Efficacious treatments for social anxiety are based on empirically validated cognitive models of this disorder (Clark & Wells, 1995, Rapee & Heimberg, 1997).

Clark and Wells (1995) describe four processes which serve to maintain social anxiety, one of which is post-event processing (PEP), or rumination, following an anxiety-provoking event.

A growing amount of research has indicated that PEP is related to levels of social anxiety in both clinical and nonclinical samples (Rachman, Gruter-Andrew, & Shatran, 2000; Kashdan & Roberts, 2007; Kocovski & Rector, 2007).

Despite this relationship, much of the variance in PEP remains unexplained; therefore it is necessary to examine factors that may contribute to excessive rumination.

Anxiety sensitivity is correlated with social anxiety (Norton, Cox, Hewitt, & McLeod, 1997), and may be predictive such that the more fearful an individual is of anxiety, the more likely he/she is to ruminate.

Mindfulness is often defined as nonjudgmental present-moment awareness (Kabat-Zinn, 1990), and is negatively related to social anxiety (Brown & Ryan, 2003), so it may be the case that lower levels of mindful awareness and acceptance are related to anxious rumination.

The objective of the current study was to examine whether the extent to which socially anxious individuals engage in rumination may be determined by levels of anxiety sensitivity and/or mindfulness and acceptance.

It is hypothesized that levels of anxiety sensitivity will predict levels of rumination, after controlling for social anxiety.

It is also expected that mindfulness will predict levels of rumination, after controlling for social anxiety, however it is unknown whether awareness or acceptance aspects will be better predictors, thus an exploratory analysis will be conducted.

### RESULTS

- **Correlations:**
  a) Rummation is significantly associated with social anxiety ($r = .49, p < .01$), anxiety sensitivity ($r = .53, p < .01$), nonjudgmental acceptance ($r = .59, p < .01$), and mindful awareness ($r = .31, p < .01$).
  b) Anxiety sensitivity and mindfulness were significantly negatively correlated. There were significant associations between anxiety sensitivity and nonjudgmental awareness ($r = .36, p < .01$) and anxiety sensitivity and mindful awareness and acceptance ($r = .45, p < .01$).
  c) Partial correlations indicated that after controlling for social anxiety, there was still a significant relationship between anxiety sensitivity and rumination (partial $r = .40, p < .01$). Similarly, after controlling for social anxiety, there was still a significant partial correlation between the mindfulness variables awareness and acceptance (partial $r = .14$ and .45 respectively, $p < .05$).

- **Regression analyses:**
  a) In order to determine whether anxiety sensitivity was predictive of rumination, a hierarchical regression analysis was conducted. After controlling for social anxiety, which significantly predicted rumination ($R^2 = .24, p < .001$), anxiety sensitivity contributed a significant amount of explained variance ($R^2$ Change $= .12, p < .001$). Table 1 presents these results.
  b) In order to determine whether mindfulness (mindful awareness and nonjudgmental acceptance) was predictive of rumination, a second regression was conducted. After controlling for social anxiety ($R^2 = .26, p < .001$) in the first step, a stepwise regression indicated that the main explanatory mindfulness variable is nonjudgmental acceptance, as it was selected in the analysis and accounts for 15% of unique variance of rumination. Mindful awareness did not pass the selection criterion (F = 10.05) and was excluded. Table 2 presents these results.

### DISCUSSION

- These findings indicate higher levels of rumination are related to the hypothesized predictors of social anxiety, anxiety sensitivity and mindfulness, namely nonjudgmental acceptance.
- Anxiety sensitivity emerged as a significant predictor of anxious rumination beyond that of social anxiety. These findings are not in line with Kocsoci and Rector (2007), who found that anxiety sensitivity did not predict PEP following a social anxiety provoking event.
- The current findings also indicated that after controlling for social anxiety, nonjudgmental acceptance emerged as a significant predictor of rumination, whereas mindful acceptance did not. This findings supports literature which suggests that acceptance may be a facet of mindfulness that is related to psychopathology (e.g., Hayes et al., 1999).
- A limitation of the current research is that it relies solely upon self-report data. Potentially, future research could utilize an experimental design to assess social anxiety-relevant anxious rumination following an anxiety provoking event.
- The findings of this study indicate that rumination is not solely due to social anxiety, thus demonstrating that there are other variables involved. Anxiety sensitivity and mindfulness also account for variance within rumination, and these findings can be applied to treatments for social anxiety.
- In addition, there are other complaints associated with rumination, such as depression or generalized anxiety disorder, and future research could examine these variables within the context of those disorders as well.