Contents lists available at ScienceDirect



## BEHAVIOUR RESEARCH AND THERAPY

## Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

# Processes and pathways mediating the experience of social anxiety and negative rumination



### Matthew Modini<sup>a</sup>, Ronald M. Rapee<sup>b</sup>, Maree J. Abbott<sup>a,\*</sup>

<sup>a</sup> Clinical Psychology Unit, School of Psychology, The University of Sydney, Sydney, NSW, Australia
<sup>b</sup> Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney, NSW, Australia

#### ARTICLE INFO

Keywords: Social anxiety Negative rumination Pre-event rumination Post-event rumination

#### ABSTRACT

Negative rumination in social anxiety disorder (SAD) occurs in anticipation of a social event (pre-event rumination) and in its aftermath (post-event rumination). Both are proposed to be key maintaining factors of the vicious cycle of social anxiety. Despite this, there is a dearth of research investigating the processes that mediate the relationship between social anxiety and pre-event rumination and uncertainty regarding the cognitive and attentional processes that mediate the relationship between social anxiety and post-event rumination. To investigate this further, the current study utilised a clinical sample of participants with SAD to determine the hypothesised mediators of a social anxiety and pre-event model (N = 239) and a social anxiety and post-event rumination model (N = 216). Results from path analyses were broadly consistent with cognitive models of SAD that posit several interrelated processes mediate the relationship between social anxiety and pre- and post-event rumination. Results also indicated slightly different processes showed stronger prediction of pre-event rumination (i.e., biased performance appraisals) and post-event rumination (i.e., negative attentional focus). Treatment recommendations that aim to address the maladaptive role of negative rumination in social anxiety are made in keeping with the inter-connected and dynamic role played by cognitive and attentional processes in heightening social anxiety.

#### 1. Introduction

The underlying feature of Social anxiety disorder (SAD) is a fear of social situations where sufferers believe that negative evaluation is likely and will have negative consequences for them. Over the last 20 years our understanding of SAD has been improved by a number of cognitive models that attempt to describe the key cognitive process involved in the maintenance of SAD (Clark & Wells, 1995; Hofmann, 2007; Rapee & Heimberg, 1997). While traditional cognitive behavioural therapy (CBT) techniques have long been the most efficacious treatment for SAD (Acarturk, Cuijpers, van Straten, & de Graaf, 2009; Mayo-Wilson et al., 2014), the need to understand and target the cognitive processes proposed by cognitive models of SAD has more recently been acknowledged with the development of 'enhanced' CBT programs that explicitly address the key processes maintaining SAD (Clark et al., 2003; Rapee, Abbott, Baillie, & Gaston, 2007).

The first proposed cognitive model of SAD was that of Clark and Wells (1995) which posits that when an individual with high social anxiety enters a feared social situation, a range of maladaptive assumptions and unhelpful beliefs are activated which in turn lead to a fear that there is a real threat of negative evaluation. This perceived threat causes attention to be become self-focused, with attention directed towards potentially observable anxiety responses, which in turn contribute to further negative processing of the feared social situation. The focus on cognitive and somatic symptoms of anxiety contributes to the creation of a negative self-impression of how the individual appears to others. The negative self-impression is further supported by engagement in safety behaviours and avoidance. Although theirs is a model of state anxiety, Clark and Wells (1995) also discuss how individuals with social anxiety engage in anticipatory processing before a social situation, which involves reflecting on past failures, engaging in negative self-imagery, and predicting that their social performance will not live up to perceived standards. As a result, the individual may avoid feared situations or enter them in a negative self-focused processing mode. Following the social situation the individual will engage in a 'post-mortem' of the event, which focuses on perceived failures and negative self-perceptions and serves to further consolidate beliefs that they cannot perform in a social situation to the required standard, further reinforcing threat biases and maladaptive beliefs about the self and others as well as patterns of safety behaviour use (Clark & Wells, 1995).

https://doi.org/10.1016/j.brat.2018.01.009 Received 19 July 2017; Received in revised form 20 October 2017; Accepted 31 January 2018 Available online 02 February 2018 0005-7967/ © 2018 Elsevier Ltd. All rights reserved.

<sup>\*</sup> Corresponding author. Clinical Psychology Unit, School of Psychology, 88 Mallet Street, Building F, M02F University of Sydney, NSW 2050, Australia. *E-mail address:* maree.abbott@sydney.edu.au (M.J. Abbott).

Further cognitive models of SAD (Hofmann, 2007; Rapee & Heimberg, 1997) are conceptually similar to Clark and Wells' (1995) model and also emphasise the role of the key cognitive and attentional processes, such as inappropriate self-focused attention, overestimating the probability and consequences of negative evaluation, and negatively biased performance appraisals, in the maintenance of SAD. While the importance and relationships between the processes proposed by the cognitive models of SAD has been validated empirically (Rapee & Abbott, 2007), they are essentially models of state social anxiety as they outline the factors that are at play when an individual with social anxiety confronts a feared social situation. The models do not directly make predictions regarding the role of these processes before and after a feared social situation. While it has been posited that the impact and relationships amongst these cognitive and attentional processes should be similar whether the individual is thinking about the upcoming social situation, experiencing it, or ruminating about performance afterwards (Rapee & Heimberg, 1997), it is yet to be fully ascertained what role the hypothesised cognitive and attentional processes play in anticipation of the social situation and during the 'post-mortem.' This is despite negative rumination in social anxiety being conceptually different from in-situation state anxiety, as state anxiety is an affective state characterised by physical arousal while rumination is a cognitive process characterised by repetitive and often uncontrollable tendency to replay events from a negatively biased perspective. In other words, the predictors of negative rumination, both pre- and post-event, require further investigation, particularly in the case of pre-event rumination.

Negative rumination in social anxiety typically involves a repetitive and distressing focus on intrusive images and thoughts that revolve around past perceived social failure (Clark & Wells, 1995). While rumination also has a clear role in maintaining depression, they are likely different constructs as depressive rumination involves reflection about the meaning and causes of one's depressive symptoms (Nolen-Hoeksema & Morrow, 1991) while rumination in social anxiety more around repeatedly reflecting on feared consequences of a social situation in a negatively biased manner. In support of this, it has been reported that depression does not account for significant variance in negative rumination after a speech-task when social anxiety scores are also included in a regression model (Abbott & Rapee, 2004) and that while performance appraisals mediates the social anxiety and postevent rumination relationship, depressive rumination is not a covariate of this relationship (Perini, Abbott, & Rapee, 2006). Negative rumination in social anxiety can be separated into anticipatory rumination before a social situation, known here as pre-event rumination, and rumination after the social situation, known here as post-event rumination. Research investigating the social anxiety and post-event rumination relationship has begun to accumulate over recent years, with an association between high levels of social anxiety and post-event rumination consistently reported in clinical samples (Abbott & Rapee, 2004; Kocovski & Rector, 2008; Perini et al., 2006). The literature has also attempted to establish the cognitive predictors of post-event rumination, including several cognitive and attentional processes proposed by the models of SAD such as performance appraisals (Abbott & Rapee, 2004; Perini et al., 2006), threat appraisals (Penney & Abbott, 2014), self-imagery (Makkar & Grisham, 2011), self-efficacy (Penney & Abbott, 2014) and self-focused attention (Gaydukevych & Kocovski, 2012; Helbig-Lang, Poels, & Lincoln, 2016). Situationally elicited anxiety has also been found to be a strong predictor of post-event rumination (Kiko et al., 2012). However, the status of these variables as predictors of post-event rumination is debated (refer to Modini and Abbott (2016) for a review), with further research needed to ascertain what role these processes have on predicting post-event rumination.

To the best of our knowledge, only two studies to date have used statistical modelling techniques, which allows for testing of multiple pathways to be conducted simultaneously, between social anxiety and post-event rumination (Chen, Rapee, & Abbott, 2013; Rapee & Abbott, 2007). The first study to do so reported that negative rumination

mediates social anxiety and negatively biased performance recall following a speech task (Rapee & Abbott, 2007). The second study by Chen et al. (2013), which utilised data from 73 participants with SAD and 48 non-anxious controls, reported that trait social anxiety leads directly to post-event rumination, and also indirectly, via self-focused attention and performance appraisals, although analysis revealed the indirect pathways to be non-significant. Interestingly, state anxiety and threat appraisals were not found to mediate the relationship between trait social anxiety and post-event rumination, despite a clear role for these processes in cognitive models of SAD. As it has not been widely studied, the role of state anxiety as a predictor of negative rumination in social anxiety is unclear. One study has demonstrated a state anxiety and negative rumination relationship (McEvoy & Kingsep, 2006), while another (in addition to Chen et al., 2013), reported state anxiety not to be a significant predictor (Makkar & Grisham, 2011). In contrast, threat appraisals have previously been found to be a significant predictor of post-event rumination (Penney & Abbott, 2014; Rapee & Abbott, 2007).

While the role of post-event rumination in social anxiety is recognized, and an increasing amount of research has been devoted to determining the cognitive predictors of post-event rumination, by comparison, little attention has been given to the relationship between social anxiety and pre-event rumination. This is despite pre-event rumination having a clear role in maintaining the vicious cycle of social anxiety according to cognitive models of SAD (Clark & Wells, 1995; Hofmann, 2007) and a likely mediator of treatment outcome in CBT for social anxiety (Hedman et al., 2013). One study that has considered the predictors of pre-event rumination with a clinical sample of participants with SAD utilised hierarchical regression modelling and reported that state anxiety, self-efficacy, threat appraisals and self-appraisals of performance explained unique variance in pre-event rumination (Penney & Abbott, 2014). Furthermore, this same study investigated the predictors of post-event rumination and found that only threat appraisals accounted for unique variance in post-event rumination (Penney & Abbott, 2014). The findings of this study suggest that the cognitive predictors of pre- and post-event rumination may actually differ despite theory suggesting that these processes are similar constructs, only separated by their chronological positioning (Rapee & Heimberg, 1997; Vassilopoulos, 2004).

Taken together, while empirical research has started to consider more the cognitive processes that predict post-event rumination in social anxiety, only a single study has used path analytic techniques to investigate the impact of these processes in mediating the relationship between social anxiety and post-event rumination (Chen et al., 2013). This sole study did not utilise a homogenous sample and questions remain regarding the importance and interplay of some of these processes, particularly threat appraisals, and whether pathways align with predictions based on cognitive models. Additionally, there is a lack of research investigating the relationship between social anxiety and preevent rumination, with statistical modelling techniques yet to be conducted to determine the role of the aforementioned processes in mediating this relationship. If the processes that impact pre- and post-event rumination can be determined, it would allow for more specific targeting of such processes when further refining CBT interventions to address the role of negative rumination in preserving social anxiety. Thus, the aims of this study are to: 1) model the cognitive and attentional processes theorised to mediate the relationship between social anxiety and post-event rumination, 2) to extend the Chen et al. (2013) model by re-assessing the roles of threat and state anxiety, 3) test a second model that determines the processes that mediate the relationship between social anxiety and pre-event rumination, and 4) compare and contrast these models and make recommendations regarding the cognitive and attentional processes that need to be addressed in treatment when aiming to reduce levels of negative rumination in SAD. This fourth aim would additionally allow more clarification if predictors of pre- and post-event rumination differ as has recently been reported by Penney and Abbott (2014).

Download English Version:

# https://daneshyari.com/en/article/7261857

Download Persian Version:

https://daneshyari.com/article/7261857

Daneshyari.com