating beyond other domains of social anxiety (Levinson & Rodebaugh, 2012)

• Perfectionism is described as a risk factor for both disordered eating (e.g., Tyrka et al., 2002) and social anxiety (Heimberg, 1995)

• In laboratory studies restraint interacts with stress to produce overeating (Greeno & Wing, 1994), thus we expect that restraint may lead to weight gain (i.e. increased BMI over time)

• Individuals high in SAA and perfectionism may seek to reduce social anxiety about their appearance through restrained eating

• Prior research has not determined what individual differences lead to the development of restrained eating

• Tested in current study:
    • Relationship between SAA, maladaptive perfectionism, and eating restraint across two time points
    • Relationship between restrained eating and BMI across two time points

Hypotheses

• Higher SAA and perfectionism will predict higher eating restraint
• Higher eating restraint will predict higher BMI over time

Participants

• Time 1 ($N = 97$)
• Time 2 ($N = 94$)
• All women, mostly Caucasian ($N = 62$, 64%)
• Mean age of 18.77 (SD = 1.08)

Procedures

• Participants came into lab and filled out packet of measures at Time 1 and Time 2, two to three months later

• Research assistants measured participants' height and weight in the lab at Time 1 and Time 2. These data were used to calculate BMI

Measures (continued)

Social Appearance Anxiety Scale (SAAS; Hart et al. 2008)
• 16-item measure assessing anxiety about one's appearance in social situations
• Positively associated with measures of social anxiety
• Is a unique predictor of social anxiety over and above body image measures

Frost Multidimensional Perfectionism Scale (F-MPS; Frost, 1990)
• 35-item measure that provides an overall perfectionism score
• Maladaptive Evaluative Concerns: composite of several subscales of the F-MPS to assess maladaptive perfectionism

Dutch Eating Behavior Scale (DEBQ; Van Strien, Frijters, Bergers, Defares, 1986)
• 32-item measure of eating behavior (restraint subscale used)

Beck Depression Inventory II (BDI-2; Beck, Steer, & Brown, 1996)
• 21-item self-report instrument measuring depression

Social Phobia Scale (SPS; Mattick & Clarke, 1998)
• 20 item measure that assesses *fear of scrutiny*
• Discriminates between social phobia and other disorders

Straightforward Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998)
• 20-item measure of anxiety-related reactions to social situations
• Reverse-score items removed to result in a 17-item measure (Rodebaugh et al., 2006)

Regression Analyses

SAA and MEC predict eating restraint
• SAA (part $r = .26$, $p = .018$) and maladaptive perfectionism (part $r = .22$, $p = .046$) at Time 1 both uniquely predicted restrained eating at Time 2 over and above restrained eating (part $r = .65$, $p < .001$), depression, fear of scrutiny, and social interaction anxiety at Time 1

Eating restraint predicts MEC, not SAA
• Restrained eating at Time 1 was not a significant predictor of SAA at Time 2 ($p = .528$), but restrained eating at Time 1 (part $r = .23$, $p = .032$) did significantly predict maladaptive perfectionism at Time 2

Eating restraint predicts BMI
• Restraint at Time 1 (part $r = .38$, $p < .001$) significantly predicted BMI at Time 2 over and above BMI at Time 1

Results: Time 1

Figure 1. Zero-order correlations between restraint, perfectionism, depression, and social anxiety

	SAAS	Maladaptive Perfectionism	Eating Restraint	Depression	Fear of Scrutiny	S-SIAS	BMI
SAAS	.92						
Maladaptive Perfectionism	.27**	.92					
Eating Restraint	**.22***	**.30****	.94				
Depression	.36**	.35**	.12	.81			
Fear of Scrutiny	.54**	.34**	.17	.30**	.88		
S-SIAS	.66**	.40**	.11	.34**	.75**	.82	
BMI	.15	.09	**.32****	.05	-.07	-.08	

SAAS=Social Appearance Anxiety Scale; S-SIAS=Social Interaction Anxiety Scale; **p < .01, *p < .05; The diagonal is Cronbach's Alpha.

Discussion

• SAA and maladaptive perfectionism were significant predictors of restrained eating over time and, in the opposite direction, restrained eating predicted maladaptive perfectionism
    • These results suggest a reciprocal relationship between maladaptive perfectionism and eating restraint

• The finding that restraint predicted BMI over time is consistent with research that has found that restraint leads to overeating (Greeno & Wing, 1994)

• These results represent the first demonstration that the relationship between restraint, maladaptive perfectionism, and BMI holds over time