

Fears of Receiving Compassion from Others Predict Safety Behaviour Use in Social Anxiety
Disorder Over and Above Fears of Negative Self-Portrayal

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Abstract

Why do people with social anxiety disorder (SAD) engage in the use of safety behaviours? While past research has established that fears of negative self-portrayal are strongly associated with safety behaviour use in SAD, no research to date has investigated the potential role of fears of receiving compassion. Both types of fears could motivate those with SAD to engage in safety behaviours in order to keep others at a distance. In the present study, 150 participants with a clinical diagnosis of SAD completed measures of fears of negative self-portrayal, fears of receiving compassion, and safety behaviour use. Multiple regression analyses revealed that when controlling for self-portrayal fears, fears of receiving compassion significantly predicted increased use of safety behaviours overall, as well as the use of avoidance and impression management subtypes. Furthermore, there was a significant interaction effect in which greater fears of receiving compassion predicted greater use of impression management at lower levels of self-portrayal fears. We discuss the implications of our findings for addressing safety behaviours in the treatment of SAD.

Keywords: social anxiety, self-portrayal, compassion, safety behaviours, impression management, avoidance

Fears of Receiving Compassion from Others Predict Safety Behaviour Use in Social Anxiety Disorder Over and Above Fears of Negative Self-Portrayal

Individuals with social anxiety disorder (SAD) perceive even benign social opportunities and contexts as threatening (Wong, Gordon, & Heimberg, 2014), often relying on the use of *safety behaviours* in an attempt to prevent feared outcomes of negative evaluation and social rejection (Salkovskis, 1991). Safety behaviours have been conceptualized as self-protection and concealment strategies that are employed to mitigate fears of exposing self-perceived negative attributes to others (Moscovitch, 2009). Indeed, individuals with SAD tend to have elevated self-portrayal fears and demonstrate greater use of safety behaviours despite the relative ineffectiveness of these behaviours at relieving anxiety and distress (Moscovitch et al., 2013). When socially anxious participants engage in a conversation while holding in mind a negative self-image, they use more safety behaviours, are more likely to believe that they performed inadequately, and tend to overestimate how poorly they came across to their conversation partner (Hirsch, Meynen, & Clark, 2004). Thus, fears of negative self-portrayal have been established as playing a key role in the use of safety behaviours amongst individuals with SAD.

Alongside their fears about exposing self-perceived flaws and opening themselves up to criticism, individuals with SAD simultaneously fear expressions of compassion and warmth (Cunha, Pereira, Galhardo, Couto, & Massano-Cardoso, 2015). In particular, fears of *receiving* compassion from others have been found to be unique to SAD: when controlling for depression, fears of receiving compassion were associated with greater symptom severity in participants with SAD, but not in those with obsessive-compulsive or generalized anxiety disorder (Merritt & Purdon, 2020). Fears of receiving compassion have been linked to early

shame experiences, and individuals who experience greater fears of compassion recall fewer positive, affiliative memories from childhood (Matos, Duarte, & Pinto-Gouveia, 2017; Silva, Ferreira, Mendes, & Marta-Simões, 2019). These experiences are thought to form the foundation for maladaptive social schema that make it difficult for socially anxious individuals to feel safe in their social environments (Kelly & Dupasquier, 2016), leading them to interpret compassion as threatening. In SAD, fears of receiving compassion may specifically centre around related feelings of unworthiness, the belief that needing compassion from others is a sign of weakness, or that compassion is equivalent to pity (Gilbert, McEwan, Matos, & Ravis, 2011). Thus, for people with SAD, fears of receiving compassion may fuel the use of safety behaviours designed to avoid showing signs of anxiety or other forms of personal distress to others not only to prevent negative evaluation but perhaps also to prevent other people from offering support (Dupasquier, Kelly, Moscovitch, & Vidovic, 2018). There is therefore reason to suspect that fears of receiving compassion are linked with self-protective and self-concealing strategies, namely safety behaviours, to avoid or reject displays of warmth and care from others; however, the relationship between fears of receiving compassion and use of safety behaviours has not previously been investigated.

It is also unclear if individuals with SAD resort to different *types* of safety behaviours to avoid expressions of care and concern from others. Clark and Wells (1995) proposed two distinct subtypes of SAD-related safety behaviours: impression management and avoidance. Impression management strategies are employed to tightly control one's impression on others by enhancing self-presentation, such as feigning friendliness or using rehearsed phrases in conversation. Their use creates a favourable façade and distracts from one's actual self. However, impression management strategies often come at the cost of authentic, genuine self-disclosure and deep,

meaningful social connection by creating a veneer of “innocuous sociability” (Plasencia, Alden, & Taylor, 2011) and deflecting others away from a socially anxious individual’s “true,” “inadequate” self. In this way, impression management strategies may also allow socially anxious people to conceal underlying feelings of distress and ensure that others do not believe they are in need of any help or compassion.

On the other hand, the goal of avoidance strategies is to reduce one’s involvement in a social situation; for example, by overtly avoiding eye contact or limiting self-disclosure. Like impression management strategies, the underlying motivation of avoidance strategies is often to draw attention away from the self. However, the use of avoidance safety behaviours might have a particularly negative impact on the individuals with SAD who use them. For example, one study found that socially anxious participants who used avoidance strategies perceived themselves as looking more anxious and enjoying the conversation less, and reported less desire to pursue further conversation with the same interaction partner in the future (Gray, Beierl, & Clark, 2019). Avoidance safety behaviours also elicit critical reactions from others: partners rated socially anxious research participants as appearing more anxious and less likeable, and objective assessors rated participants lower on positivity when avoidance safety behaviours were being used (Gray et al., 2019; see also Rowa et al., 2015). Like the motivations that may drive the use of impression management strategies for socially anxious individuals who fear receiving compassion, such individuals may also rely on avoidance safety behaviours to ensure that other people do not notice signs of distress or discomfort or imagined flaws that may prompt unwelcome expressions of compassion.

In the present study, we examined the relations between self-portrayal fears, fears of receiving compassion, and use of safety behaviours in individuals with a clinical diagnosis of

SAD. We hypothesized that self-portrayal fears and fears of receiving compassion would each uniquely explain significant variance in use of safety behaviours. We also hypothesized that fears of receiving compassion would interact with self-portrayal fears to further elevate safety behaviour use, such that socially anxious people with higher levels of both self-portrayal fears and fears of compassion would report the greater reliance on self-protective strategies. Finally, we explored the effects of self-portrayal fears, fears of receiving compassion, and their interaction on the use of avoidance and impression management safety behaviours separately in order to determine whether the preferential use of the two safety behaviour subtypes may be differentially related to these two types of underlying fears. Extending our knowledge of the various factors that contribute to safety behaviour use may help to advance treatments targeted at reducing socially anxious individuals' maladaptive over-reliance on social safety behaviours (McManus, Sacadura, & Clark, 2008; Taylor & Alden, 2011).

Methods

Participants

A total of 150 participants over the age of 18 were recruited for the present study with online and flyer advertisements posted in a mid-size Canadian city with a population of approximately 240,000 following procedures detailed in Moscovitch, Shaughnessy et al. (2015). Adults who self-identified as having current difficulties with social anxiety were screened for inclusion and exclusion criteria using an online questionnaire and phone screen adapted from the Mini International Neuropsychiatric Interview (MINI; Sheehan, 2014), a well-validated semi-structured diagnostic interview (Pinninti, Madison, Musser, & Rissmiller, 2003; Sheehan et al., 1998). Participants who endorsed symptoms on the phone screen consistent with a DSM-5 diagnosis of SAD were invited to complete an in-person assessment consisting of the full MINI

and detailed symptom checklists adapted from the Anxiety Disorders Interview Schedule for DSM-5 (ADIS; Brown & Barlow, 2014). The interview was administered by highly trained clinical psychology graduate students. The clinical data supporting the diagnoses recorded by graduate students during the interviews were reviewed in detail by a clinical team consisting of the two psychologists and other graduate student clinicians, who collaboratively established consensus diagnoses for each case based on discussion at weekly meetings. Prior research has established 100% inter-rater reliability for a diagnosis of SAD when two clinicians in our group independently assessed a small sample of the same participants using these methods (see Moscovitch, Waechter et al., 2015). Following the interview, participants completed a series of self-report questionnaires. For inclusion in the current study, participants were required to have a clinically significant SAD diagnosis (i.e., associated with a Clinician Severity Rating of symptoms of 4 or above on a standardized Likert scale ranging from 0 – *none* to 8 – *very severe*). Exclusion criteria included endorsement of active and clinically significant suicidality, mania, psychosis, or substance abuse or dependence. Eligible participants were compensated \$40 CAD for their participation.

The mean age of the sample was 27.9 ($SD = 11.81$). A total of 107 (71.3%) participants identified as female, with the remaining identifying as male (24.7%), transgender (2.7%) or non-binary (1.4%). The majority of participants identified their ethnic or cultural background as White/European (63.3%), with the remaining identifying as South Asian (12%), East Asian (9.3%), Latin American (3.3%), Southeast Asian (2%), Black (1.3%), Indigenous or First Nations (1.3%), West Indian (0.7%), Arab (0.7%), Filipino (0.7%), or Other (5.3%). One hundred and twenty-seven (84.7%) participants reported having completed at least some post-secondary education. SAD represented the principal diagnosis for 86 (57.3%) participants, the

co-principal diagnosis for seven (4.7%) participants, and a secondary diagnosis for 57 (38.0%) participants. The principal diagnoses of those with a secondary diagnosis of SAD included generalized anxiety disorder (35.1%), persistent depressive disorder (29.8%), obsessive compulsive disorder (15.8%), major depressive disorder (7%), panic disorder (5.3%), and agoraphobia, specific phobia, post-traumatic stress disorder, and bulimia nervosa, each representing 1.8%. One hundred and thirty-two (88.0%) participants presented with one or more comorbid diagnoses, whereas SAD represented the sole diagnosis for 18 (12%) participants.

Measures

Self Portrayal Fears. The Negative Self-Portrayal Scale (Moscovitch & Huyder, 2010) is a 27-item Likert-type scale that assesses the extent to which individuals fear that specific self-attributes they view as being deficient will be exposed to scrutiny and evaluation by critical others in social situations. Participants are instructed to rate the degree to which they are concerned that certain qualities will become obvious to others in anxiety-provoking situations on a scale from 1 (*not at all concerned*) to 5 (*extremely concerned*). The NSPS has previously demonstrated strong internal consistency (Cronbach's $\alpha = .96$), test-retest reliability, convergent validity, and discriminant validity in both undergraduate and clinical samples (Moscovitch & Huyder, 2011), as well as treatment sensitivity (Moscovitch, Rowa et al., 2015). Cronbach's α in the present sample was .92.

Fears of Receiving Compassion. Fears of receiving compassion from others were measured using the Fears of Compassion from Others (FOCS-R) subscale of the Fears of Compassion Scales (Gilbert et al., 2011). Participants respond to the degree to which they agree with 13 items (e.g., "Feelings of kindness from others are somehow frightening"), with response options ranging from 0 (*do not agree at all*) to 4 (*completely agree*). The FOCS-R has previously

demonstrated good internal consistency ($\alpha = .85$) in a sample of 222 undergraduate students (Gilbert et al., 2011), and strong internal consistency ($\alpha = .92$) in a clinical sample of 407 individuals with a range of mood and anxiety concerns (Merritt & Purdon, 2020). Cronbach's α in the present sample was .87, indicating good internal consistency.

Safety Behaviour Use. The Subtle Avoidance Frequency Examination (SAFE; Cuming et al., 2009) is a 32-item measure that assesses frequency of safety behaviour use. The SAFE is comprised of three nonorthogonal factors: inhibiting/ restricting safety behaviours (11 items), active safety behaviours (15 items), and physical symptom management (6 items). In the present study, inhibiting/restricting SAFE items (e.g., “remain silent,” “position yourself so as not to be noticed”) were conceptualized as a measure of avoidance safety behaviours. Conversely, active SAFE items (e.g., “rehearse sentences in your mind,” “ask others about your performance”) were conceptualized as a measure of impression management safety behaviours. Participants were instructed to rate the frequency with which they engage in certain behaviours in social situations on a scale from 1 (*never*) to 5 (*always*). Given our research questions and hypotheses surrounding the specific functions of avoidance and impression management safety behaviours, items from the physical symptom management subscale (e.g., “wear clothes or makeup to hide blushing,” “wear cool clothes to prevent sweating”) were not included in analyses of separate subscales but were incorporated into analyses of overall use of safety behaviours, which relied on SAFE total scores (see data analytic strategy, below). The SAFE has previously been shown to exhibit strong internal consistency and construct validity, with an overall Cronbach's α of .91 and α values of .87 and .85 for the impression management and avoidance subscales, respectively (Cuming et al., 2009). Cronbach's α for the complete scale was .89 in the present sample, indicating good

internal consistency. Each subscale also demonstrated acceptable internal consistency ($\alpha = .85$ for avoidance safety behaviours, $\alpha = .81$ for impression management safety behaviours).

Data analytic strategy

Data were analyzed in IBM SPSS Statistics 23 (2015) using multiple linear regression to test our main hypothesis that fears of receiving compassion uniquely contribute to the use of safety behaviours while controlling for their well-established association with self-portrayal fears. Predictor variables were centred based on their respective grand means and entered hierarchically, with self-portrayal fears entered on the first step, fears of receiving compassion on the second step, and their interaction on the third step. SAFE total and subscale scores were entered as the dependent variable in separate analyses. The conditional effects of fears of receiving compassion on the use of safety behaviours at varying levels of self-portrayal fears were probed using the PROCESS macro (Hayes, 2013). The Johnson-Neyman technique was used to identify the regions of significance for any significant interactions. All collinearity statistics were within acceptable range ($VIF < 4$, tolerance $> .20$; Hair et al., 1995).

Results

Descriptive statistics and zero-order correlations

See Tables 1 and 2 for descriptive statistics and zero-order correlations. According to Welch's *t*-test, scores on the NSPS did not differ significantly between participants with SAD as a principal vs. secondary diagnosis, $t(106.62) = 0.870$, $p = .386$. Additionally, scores on the FOCS-R did not differ, $t(112.10) = 0.823$, $p = .412$, nor did scores on the SAFE, $t(114.11) = .507$, $p = .613$.

Overall use of safety behaviours

See Table 3 for regression results. Self-portrayal fears significantly predicted overall use of safety behaviours ($R^2 = .466$, $F(1, 148) = 130.978$, $p < .001$), as did fears of receiving compassion on the second step ($\Delta R^2 = .040$, $F(1, 147) = 12.000$, $p = .001$). When fears of receiving compassion was included in the analysis, self-portrayal fears uniquely accounted for 28.6% of the variability in overall safety behaviour use ($sr^2 = .286$). The self-portrayal fears x fears of receiving compassion interaction on the third step did not result in a significant amount of unique variance explained ($\Delta R^2 = .000$, $F(3, 146) = .117$, $p = .733$), indicating that self-portrayal fears did not moderate the relationship between fears of receiving compassion and overall use of safety behaviours.

Use of impression management safety behaviours

Next, we tested whether fears of receiving compassion predicted use of impression management safety behaviours when controlling for self-portrayal fears. Self-portrayal fears significantly predicted use of impression management ($R^2 = .400$, $F(1, 148) = 100.475$, $p < .001$) in step 1, as did fears of receiving compassion on step 2 ($\Delta R^2 = .039$, $F(1, 147) = 10.419$, $p = .002$). When fears of receiving compassion was included in step 2, self-portrayal fears uniquely accounted for 24.1% of the variability in impression management behaviours ($sr^2 = .241$). There was also a significant self-portrayal fears x fears of receiving compassion interaction on the third step ($\Delta R^2 = .016$, $F(1, 146) = 4.306$, $p = .040$). Probing of simple slopes revealed that at lower self-portrayal fears (-1 SD), fears of receiving compassion predicted greater use of impression management safety behaviours ($B = .326$, $SE = .086$, $t(145) = 3.806$, $p < .001$), whereas at higher self-portrayal fears (+1 SD), fears of receiving compassion did not significantly predict use of impression management safety behaviours ($B = .117$, $SE = .076$, $t(145) = 1.543$, $p = .125$); see Figure 1. The Johnson-Neyman analysis

showed that the relationship between fears of receiving compassion and use of impression management safety behaviours was significant when self-portrayal fears were in the lower 78.00% below a cut-off score of 95.78 on the NSPS, but not for the upper 22.00% who scored above the cut-off.

Use of avoidance safety behaviours

Finally, we tested the effects of fears of receiving compassion on avoidance safety behaviours when controlling for self-portrayal fears. Self-portrayal fears significantly predicted overall use of safety behaviours ($R^2 = .327$, $F(1, 148) = 73.420$, $p < .001$), as did fears of receiving compassion on the second step ($\Delta R^2 = .030$, $F(1, 147) = 6.923$, $p = .009$). When fears of receiving compassion was included in step 2, self-portrayal fears uniquely accounted for 20.1% of the variability in the use of avoidance behaviours ($sr^2 = .201$). The interaction between self-portrayal fears and fears of receiving compassion on step 3 was not significant ($\Delta R^2 = .000$, $F(3, 146) = .102$, $p = .750$), indicating that self-portrayal fears did not moderate the relationship between fears of receiving compassion and use of avoidance safety behaviours.

Discussion

It is well-established that people with SAD use a variety of self-protective and self-concealing strategies to keep others at arm's length (Piccirillo et al., 2016). Cognitive models of social anxiety commonly emphasize that the function of safety behaviours is to prevent the occurrence of feared consequences (Salkovskis, 1991; Clark & Wells, 1995; Hofmann, 2007; Rapee & Heimberg, 2007). In the case of SAD, feared consequences are typically conceptualized as fears of negative evaluation arising from negative self-portrayal (e.g., Moscovitch, 2009), which have been shown to motivate the desire to self-conceal (Moscovitch et al., 2013). The present study investigated whether another type of fear that tends to be elevated in SAD – fear of

receiving compassion from others – might independently explain the use of safety behaviours over and above fears of negative self-portrayal.

Results demonstrated that among individuals with a clinical diagnosis of SAD, fears of receiving compassion from others explained unique variance in use of safety behaviours over and above the contribution of self-portrayal fears. This was true for safety behaviours in general and for both avoidance and impression management subtypes of safety behaviours specifically. These findings emphasize the potential importance of the underlying fear of receiving compassion as a previously overlooked factor that may elevate socially anxious individuals' desire to self-protect and enact avoidance or impression management designed to keep other people at a safe distance. When others express compassion towards them, people with SAD may feel undeserving and unworthy due to their overly critical self-views, believe that expressions of compassion indicate they are truly deficient, or mistrust that support will be consistently available when needed (Gilbert et al., 2011). Socially anxious individuals may also misinterpret genuine concern and compassion from others as pity—and thus confirmation of having exposed their self-perceived flaws (see Moscovitch, 2009), driving them to rely on safety behaviours to prevent or even reject others' intentions to provide compassion.

In particular, at lower levels of self-portrayal fears, fears of receiving compassion positively predicted use of the impression management subtype of safety behaviours. Impression management strategies allow socially anxious individuals to mask their discomfort by appearing friendly and polite while remaining distant and disconnected—for example, by nodding and appearing to listen attentively to the other person as opposed to deeply engaging in an interaction (Schlenker & Leary, 1982). For socially anxious individuals, keeping up this agreeable, albeit superficial, image is preferable to the risk of revealing self-flaws from attempts at more

meaningful social interaction. By adjusting self-presentation in this way, socially anxious individuals may also be able to come across as convincingly self-sufficient and less in need of others' social support, preventing others from offering them compassion and also enabling them to avoid the experience of receiving compassion and potentially receive the support they genuinely need.

At higher levels of self-portrayal fears, there was a surprising lack of significant conditional effect of fears of receiving compassion on the use of impression management, suggesting that individuals with SAD are primarily driven by fear of exposing self-flaws and are thus more focused on using impression management for self-concealment at all costs than for the prevention of compassion from others. Indeed, self-portrayal fears already accounted for a large amount of variance in impression management ($sr^2 = .241$) in comparison to the unique contribution of fears of receiving compassion ($\Delta R^2 = .039$) and its moderating effects ($\Delta R^2 = .016$) in subsequent steps of the regression model. Thus, among individuals with SAD, a fear of negative self-portrayal may represent a more fundamental concern than fears of receiving compassion, with the former taking priority in the use of impression management strategies.

When controlling for self-portrayal fears, fears of receiving compassion also positively predicted use of the avoidance subtype, but did not conditionally predict avoidance safety behaviours at varying levels of self-portrayal fears. By attracting as little attention as possible through avoidance strategies, socially anxious individuals may aim to limit chances of exposing their self-flaws to others, and at the same time may conveniently reduce opportunities for others to express compassion towards them. However, since avoidance safety behaviours can actually lead socially anxious individuals to appear overly anxious (Gray et al.,

2019; Rowa et al., 2015)—and thus in need of support—their use may counterproductively elicit unwelcome compassion from others.

Although the present study was cross-sectional and correlational in nature and ultimately cannot confirm directionality in the relationships between variables, our findings are consistent with a plausible causal model explaining how fears of self-portrayal and fears of self-compassion may interact to fuel the use of impression management safety behaviours in SAD. Whereas these two types of fears may be expected to interact synergistically to elevate the use of safety behaviours in the general population, such that increases in both types of fears would generate significant increases in the use of impression management safety behaviours over and above the effects of either fear alone, for people with SAD, elevations in only one of these two fears may be sufficient for increasing their use of such strategies. Specifically, our findings suggest that when individuals with SAD are very fearful of negative self-portrayal, such fears alone are likely to fuel the use impression management safety behaviours irrespective of fears of receiving compassion. In contrast, for those with SAD experiencing lower fears of negative self-portrayal (for example, in more familiar social contexts or while interacting with close others), the extent to which they rely on impression management safety behaviours appears to depend on the degree to which they appraise receiving compassion as an imminent threat. Future research is needed to test this model experimentally in people with and without SAD and to examine whether attempts to prevent anxiety-inducing displays of compassion from others by using strategies to keep them at arm's length are likely to be ineffective at reducing threat perceptions, thus maintaining or even amplifying distress, as seen in prior studies that have examined the consequences of safety behaviour use (e.g., Moscovitch et al., 2013). It would also be worth investigating why the interaction effect was present for impression management, but not avoidance safety behaviours.

Several limitations should be noted, which also help to further clarify important directions for future research. It is possible that safety behaviour use and fear of compassion are associated in bidirectional or more complex ways than the current design permit us to test; for example, greater safety behaviour use may decrease the number of interactions that individuals with SAD have with compassionate others, resulting in decreased familiarity with receiving compassion and creating a general fear of these unfamiliar experiences. In the absence of evidence that their fears are unfounded, use of safety behaviours may therefore reinforce fears of compassion from others. Future longitudinal studies could examine this idea by collecting multiple data points of both measures across time. Another limitation was that the majority of participants in our sample had at least two clinically significant diagnoses and other symptoms may also have influenced self-portrayal fears, fears of receiving compassion, and safety behaviour use; for instance, fears of receiving compassion have also been linked to depressive symptoms (Merritt & Purdon, 2020; Trindade et al., 2018). Though the safety behaviours we measured using the SAFE are most commonly used by those with SAD, future research could attempt to disentangle the effects of fears of compassion on safety behaviours by comparing individuals with SAD alone versus those with comorbid diagnoses. Additionally, all measures were based on self-report, leading to potential biases in the quantification of different fears and how often safety behaviours are actually used. Future studies could include daily diaries, experience sampling methods (ESM), or lab-based interaction tasks that would allow for more objective coding of the safety behaviours participants might be employing in the face of compassionate displays from others. As well, the overrepresentation of females in our sample may limit the generalizability of our findings, as we were unable to investigate any potential moderating effect of gender given the lack of gender diversity in our sample. As fears

of compassion tend to be associated with masculine role norms (Heath et al., 2017), future research should replicate the present findings using more diverse samples to examine how the effects of fears of compassion may differ across gender identities. Finally, we did not distinguish between treatment-seeking and non-treatment seeking individuals in our sample, as we did not collect data on their treatment seeking status. Though participants were not seeking treatment in conjunction with their participation in the present study, they may have been seeking treatment elsewhere. It is possible that fears of compassion from others may be somewhat reduced in treatment-seeking individuals, as their help-seeking could be considered evidence of some openness to receiving compassion from others. Nonetheless, our results suggest that assessing fears of compassion in socially anxious individuals could point to fruitful clinical targets.

How can the present findings inform treatment processes? In cognitive interventions, clinicians should consider the possibility that clients' hot thoughts may not only centre around fears of negative evaluation, but that even supportive responses from others may be perceived as threatening. The fact that the person has sought out therapy could be used as a jumping off point to examine existing alternative beliefs that warmth and kindness can be helpful. During exposure exercises or behavioural experiments where clients are encouraged to reduce avoidance and impression management safety behaviours, monitoring for feared consequences such as expressions of compassion from others and assessing whether receiving such compassion from others is as bad as they expected it would be may help clients acquire useful experiential evidence. Behavioural experiments in which clients directly attempt to elicit supportive responses from others may also be beneficial in challenging their beliefs about negative consequences and the intent behind positive responses received. Finally, designing behavioural experiments in which clients themselves offer compassion to others or asking clients to reflect on

their own previous experiences of giving compassion may help them recognize that caring can be driven by connection and empathy rather than pity for the person in distress.

The present study carries novel clinical implications by identifying a potential additional factor underlying the maintenance of SAD as a future target for treatment. Fears of receiving compassion may prevent therapeutic recovery for individuals with SAD, as receiving self-compassion and support from others have been shown to be highly effective emotion regulation tools for reducing symptoms (Arch, Landy, Schneider, Koban, & Andrews-Hanna, 2018; Căndea & Szentágotai-Tătar, 2018; Harwood & Kocovski, 2017; Rapee, Peters, Carpenter, & Gaston, 2015; Reinelt et al., 2014; Williams, Morelli, Ong, & Zaki, 2018). Thus, using impression-management safety behaviours to avoid receiving compassion from others may impede effective stress management by blocking access to helpful emotion regulation strategies that rely on social support (Levy-Gigi & Shamay-Tsoory, 2017; Marroquin & Nolen-Hoeksema, 2015; Nils & Rimé, 2012). Learning to accept others' compassion as genuine and well-intentioned may reduce perceptions of social threat for individuals with SAD, encouraging them to reveal their authentic selves for developing deeper and more meaningful relationships.

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Declarations of interest

None.

References

- Arch, J. J., Landy, L. N., Schneider, R. L., Koban, L., & Andrews-Hanna, J. R. (2018). Self-compassion induction enhances recovery from social stressors: Comparing adults with social anxiety disorder and healthy controls. *Anxiety, Stress and Coping*, 31(5), 594–609. <https://doi.org/10.1080/10615806.2018.1504033>
- Brown TA, Barlow DH (2014) Anxiety Disorders Interview Schedule for DSM-5: Client interview schedule. Oxford, United Kingdom: Oxford University Press.
- Cândeia, D. M., & Szentágotai-Tătar, A. (2018). The impact of self-compassion on shame-proneness in social anxiety. *Mindfulness*, 9(6), 1816–1824. <https://doi.org/10.1007/s12671-018-0924-1>
- Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), *Social phobia: Diagnosis, assessment, and treatment* (p. 69–93). The Guilford Press.
- Cuming, S., Rapee, R. M., Kemp, N., Abbott, M. J., Peters, L., & Gaston, J. E. (2009). A self-report measure of subtle avoidance and safety behaviors relevant to social anxiety: development and psychometric properties. *Journal of Anxiety Disorders*, 23(7), 879–883. <https://doi.org/10.1016/j.janxdis.2009.05.002>
- Cunha, M., Pereira, C., Galhardo, A., Couto, M., & Massano-Cardoso, I. (2015). Social anxiety in adolescents: the role of early negative memories and fear of compassion. *European Psychiatry*, 30, 428. [https://doi.org/10.1016/s0924-9338\(15\)30336-9](https://doi.org/10.1016/s0924-9338(15)30336-9)
- Dupasquier, J. R., Kelly, A. C., Moscovitch, D. A., & Vidovic, V. (2018). Practicing self-compassion weakens the relationship between fear of receiving compassion and the

desire to conceal negative experiences from others. *Mindfulness*, 9(2), 500–511.

<https://doi.org/10.1007/s12671-017-0792-0>

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(3), 239–255. <https://doi.org/10.1348/147608310X526511>

Gray, E., Beierl, E. T., & Clark, D. M. (2019). Sub-types of safety behaviours and their effects on social anxiety disorder. *PLoS ONE*, 14(10).

<https://doi.org/10.1371/journal.pone.0223165>

Hair, Jr, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis* (3rd ed.). New York, NY: Macmillan.

Harwood, E. M., & Kocovski, N. L. (2017). Self-compassion induction reduces anticipatory anxiety among socially anxious students. *Mindfulness*, 8(6), 1544–1551.

<https://doi.org/10.1007/s12671-017-0721-2>

Hayes, A. F. (2013). *Methodology in the social sciences. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Heath, P. J., Brenner, R. E., Vogel, D. L., Lannin, D. G., & Strass, H. A. (2017). Masculinity and barriers to seeking counseling: The buffering role of self-compassion. *Journal of Counseling Psychology*, 64(1), 94–103. <https://doi.org/10.1037/cou0000185>

Hirsch, C. R., Meynen, T., & Clark, D. M. (2004). Negative self-imagery in social anxiety contaminates social interactions. *Memory*, 12(4), 496–506.

<https://doi.org/10.1080/09658210444000106>

Hofmann, S.G. (2007). Cognitive factors that maintain social anxiety disorder: a comprehensive model and its treatment implications. *Cognitive Behaviour Therapy*, 36(4), 193–209.

IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp.

Kelly, A. C., & Dupasquier, J. (2016). Social safeness mediates the relationship between recalled parental warmth and the capacity for self-compassion and receiving compassion. *Personality and Individual Differences*, 89, 157–161.
<https://doi.org/10.1016/j.paid.2015.10.017>

Levy-Gigi, E., & Shamay-Tsoory, S. G. (2017). Help me if you can: Evaluating the effectiveness of interpersonal compared to intrapersonal emotion regulation in reducing distress. *Journal of Behavior Therapy and Experimental Psychiatry*, 55, 33–40.
<https://doi.org/10.1016/j.jbtep.2016.11.008>

Marroquín, B., & Nolen-Hoeksema, S. (2015). Emotion regulation and depressive symptoms: Close relationships as social context and influence. *Journal of Personality and Social Psychology*, 109(5), 836–855. <https://doi.org/10.1037/pspi0000034>

Matos, M., Duarte, J., & Pinto-Gouveia, J. (2017). The origins of fears of compassion: Shame and lack of safeness memories, Fears of Compassion and Psychopathology. *Journal of Psychology: Interdisciplinary and Applied*, 151(8), 804–819.
<https://doi.org/10.1080/00223980.2017.1393380>

McManus, F., Sacadura, C., & Clark, D. M. (2008). Why social anxiety persists: An experimental investigation of the role of safety behaviours as a maintaining factor. *Journal of Behavior Therapy and Experimental Psychiatry*, 39(2), 147–161.
<https://doi.org/10.1016/j.jbtep.2006.12.002>

Merritt, O. A., & Purdon, C. L. (2020). Scared of compassion: Fear of compassion in anxiety, mood, and non-clinical groups. *British Journal of Clinical Psychology*, 59(3), 354–368.

<https://doi.org/10.1111/bjc.12250>

Moscovitch, D. A. (2009). What is the core fear in social phobia? A new model to facilitate individualized Case Conceptualization and Treatment. *Cognitive and Behavioral Practice*, 16(2), 123–134. <https://doi.org/10.1016/j.cbpra.2008.04.002>

Moscovitch, D. A., & Huyder, V. (2010). The negative self-portrayal scale: development, validation, and application to social anxiety. *Behavior Therapy*, 42(2), 183-196.

<https://doi.org/10.1016/j.beth.2010.04.007>

Moscovitch, D.A., Rowa, K., Paulitzki, J.r., Antony, M.M. & McCabe, R.E. (2015). What if I appear boring, anxious, or unattractive? Validation and treatment sensitivity of the negative self portrayal scale in clinical samples. *Cognitive Therapy and Research*, 39, 178-192.

Moscovitch, D. A., Rowa, K., Paulitzki, J. R., Ierullo, M. D., Chiang, B., Antony, M. M., & McCabe, R. E. (2013). Self-portrayal concerns and their relation to safety behaviors and negative affect in social anxiety disorder. *Behaviour Research and Therapy*, 51(8), 476–486. <https://doi.org/10.1016/j.brat.2013.05.002>

Moscovitch, D. A., Shaughnessy, K., Waechter, S., Xu, M., Collaton, J., Nelson, A. L., Barber, K. C., Taylor, J., Chiang, B., & Purdon, C. (2015). A model for recruiting clinical research participants with anxiety disorders in the absence of service provision: visions, challenges, and norms within a Canadian context. *Journal of Nervous and Mental Disease*, 203(12), 943–957. <https://doi.org/10.1097/NMD.0000000000000400>

- Moscovitch, D. A., Waechter, S., Bielak, T., Rowa, K., & McCabe, R. E. (2015). Out of the shadows and into the spotlight: Social blunders fuel fear of self-exposure in social anxiety disorder. *Journal of Anxiety Disorders*, 34, 24–32.
<https://doi.org/10.1016/j.janxdis.2015.06.004>
- Nils, F., & Rimé, B. (2012). Beyond the myth of venting: Social sharing modes determine the benefits of emotional disclosure. *European Journal of Social Psychology*, 42(6), 672–681.
<https://doi.org/10.1002/ejsp.1880>
- Piccirillo, M. L., Dryman, M. T., & Heimberg, R. G. (2016). Safety behaviors in adults with social anxiety: Review and future directions. *Behavior Therapy*, 47(5), 675–287.
<https://doi.org/10.1016/j.beth.2015.11.005>
- Pinninti, N.R., Madison, H., Musser, E., & Rissmiller, D. (2003). MINI International Neuropsychiatric Schedule: Clinical utility and patient acceptance. *European Psychiatry*.
- Plasencia, M. L., Alden, L. E., & Taylor, C. T. (2011). Differential effects of safety behaviour subtypes in social anxiety disorder. *Behaviour Research and Therapy*, 49(10), 665–675.
<https://doi.org/10.1016/j.brat.2011.07.005>
- Rapee, R.N., & Heimberg, R.G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy*, 35, 741–756.
- Rapee, R. M., Peters, L., Carpenter, L., & Gaston, J. E. (2015). The Yin and Yang of support from significant others: Influence of general social support and partner support of avoidance in the context of treatment for social anxiety disorder. *Behaviour Research and Therapy*, 69, 40–47. <https://doi.org/10.1016/j.brat.2015.03.012>
- Reinelt, E., Aldinger, M., Stopsack, M., Schwahn, C., John, U., Baumeister, S. E., ... Barnow, S. (2014). High social support buffers the effects of 5-HTTLPR genotypes within social

- anxiety disorder. *European Archives of Psychiatry and Clinical Neuroscience*, 264(5), 433–439. <https://doi.org/10.1007/s00406-013-0481-5>
- Rowa, K., Paulitzki, J. R., Ierullo, M. D., Chiang, B., Antony, M. M., McCabe, R. E., & Moscovitch, D. A. (2014). A false sense of security: Safety behaviors erode objective speech performance in individuals with social anxiety disorder. *Behavior Therapy*, 42, 304-314. <https://doi.org/10.1016/j.beth.2014.11.004>
- Salkovskis, P. M. (1991). The importance of behaviour in the maintenance of anxiety and panic: a cognitive account. *Behavioural Psychotherapy*, 19(1), 6-19. <https://doi.org/10.1017/S0141347300011472>
- Schlenker, B. R., Leary, M. R., Severy, L. J., Shaw, M. E., & Snyder, C. R. (1982). Social anxiety and self-presentation: a conceptualization and model. *Psychological Bulletin*, 92(3), 641–669.
- Sheehan DV, Lecrubier Y, Harnett K, Amorim P, Janavs J, Weiller E, Dunbar GC (1998) The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *J Clin Psychiatry*. 59(suppl 20):22–33.
- Sheehan, D.V. (2014). *The mini-international neuropsychiatric interview, version 7.0 for DSM-5 (MINI 7.0)*. Jacksonville, FL: Medical Outcomes Systems.
- Silva, C., Ferreira, C., Mendes, A. L., & Marta-Simões, J. (2019). The relation of early positive emotional memories to women’s social safeness: The role of shame and fear of receiving compassion. *Women and Health*, 59(4), 420–432. <https://doi.org/10.1080/03630242.2018.1487906>

- Taylor, C. T., & Alden, L. E. (2011). To see ourselves as others see us: An experimental integration of the intra and interpersonal consequences of self-protection in social anxiety disorder. *Journal of Abnormal Psychology, 120*(1), 129–141.
<https://doi.org/10.1037/a0022127>
- Trindade, I. A., Ferreira, C., Borrego, M., Ponte, A., Carvalho, C., & Pinto-Gouveia, J. (2018). Going beyond social support: Fear of receiving compassion from others predicts depression symptoms in breast cancer patients. *Journal of Psychosocial Oncology, 36*(4), 520–528. <https://doi.org/10.1080/07347332.2018.1440275>
- Williams, W. C., Morelli, S. A., Ong, D. C., & Zaki, J. (2018). Interpersonal Emotion Regulation: Implications for affiliation, perceived support, relationships, and well-being. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/pspi0000132.supp>
- Wong, J., Gordon, E.A., & Heimberg, R.G. (2014). Cognitive-Behavioral Models of Social Anxiety Disorder. *The Wiley Blackwell Handbook of Social Anxiety Disorder*. Wiley-Blackwell.

Table 1*Descriptive Statistics*

	<i>M</i>	<i>SD</i>	Scale range
NSPS	80.27	19.69	27 - 135
FOCS-R	24.18	10.08	0 - 52
SAFE	93.21	18.28	32 - 160
Impression management	37.97	7.87	11 - 55
Avoidance	42.68	9.45	15 - 75

Note: NSPS = Negative Self-Portrayal Scale, FOCS-R = Fears of Compassion Scale (fears of receiving compassion), SAFE = Subtle Avoidance Frequency Examination.

Table 2*Zero-order Correlations Between Study Variables*

	FOCS -R	SAFE	SAFE- IM	SAFE-A
NSPS	.42**	.69**	.58**	.64**
FOCS-R	-	.47**	.40**	.45**
SAFE		-	.81**	.90**
SAFE-IM			-	.56**
SAFE-A				-

Note: NSPS = Negative Self-Portrayal Scale, FOCS-R = Fears of Compassion Scale

(fears of receiving compassion), SAFE = Subtle Avoidance Frequency

Examination, A = Avoidance items, IM = Impression Management items.

** $p < .001$

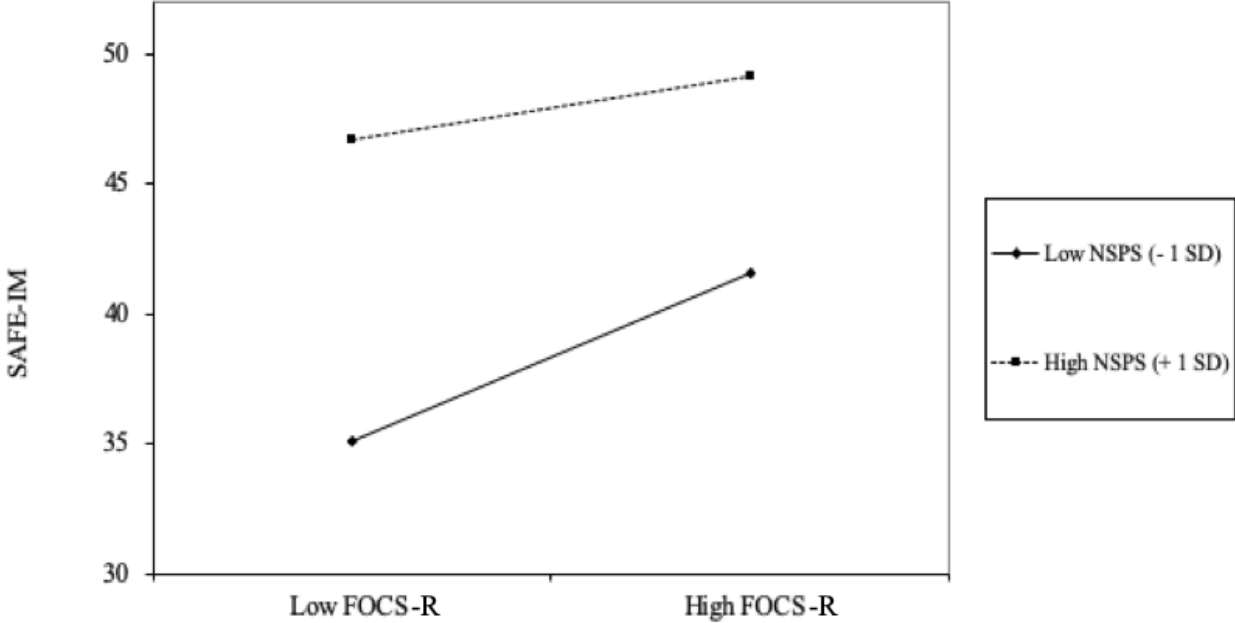
Table 3*Multiple Linear Regression Predicting Use of Safety Behaviours Overall and by Subtype*

DV	Step	IV	B	SE B	p value	F change	ΔR^2	
SAFE	1	(Constant)	93.213	1.091	< .001			
		NSPS	0.636	0.056	< .001	130.978**	.469	
	2	(Constant)	93.213	1.052	< .001			
		NSPS	0.549	0.059	< .001			
		FOCS-R	0.401	0.116	.001	12.000*	.040	
	3	(Constant)	93.348	1.127	< .001			
		NSPS	0.544	0.061	< .001			
		FOCS-R	0.405	0.117	.001			
		NSPS x FOCS-R	-0.002	0.005	.733	0.117	.000	
	SAFE-IM	1	(Constant)	42.680	0.597	< .001		
			NSPS	0.305	0.030	< .001	100.475**	.404
		2	(Constant)	42.680	0.579	< .001		
NSPS			0.260	0.033	< .001			
FOCS-R			0.205	0.064	.002	10.419**	.039	
3		(Constant)	43.124	0.611	< .001			
		NSPS	0.244	0.033	< .001			
		FOCS	0.222	0.063	.001			
		NSPS x FOCS-R	-0.005	0.003	.040	4.306**	.016	
SAFE-A		1	(Constant)	37.973	0.527	< .001		
			NSPS	0.230	0.027	< .001	73.420**	.332
		2	(Constant)	37.973	0.517	< .001		
	NSPS		0.198	0.029	< .001			
	FOCS-R		0.150	0.057	.009	6.923**	.030	
	3	(Constant)	37.911	0.554	< .001			
		NSPS	0.200	0.030	< .001			
		FOCS	0.147	0.057	.011			
		NSPS x FOCS-R	0.001	0.002	.750	0.102	.000	

Note: NSPS = Negative Self-Portrayal Scale, FOCS-R = Fears of Compassion Scale (fears of receiving compassion), SAFE = Subtle Avoidance Frequency Examination, A = Avoidance items, IM = Impression Management items. All predictors have been mean centred; * $p < .01$, ** $p < .001$

Figure 1

Moderating Effect of Negative Self-Portrayal on the Relationship Between Fears of Receiving Compassion and Use of Impression Management Safety Behaviours in Individuals with Social Anxiety Disorder



Note: NSPS = Negative Self-Portrayal Scale, FOCS-R = Fears of Compassion Scale (fears of receiving compassion), SAFE-IM = Subtle Avoidance Frequency Examination – Impression Management