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Self-portrayal concerns mediate the relationship between recalled teasing and social anxiety symptoms in adults with anxiety disorders☆

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ABSTRACT

Previous research on individuals with anxiety disorders has demonstrated that both childhood peer maltreatment and concerns about negative self-portrayal are related to elevated symptoms of social anxiety (SA). In the present study, we examined whether concerns about negative self-portrayal might either moderate or mediate the relation between recalled childhood teasing history and current symptoms of SA in a non-treatment-seeking clinical sample of 238 individuals with anxiety disorders. Participants completed the *Teasing Questionnaire-Revised* (TQ-R), the *Negative Self-Portrayal Scale* (NSPS), and the *Social Phobia Inventory* (SPIN). Analyses using structural equation modeling (SEM) indicated that self-portrayal concerns mediated, but did not moderate, the relationship between recalled teasing and current SA, accounting for 51% of the total effect. Clinical implications and directions for future research are discussed.

A substantial body of research has shown that the development or exacerbation of social anxiety (SA) symptoms and SA-related problems such as depression and loneliness are among the most significant negative psychological consequences of early peer victimization, including physical or verbal attacks, shunning, teasing, ignoring, and rumor-spreading (e.g., Roth, Coles, & Heimberg, 2002; Storch, Roth, Coles, Heimberg, Bravata, & Moser, 2004). Cross-sectional studies have consistently found significant associations between greater perceived peer victimization, on one hand, and concerns about negative evaluation, fear and avoidance of social situations, and deficits in social skills, on the other (Callaghan & Joseph, 1995; Neary & Joseph, 1994; Schwartz, Dodge, & Coie, 1993; Storch & Masia-Warner, 2004; Storch, Brassard, & Masia-Warner, 2003). Such research has also shown that recalled peer victimization is related to poor self-perception (i.e., low self-esteem and self-worth) and higher levels of depression and loneliness (Callaghan & Joseph, 1995; Craig, 1998; Grills & Ollendick, 2002; Hodges & Perry, 1999; Olweus, 1993; Storch & Roth-Ledley, 2005). This pattern of results extends to clinical samples as well, with a recent cross-sectional study of outpatients with anxiety disorders demonstrating that recalled childhood teasing accounts for significant and unique variance in current SA symptom severity even after controlling for concurrent symptoms of depression, anxiety, and stress (McCabe, Miller, Laugesen, Antony, & Young, 2010). Moreover, prospective studies have helped to clarify the sequential time course of these associations, demonstrating that peer maltreatment during childhood and adolescence is a predictive risk factor for future elevations both in SA symptoms (Storch, Masia-Warner, Crisp, & Klein, 2005) and in a number of SA-related internalizing and interpersonal problems such as depression, poor self-esteem, and peer rejection (Egan & Perry, 1998; Hodges & Perry, 1999; Olweus, 1993).

Despite this clear evidence of an association between early peer maltreatment and the subsequent amplification or development of SA and SA-related symptoms, little is known about the underlying psychological mechanisms that might account for or influence this relationship. Although no previous studies to our knowledge have attempted to answer this question, hypotheses about such potential factors may be derived from current theoretical models of SA. According to both cognitive and interpersonal theories, symptoms of SA are driven by negatively biased assumptions that

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Table 1
Diagnostic composition of the study sample ($N = 238$).

Principal diagnosis	*n*	%	Secondary diagnoses	*n*	%
Social anxiety disorder	111	46.6	Social anxiety disorder	45	18.9
Obsessive-compulsive disorder	59	24.8	Generalized anxiety disorder	31	13.0
PD with or without Agoraphobia	30	12.6	Major depressive disorder	30	12.6
Generalized anxiety disorder	21	8.8	Specific phobia	19	7.9
Posttraumatic stress disorder	10	4.2	PD with or without Agoraphobia	18	7.6
Anxiety disorder NOS	6	2.5	Alcohol/substance disorder	18	7.6
Specific phobia	1	.40	Obsessive-compulsive disorder	16	6.7
			Eating disorder	11	4.6
			Dysthymia	8	3.4
			Posttraumatic stress disorder	4	1.7
			Depressive disorder NOS	3	1.3
			Anxiety disorder NOS	2	.84
			Hypochondrasis	1	.40

Note. PD = panic disorder, NOS = not otherwise specified.

people make about themselves, others, and the world based on their early experiences, which significantly color their appraisals of their social experiences and negatively impact their behavior during interpersonal encounters (e.g., Alden & Taylor, 2004; Clark & Wells, 1995; Hofmann, 2007; Rapee & Heimberg, 1997). Building upon these models, Moscovitch (2009) recently proposed that SA symptoms are fundamentally driven by specific concerns that individuals have about exposing certain self-attributes that they view as being flawed or deficient to the scrutiny of others within social contexts. According to Moscovitch's (2009) model, these specific *self-portrayal concerns* across the dimensions of social skills, personality, physical appearance, and signs of anxiety represent the core threat stimuli for socially anxious individuals in anticipation of or during social encounters. Subsequent research by Moscovitch and colleagues has supported the notion that such concerns are functionally related to the characteristic emotional and behavioral symptoms of SA, including elevated levels of negative affect and distress within social contexts, the use of particular safety behaviors, and fear and avoidance of specific social situations (Moscovitch et al., 2013; Moscovitch & Huyder, 2011).

Drawing upon these theoretical models, it seems intuitive that experiences of teasing in childhood might lead some individuals to develop the types of self-portrayal concerns that underlie the expression of SA symptoms. In particular, the types of concerns described in Moscovitch's (2009) model – concerns about social skills, personality, physical appearance, and signs of anxiety – overlap with the very themes that often tend to characterize childhood teasing (Storch et al., 2004). Thus, it might be reasonable to predict that the relationship between perceived early experiences of peer maltreatment and the later development or exacerbation of SA symptoms could depend on the extent to which those early negative social experiences are internalized to shape the development of beliefs in which the self is appraised as being flawed or deficient. In other words, perhaps the relationship between early childhood teasing and later SA depends on, or is accounted for by, such self-portrayal concerns.

Following these premises, we conducted the present cross-sectional study in order to determine whether self-portrayal concerns might either moderate or mediate the relationship between recalled childhood teasing and current symptoms of SA in a non-treatment-seeking clinical sample of individuals with anxiety disorders. An explicit aim of the current study was to replicate and extend the recent findings of McCabe et al. (2010), who reported that recalled childhood teasing was associated with elevated current symptoms of SA in a sample of treatment-seeking adult outpatients with anxiety disorders. Here, however, we recruited a non-treatment-seeking clinical sample in order to control for the possibility that treatment-seeking participants' explicit acknowledgment that they have a personal problem requiring treatment may negatively bias their reported perceptions of their past teasing experiences.[1]

We reasoned, on one hand, that the association between recalled teasing and SA symptoms might become stronger as individuals' self-portrayal concerns increased (moderation hypothesis). On the other hand, self-portrayal concerns might play a more direct role as the "psychological glue" that binds teasing and SA symptoms together, such that the association between the two constructs is fully or partially accounted for by the presence of elevated self-portrayal concerns (mediation hypothesis). As Moscovitch's (2009) model of SA could theoretically support either hypothesis, we did not strongly advance one or the other but rather examined both alongside each other, with the expectation that the present results would ultimately help to direct and inform the development of future hypothesis-driven experimental and/or longitudinal studies.

1. Method

1.1. Participants

The study sample was comprised of 238 individuals who met DSM-IV-TR (American Psychiatric Association, 2000) criteria for a principal anxiety disorder diagnosis. All participants were recruited from the surrounding community via advertisements posted online and in local newspapers and flyers in Kitchener-Waterloo, a mid-sized Canadian city.

Diagnoses were assessed using the semi-structured *Mini-International Neuropsychiatric Interview* (MINI; Sheehan et al., 1998) by trained graduate students from the *Anxiety Studies Division* of the Center for Mental Health Research (CMHR) at the University of Waterloo under the supervision of two registered clinical psychologists. Every case was presented and reviewed at weekly intake meetings during which the graduate students and the two psychologists achieved consensus on all diagnoses. The principal diagnosis

[1] Thus, we wished to ensure that participants in the present study were symptomatic at the time of data collection while also minimizing the extent to which the research context would potentially set the stage for embellished self-reports of past or current distress. Moreover, like McCabe et al., we reasoned that examining these phenomena in a sample of individuals with mixed anxiety disorders (as opposed to a sample of individuals with SAD alone), would allow for the expression of a variable range of responses across the constructs of interest. While a community (i.e., nonclinical) sample might have captured an even broader range of variability on these constructs, recruiting such a sample would not have allowed for a replication and extension of the McCabe et al. study and may have also introduced new methodological challenges associated with positive retrospective biases that typically characterize the retrospective self-reflections of healthy individuals (e.g., Hirsch & Mathews, 2000).