Applicant Anxiety: Examining the sex-linked anxiety coping theory in job interview contexts

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The Sex-linked Anxiety Coping Theory (SCT) suggests that anxiety should relate to performance more strongly for males than females. In Study 1, we examined how the theory applied to five interview anxiety dimensions (appearance anxiety, behavioral anxiety, communication anxiety, performance anxiety, and social anxiety) using actual job applicants. In general, females reported higher levels of each type of interview anxiety than did males. However, consistent with SCT, Overall Interview Anxiety, Appearance Anxiety, and Social Anxiety demonstrated stronger negative relations with interview performance for males than for females. Consistent with the SCT, in Study 2 we found that females had more effective coping orientations for job interviews than did males.

1. Introduction

Most of us have experienced feelings of nervous tension and trepidation when walking into a job interview. This reaction is a concern, as high levels of anxiety have been associated with lower scores on a variety of selection tests (Arvey, Strickland, Drauden, & Martin, 1990; Luria & Torjman, 2009; McCarthy & Goffin, 2001; McCarthy et al., 2013) and job interviews (Ayers & Crosby, 1995; McCarthy & Goffin, 2004). Interestingly, research suggests that the level and negative influence of anxiety are different for males and females. Females generally experience higher levels of anxiety across a wide variety of situations (McLean & Anderson, 2009). In academic test settings, meta-analytic research indicates that females experience significantly higher mathematics anxiety than do males \( (d = 0.27; \text{Else-Quest, Hyde, & Linn, 2010}). \) Additionally, females exhibit significantly higher levels of test-taking anxiety in the context of personnel selection than do males on multiple measures \( (d = 0.30; \text{McCarthy & Goffin, 2005}). \) and females report more than twice as much anxiety as males when suppressing their emotions during job interviews \( (d = 0.71; \text{Sieverding, 2009}). \) Findings such as these have led many to assume that females may be at a disadvantage in anxiety-provoking situations (Zeidner, 1998). However, as detailed in the next section, there are sound theoretical and empirical reasons to suggest that this may not be the case. Specifically, the Sex-linked Anxiety Coping Theory (SCT; McCarthy & Goffin, 2005) suggests that females are not as adversely affected by their levels of test-taking anxiety as are males when it comes to the prediction of test performance.

Broadly, the purpose of this article is to investigate the role of SCT in the context of employment interviews. While there is initial evidence that interview anxiety negatively predicts performance for males more so than for females (Feiler & Powell, 2013), research has yet to investigate how the SCT applies to different dimensions of interview anxiety or to examine whether males and females utilize different coping strategies when dealing with interview anxiety. The goal of the present study was to address these gaps by assessing how the SCT applies to five distinct dimensions of interview anxiety, such as concerns about appearance and following social conventions during the interview, and by testing the coping strategies used by males and females when faced with the challenge of a job interview. Before delving into our specific hypotheses, we review SCT and the literature on anxiety in job-related contexts.
1.1. Sex-linked anxiety coping theory

McCarthy and Goffin (2005) advanced the SCT to explain why males (from nonclinical populations) may generally experience a more adverse anxiety-performance link than do females. The SCT stipulates that because women generally experience more anxiety than men do, women tend to develop more effective coping strategies. Coping orientations influence the ‘range of activities that allow an individual to monitor, evaluate, and modify the nature and course of an emotional response, to pursue his or her goals and appropriately respond to environmental demands’ (Nolen-Hoeksema, 2012, p. 163). Consequently, women may be more efficacious in dealing with the psychological stress experienced during testing situations due to both the frequency and the type of coping strategies they typically employ.

McCarthy and Goffin (2005) discussed three different general types of coping strategies relevant to evaluative situations: Problem, Emotion, and Avoidance-oriented. Problem-oriented coping is associated with addressing the stressor head-on, which may enable applicants to reduce anxiety prior to the assessment situation and may provide tools to applicants to improve their performance during the assessment (Carver & Connor-Smith, 2010; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Folkman, 1982; Latack & Havlovic, 1992). An applicant could engage in Problem-oriented coping by studying test or interview tips, or by taking practice tests or interviews. Problem-oriented coping should be the most efficacious coping orientation for pre-employment tests and interviews. Test-takers may engage in Emotion-oriented coping by seeking social support before the test, and may recall the supportive words of others during their assessment. Emotion-oriented coping is generally efficacious because it provides a mechanism for reducing the amount of anxiety created by a stressor both before and during the assessment situation (Carver & Connor-Smith, 2010; Folkman, 1982; Latack & Havlovic, 1992; McCarthy & Goffin, 2005). Avoidance-oriented coping includes techniques aimed at ignoring the stressor (Connor-Smith & Flachsbart, 2007). Prior to the test or interview, individuals engaging in Avoidance-oriented coping might watch a movie or focus on unrelated events to distract themselves. Although Avoidance-oriented coping may reduce anxiety before the assessment, it is unlikely to help reduce anxiety or improve performance during an assessment situation (McCarthy & Goffin, 2005).

In support of the SCT, McCarthy and Goffin (2005) found that sex moderated the negative relationships between test-taking anxiety and general mental ability (GMA) test scores. Test-taking anxiety negatively predicted GMA more strongly for males than for females. In a follow-up study, women engaged in significantly more Problem and Emotion-oriented coping than did males when experiencing test-taking anxiety; whereas, males engaged in significantly more Avoidance-oriented coping than did females (McCarthy & Goffin, 2005).

Given that the SCT was originally developed to understand gender differences in the link between anxiety and performance in selection testing, a critical research question is the extent to which the SCT will account for anxiety-based differences in the context of employment interviews. On one hand, generalizability from testing to interview contexts is expected because selection testing shares some similarities with employment interviews. For example, both represent ‘strong’ situations whereby applicants are under considerable pressure to perform (Mischel, 1977). Further, applicants typically have little control over the duration, setting, or content of an interview or a selection test (Stevens, 1998). Conversely, several features of job interviews are distinct from selection tests. Most notably, the employment interview involves higher levels of interpersonal interaction, which introduces new sources of anxiety, such as Social, Communication, and Appearance components that may influence the applicability of SCT (McCarthy & Goffin, 2004). Therefore, examining the role of SCT and employment interviews may yield important new insights. However, to our knowledge, only Feiler and Powell (2013) have examined the role of SCT in employment interviews.

Feiler and Powell (2013) found that interview anxiety was more strongly related to the simulated interview performance of males than females. While that study provided valuable insight, three critical issues were not investigated. First, the influence of gender on the link between interview anxiety and interview performance has not yet been examined using actual job applicants. In Study 1, we used actual job applicants undergoing real job interviews to evaluate whether the link between interview anxiety and interview performance varies by gender, improving the generalizability of findings to the workplace. Second, interview anxiety consists of five unique dimensions (defined in the next section), yet it is unknown how these different dimensions relate to the SCT. Our study fills this gap, as we assessed the role of gender in the link between all five interview anxiety dimensions and interview performance. This provided a more nuanced investigation of how SCT applies to interview anxiety. Third, the extent to which male and female interviewees engage in different coping orientations to combat interview anxiety remains unknown. In Study 2, we examined whether females employ more effective coping strategies than males when faced with the challenge of job interview anxiety. This is important because sex differences in coping styles provide the foundation of the SCT.

2. Study 1

Using job applicants, Study 1 assessed the role of gender in the link between all five interview anxiety dimensions
defined below) and job interview performance. In line with the SCT, we expected that females would experience higher mean levels of interview anxiety than males. Further, we expected that the negative relation between Overall Interview Anxiety and job performance would be stronger for males.

H1: Female applicants will report higher mean levels of Overall Interview Anxiety and all five interview anxiety dimensions than will male applicants.

H2A: Sex will moderate the negative relationship between Overall Interview Anxiety and interview performance, with a stronger relationship for males than for females.

2.1. Sex-linked anxiety coping theory and dimensions of interview anxiety

There is reason to believe that the moderating role of gender will apply differentially to the five interview anxiety dimensions. McCarthy and Goffin (2004, p. 612) define Appearance Anxiety as ‘having feelings of nervousness or apprehension about one’s physical appearance in job interview situations. This includes both the unchangeable (e.g., height) and changeable (e.g., hairstyle) aspects of one’s appearance.’ There are a number of studies that highlight the heightened concern about physical appearance and body image for females, as opposed to males, and demonstrate that this difference begins in early adolescence (e.g., Grabe, Ward, & Hyde, 2008; Keelan, Dion, & Dion, 1992; Monro & Huon, 2005; Pliner, Chaiken, & Flett, 1990; Tiggemann & Lynch, 2001). Such increased exposure to adverse experiences has been found to result in increased levels of resilience (Seery, Holman, & Silver, 2010; Seery, 2011), psychological toughening (Dienstbier, 1989) and stress inoculation (Meichenbaum, 2008). It has also been argued that childhood adversity causes people to engage in a ‘shift and persist’ strategy, enabling them to ‘shift’ by accepting stress and adapting to the situation, and to ‘persist’ by holding onto optimism and meaning (Chen & Miller, 2012). In line with these findings, SCT suggests that early exposure to adversity facilitates the development of adaptive coping strategies. It follows that females who experience anxiety about their appearance at a young age should develop better coping orientations to combat Appearance Anxiety than males. In contrast, males should be less experienced in dealing with Appearance Anxiety and therefore be less effective in coping with appearance concerns during an interview.

H2B: Sex will moderate the negative relationship between Appearance Anxiety and interview performance, resulting in a stronger relationship for males than for females.

Females are more likely than males to experience Performance Anxiety, which can be defined as having feelings of nervousness or apprehension about one’s level of performance in job interview situations (McCarthy & Goffin, 2004). As we described earlier, females exhibit higher levels of worry about their ability to perform during academic mathematics tests and pre-employment cognitive ability tests (Else-Quest et al., 2010; McCarthy & Goffin, 2005). In line with the aforementioned theory and research, it follows that females should have developed more effective coping strategies than males to combat anxiety in performance scenarios. Although past research has not considered gender effects with respect to the relation between Performance Anxiety and job interview performance, McCarthy and Goffin (2005) have established that the negative link between test-taking anxiety and test performance is stronger for males than for females. These findings are informative, because Performance Anxiety, like test-taking anxiety, focuses on worry about how one is performing. Assuming that worrying about performance during pre-employment cognitive ability tests and during interviews is similar, it follows females will have developed better coping mechanisms than males to combat interview Performance Anxiety.

H2C: Sex will moderate the negative relationship between Performance Anxiety and interview performance, resulting in a stronger relationship for males than for females.

There is also abundant evidence suggesting that females are more prone to experience Social Anxiety than are males. In the interview context, social anxiety can be defined as having feelings of nervousness or apprehension about one’s social behavior in job interview situations (e.g., correct handshake) resulting from a desire to be liked (McCarthy & Goffin, 2004, p. 612). For example, female adolescents experience significantly higher levels of Social Anxiety than do adolescent males (Greca & Lopez, 1998; Inderbitzen-Nolan & Walters, 2000). Moreover, a study of social phobias found that females were more likely than males to experience Social Anxiety while talking to authority, presenting to an audience, or being observed at work (Turk et al., 1998). Because they may have had more exposure to Social Anxiety than males, females may have developed better coping mechanisms to combat Social Anxiety. Therefore:

H2D: Sex will moderate the negative relationship between Social Anxiety and interview performance, resulting in a stronger relationship for males than for females.

In contrast to the previous three interview anxiety dimensions, it is challenging to develop predictions regarding how the SCT will apply to Behavioral Anxiety and Communication Anxiety. On the one hand, Behavioral Anxiety captures the physiological aspects of
interview anxiety (e.g., sweaty palms; McCarthy & Goffin, 2004) and we expect that females will experience higher levels of Behavioral Anxiety than males (see $H_1$). Conversely, Behavioral Anxiety focuses on physiological symptoms during the actual interview and it would be difficult to learn how to cope with physiological symptoms of anxiety that only appear during an actual interview. Therefore, we do not include a hypothesis predicting gender moderation of the relationship between Behavioral Anxiety and interview performance.

Finally, Communication Anxiety is defined as having ‘feelings of nervousness or apprehension about one’s verbal communication skills, non-verbal communication skills, and listening skills in job interview contexts’ (McCarthy & Goffin, 2004, p. 612). Multiple studies have found that adult females are more likely to be nervous about communicating than are adult males, but adolescent females are not more likely to be nervous about communicating than are adolescent males (Donovan & MacIntyre, 2004; McCroskey, Simpson, & Richmond, 1982). It follows that because adult females have only recently begun to experience more elevated levels of Communication Anxiety than males, they are unlikely to have developed a stronger coping repertoire for combating Communication Anxiety than similarly-aged males. This suggests that sex should not influence the relation between Communication Anxiety and job interview performance; hence, we do not hypothesize this moderation effect.

2.2. Study 1 method

2.2.1. Participants and procedure

2.2.1.1. Interviewees. The sample consisted of 514 applicants to a wide range of managerial and professional positions at several organizations. Employment interviews were scheduled through the Career Services division at a large North American university, and were conducted on campus. When applicants arrived for their interviews, they were invited to participate and given a package containing demographic questions and the Measure of Anxiety in Selection Interviews (MASI; described below). If they chose to participate, they were asked to complete the questionnaires after they had finished their job interview. The response rate was 54% ($N = 276$, Males = 60.7%). Males had a mean age of 24.8 years and had completed 5.4 prior interviews. Females had a mean age of 24.9 and had completed 6.1 prior interviews. A t-test revealed no significant differences between males’ and females’ amount of interview experience, $t(172) = -0.94, ns$. We received interview performance ratings for 66% of the participating applicants ($N = 182$, $M_{age} = 24.9$, Males = 58.8%).

2.2.1.2. Interviewers. The interviewers represented 24 government organizations and corporations across multiple sectors (e.g., auto manufacturing & software engineering). Interviewers indicated they had extremely tight schedules that limited their participation time so we minimized the number of questions we asked of them and did not formally ask for demographic information. Candidates were interviewed by either one (48%) or two (52%) interviewers. Due to organizational time constraints, one interviewer was randomly selected to complete the Interviewer Ratings described below. In each case, an experimenter overseeing the interviews recorded the sex of each interviewer. The experimenter noted that 42% of the interviews were conducted by panels consisting of both males and females, whereas the remaining interviews were conducted individually by females (12.5%) and males (45.5%).

2.2.2. Measures

2.2.2.1. Measure of anxiety in selection interviews. The MASI (McCarthy & Goffin, 2004) measures five dimensions of interview anxiety (as defined earlier). Each dimension is measured with six items using a 5-point response scale, ranging from 1 = strongly disagree to 5 = strongly agree, and we found sufficient evidence of reliability according to Murphy and Davidshofer’s guidelines (2005), with internal consistencies between 0.69 and 0.83 (see Table 1). As recommended by McCarthy and Goffin (2004), we also created an Overall Interview Anxiety score using all 30 items ($x = 0.92$).

2.2.2.2. Interviewer ratings. Job interviewers rated interview performance by responding to the item ‘Indicate the applicant’s overall performance in the job interview.’ Ratings were based on the Relative Percentile Method (RPM; Goffin & Olson, 2011) which uses a 0–100 scale where 50 represents the average performance of the interviewee’s peer group. Studies have suggested that single-item performance evaluations using the RPM may be at least as valid as evaluations based on multi-item rating formats (Goffin, Gellatly, Paunonen, Jackson, & Meyer, 1996; Goffin, Jelley, Powell, & Johnston, 2009). Interviewers also rated interviewee’s anxiety by responding to the following RPM item ‘Indicate the applicant’s level of anxiety in the job interview.’

2.3. Study 1 results

2.3.1. Preliminary analyses

Table 1 presents means, SDs, and correlations separately by sex; and internal consistencies. Prior to performing our moderation analyses, we assessed the veracity of the MASI for both males and females. We examined the assumption of homoscedasticity using two approaches. First, we conducted Box’s Test of Equality of Covariance Matrices during MANOVA analyses and the test was non-significant, $F(15, 197333.75) = 0.961$, Box’s $M = 14.74$, $p = .49$. Second, we conducted Levene’s Test for Equality of Variances for our t-test comparing Overall Interview Anxiety score.
Table 1. Descriptive statistics and correlation matrix

<table>
<thead>
<tr>
<th>Trait</th>
<th>Females M (SD)</th>
<th>Males M (SD)</th>
<th>d(^a)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>24.89 (5.18)</td>
<td>24.79 (5.15)</td>
<td>.02</td>
<td>–</td>
<td>–.06</td>
<td>–.25</td>
<td>–.01</td>
<td>.08</td>
</tr>
<tr>
<td>2. Interview experience</td>
<td>6.05 (4.48)</td>
<td>5.44 (3.90)</td>
<td>.15</td>
<td>.09</td>
<td>–</td>
<td>.26</td>
<td>–.24</td>
<td>–.18</td>
</tr>
<tr>
<td>3. Interview performance</td>
<td>61.96 (20.98)</td>
<td>61.05 (20.87)</td>
<td>.04</td>
<td>–.32</td>
<td>.31</td>
<td>–</td>
<td>–.34</td>
<td>–.38</td>
</tr>
<tr>
<td>4. Overall interview anxiety</td>
<td>2.58 (0.54)</td>
<td>2.38 (0.56)</td>
<td>.35**</td>
<td>–.03</td>
<td>.01</td>
<td>.02</td>
<td>.92</td>
<td>.74</td>
</tr>
<tr>
<td>5. Appearance anxiety</td>
<td>2.35 (0.61)</td>
<td>2.17 (0.60)</td>
<td>.29**</td>
<td>.08</td>
<td>.11</td>
<td>.03</td>
<td>.56</td>
<td>.69</td>
</tr>
<tr>
<td>6. Communication anxiety</td>
<td>2.62 (0.72)</td>
<td>2.46 (0.73)</td>
<td>.22†</td>
<td>.07</td>
<td>–.17</td>
<td>–.22</td>
<td>.78</td>
<td>.18</td>
</tr>
<tr>
<td>7. Social anxiety</td>
<td>2.51 (0.72)</td>
<td>2.37 (0.70)</td>
<td>.21†</td>
<td>–.03</td>
<td>.18</td>
<td>.19</td>
<td>.84</td>
<td>.51</td>
</tr>
<tr>
<td>8. Behavioral anxiety</td>
<td>2.57 (0.70)</td>
<td>2.40 (0.68)</td>
<td>.25*</td>
<td>–.19</td>
<td>.03</td>
<td>.01</td>
<td>.74</td>
<td>.23</td>
</tr>
<tr>
<td>9. Performance anxiety</td>
<td>2.83 (0.79)</td>
<td>2.52 (0.76)</td>
<td>.40***</td>
<td>–.05</td>
<td>–.09</td>
<td>.04</td>
<td>.86</td>
<td>.31</td>
</tr>
<tr>
<td>10. Interviewer-rated anxiety</td>
<td>44.32 (21.92)</td>
<td>41.28 (22.77)</td>
<td>.14</td>
<td>.17</td>
<td>–.43</td>
<td>–.38</td>
<td>.03</td>
<td>.02</td>
</tr>
</tbody>
</table>

Note: N = 269 (164 Males, 105 Females) for age, interview experience, and the Measure of Anxiety in Selection Interviews (MASI). N = 182 for interview performance ratings. Internal consistencies are bolded along the diagonal in the middle. Correlations for males are on the top half of the matrix above the diagonal, whereas correlations for females are on the bottom half of the matrix below the diagonal. For females, p < .01 when r > |.31|, p < .05 when r > |.23|. For males, p < .01 when r > |.31|, p < .05 when r > |.16|. *The effect sizes column reports estimates from t-test results. The sign of the t-tests are reported in the effect size column for rows 1 through 4, and the significance for the pairwise comparisons are reported for the MASI (rows 4 through 9), which were calculated using estimated marginal means from a MANOVA analysis.  
†Marginally significant, p < .10; †p < .05; ** p < .01.

Anxiety by gender and each pairwise comparison, and the assumption held for each measure individually. We conducted Confirmatory Factor Analysis to test for measurement invariance across gender in our interview anxiety measures using mPlus 6.11 (Muthen & Muthen, 2011). The results provided support for the equivalence of construct variances and covariances (χ\(^2\)\text{1430} = 1474.85; Root Mean Square Error of Approximation [RMSEA] = .075; Comparative Fit Index [CFI] = .79; Tucker–Lewis Fit Index [TFI] = .78; Standardized Root Mean Square Residual [SRMR] = .08), which did not differ significantly from the metric invariance model (Δχ\(^2\)\text{25} = 25.469, ns; χ\(^2\)\text{1815} = 1449.39; RMSEA = .076; CFI = .79; TFI = .77; SRMR = .08), which, in turn, did not significantly differ from the configural invariance model (Δχ\(^2\)\text{25} = 31.08, ns; χ\(^2\)\text{790} = 1418.31; RMSEA = .077; CFI = .79; TFI = .77; SRMR = .07).

2.3.3. H\(_2\): Sex as a moderator of the negative interview anxiety-interview performance link

As illustrated in Table 1, the relationships of interview anxiety dimensions with interview performance were more consistently negative and stronger for males than for females. To evaluate whether sex moderates the relationship between interview anxiety and interview performance, we performed separate moderated multiple regressions with each interview anxiety dimension. In these analyses (Table 2), the ΔR\(^2\) reflects the change in R\(^2\) when the interaction term of sex and the respective MASI scale was entered into a multiple regression equation already containing sex and the MASI scale.
Table 2. Sex as a moderator of interview anxiety and interview performance

<table>
<thead>
<tr>
<th>Interview anxiety type</th>
<th>Regression with interaction term</th>
<th>Test of sex moderation</th>
<th>Simple slopes (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$</td>
<td>$df$</td>
<td>$F$</td>
</tr>
<tr>
<td>Overall</td>
<td>.07</td>
<td>3, 181</td>
<td>4.21***</td>
</tr>
<tr>
<td>Appearance</td>
<td>.09</td>
<td>3, 181</td>
<td>5.64***</td>
</tr>
<tr>
<td>Communication</td>
<td>.08</td>
<td>3, 181</td>
<td>5.19***</td>
</tr>
<tr>
<td>Social</td>
<td>.08</td>
<td>3, 181</td>
<td>5.19***</td>
</tr>
<tr>
<td>Behavioral</td>
<td>.01</td>
<td>3, 181</td>
<td>0.59</td>
</tr>
<tr>
<td>Performance</td>
<td>.03</td>
<td>3, 181</td>
<td>1.73</td>
</tr>
</tbody>
</table>

Note: $N = 182$ (75 females, 107 males). $\Delta R^2$ reflects the change in $R^2$ when the interaction term of sex and MASI anxiety was entered into a multiple regression equation already containing sex and the respective MASI anxiety scale. $t$-tests from simple slopes analyses are reported for males and females when moderated regression tests were significant. †$p < .10$; *$p < .05$. **$p < .01$. ***$p < .001$.

$H_{2A}$ suggested that sex would moderate the negative relationship between Overall Interview Anxiety and interview performance such that the relationship would be stronger for males than for females. As shown in Table 2, moderated multiple regression analyses supported this hypothesis. Figure 1 illustrates this interaction. Moreover, simple slopes analysis (see Cohen, Cohen, West, & Aiken, 2003, for a review) indicated that Overall Interview Anxiety negatively predicted interview performance for males, but not for females (also shown in Table 2).

$H_{2B}$ predicted that sex would moderate the negative relationship between Appearance Anxiety and interview performance resulting in a stronger relationship for males than for females. Moderated multiple regression results (Table 2) supported this hypothesis, and the moderation is shown in Figure 2. Simple slopes analyses (Table 2) indicated that Appearance Anxiety negatively predicted interview performance for males, but that there was no significant prediction for females.

$H_{2C}$ stated that sex would moderate the negative relationship between Performance Anxiety and interview performance. This hypothesis was not supported, as the test of moderation (Table 2) was not significant, although the correlations between Performance Anxiety and interview performance were in the predicted directions ($r = .04$ and $-.21$ for females and males, respectively).

$H_{2D}$ proposed that sex would moderate the negative relationship between Social Anxiety and interview performance, such that it would be stronger for males than for females. Moderated multiple regression analyses (Table 2) supported this hypothesis, and the moderation is shown in Figure 3. Simple slopes analyses (Table 2) indicated that Social Anxiety negatively predicted interview performance for males, but not for females.

2.3.4. Additional analyses

Although we did not have specific hypotheses for Behavioral Anxiety or Communication Anxiety, we conducted moderation analyses to learn more about how the SCT applies to these interview anxiety dimensions. First, we examined whether Behavioral Anxiety predicted interview performance differentially for males and females. As shown in Table 2, the moderated multiple regression results indicated no significant moderation effect for Behavioral Anxiety. Second, we examined whether Communication Anxiety predicted interview performance...
The findings from the first study provided support for several of the core tenets of the SCT within the new frontier of interview anxiety. First, during job interviews, females experienced significantly higher Appearance Anxiety, Behavioral Anxiety, Performance Anxiety, and Overall Interview Anxiety than males, and females experienced marginally more Social Anxiety and Performance Anxiety than males. Second, sex significantly moderated the relations between interview anxiety and interview performance, such that Overall, Social, and Appearance Anxiety negatively predicted interview performance for males but did not predict performance for females.

These findings support one key aspect of the SCT within the new realm of interview anxiety but leave one major unanswered question. Specifically, are women’s weaker relations between interview anxiety and interview performance due to their more effective strategies for coping with interview anxiety? The purpose of Study 2 was to consider further the psychological process that may underlie gender moderation, as deduced from the sex-linked anxiety coping theory. More explicitly, Study 2 builds on Study 1 by examining whether males and females do indeed use different coping styles, and that these styles are consistent with predictions from the Sex-linked Coping Theory.

**H3:** Females will exhibit significantly higher levels of both Problem and Emotion-oriented coping in job interviews than will males.

**H4:** Males will exhibit significantly higher levels of Avoidance-oriented coping in job interviews than will females.

### 3.1. Study 2 method

#### 3.1.1. Participants and procedure

Our initial sample consisted of 168 undergraduate management students who had prior interview experience. In our initial analyses, females had significantly more interview experience than males ($t(183) = -3.40$, $p < .001$) because of a few participants who had an unusual amount of interview experience. To make our male and female samples more comparable in interview experience, we removed 20 females and 3 males who were 2 SDs above the mean (i.e., 8 or more interviews) in interview experience. The resulting sample consisted of 145 undergraduate management students ($M_{age} = 20.5, SD = 1.7, 54\%$ Male). The male subsample had a mean age of 20.5 and had an average of 2.82 previous interviews. The female subsample also had a mean age of 20.5 and had an average of 2.93 previous interviews.

Participants were asked to play the role of a job applicant who would have to pass a selection interview to be hired. They were told that the position was one that they highly motivated to obtain. They were then asked to complete the Ways of Coping Questionnaire (Folkman & Lazarus, 1988). This enabled an assessment of the typical coping styles that individuals would adopt when faced with the challenge of a job interview. Actual interviews were not conducted.

### 3.2. Measures

#### 3.2.1. Ways of coping questionnaire

To determine the coping strategies participants would adopt during a job interview, we administered a 26-item subset of the Ways of Coping Questionnaire (WOC; Folkman & Lazarus, 1988) that was adapted to the job interview context. Items were selected to reflect the three core dimensions of coping that have been found in previous research: Emotion, Problem, and Avoidance-oriented
coping (e.g., Hecht & McCarthy, 2010; McCarthy & Goffin, 2005; Tamres, Janicki, & Helgeson, 2002). Sample items are ‘I talked to someone about how I was feeling’ (Emotion-oriented); ‘I made a plan of action and followed it’ (Problem-oriented), and ‘I didn’t let it get to me; refused to think about it too much’ (Avoidance-oriented). Further, we created 2 additional items that reflected Problem-oriented coping strategies in job interview contexts. Consistent with standard practice in this area (e.g., Hecht & McCarthy, 2010), we adjusted our coping scales by removing poorly performing items using internal consistency analysis.

Confirmatory Factor Analysis conducted using MPlus 6.11 (Muthén & Muthén, 2011) supported the a priori three-factor solution where each of the correlated factors represented one of the coping dimensions ($\chi^2 = 103.06; \text{RMSEA} = .052; \text{CFI} = .91; \text{TLI} = .89; \text{SRMR} = .07$). Moreover, the three-factor model fit significantly better ($\chi^2 = 125.59, p < .001$) than a model in which a single coping factor was specified ($\chi^2 = 228.66, \text{RMSEA} = .117; \text{CFI} = .54; \text{TLI} = .46; \text{SRMR} = .10$). We also assessed the veracity of the WOC for comparing males and females. We examined the assumption of heteroscedasticity using two approaches. First, we conducted Box’s Test of Equality of Covariance Matrices during MANOVA analyses and the test was non-significant, $F(6, 139241.13) = 1.17$, Box’s $M = 7.18$, $p = .32$. Second, we conducted Levene’s Test for Equality of Variances for each pairwise comparison and the assumption held for all three coping dimensions individually. We used Confirmatory Factor Analysis to test for measurement invariance across gender in our coping measures. The results provided support for a metric invariance model ($\chi^2 = 214.20; \text{RMSEA} = .069; \text{CFI} = .83; \text{TLI} = .80; \text{SRMR} = .10$), which achieved a fit that was not significantly different from the configural invariance model ($\chi^2 = 11.74, ns; \text{SRMR} = .09$). 

3.3. Study 2 results

Means, SDs, correlations, and internal consistencies are presented in Table 3. Overall, the internal consistencies for the three coping styles are acceptable according to the guidelines outlined by Murphy and Davidshofer (2005, p. 150), with alphas between 0.64 and 0.71. A two-way MANOVA using the three coping measures as criterion variables and sex as the predictor variable showed a significant association between sex and coping orientations, $F(3, 141) = 9.50, p < .001$, Wilks’ $\Lambda = 0.832$. $H_3$ stated that females would employ more Problem-oriented and Emotion-oriented coping than would males, and $H_4$ specified that males would employ more Avoidance-oriented coping than would females. To test these hypotheses, we conducted pairwise comparisons, which revealed significant male-female mean differences for all three coping scales (Table 3). When coping with anxiety caused by the challenge of a job interview, females had significantly higher Problem-oriented $(d = 0.70, p < .001)$ and Emotion-oriented coping scores $(d = 0.49, p < .01)$ than did males, whereas males scored significantly higher on Avoidance-oriented coping $(d = 0.60, p < .01)$ than did females. These results support $H_3$ and $H_4$.

4. General discussion

The goal of the current research was to further our understanding of how gender influences the link between interview anxiety and interview performance. We advanced theory by elucidating gender differences in job interview coping styles and by revealing how the SCT applies to distinct dimensions of job interview anxiety. Study 1 considered the role of sex in job interview anxiety using job applicants in an applied interview setting. Findings were largely supportive of our proposition that female applicants would report higher mean levels of the five types of interview anxiety and Overall Interview Anxiety than their male counterparts would. Indeed, females exhibited significantly higher scores on Overall Interview Anxiety, Appearance Anxiety, Behavioral Anxiety, and Performance Anxiety, and marginally higher scores on Social Anxiety and Performance Anxiety. This is consistent with past research which has found that females experience higher levels of anxiety in many different contexts (Grabe et al., 2008; Keelan et al., 1992; McLean & Anderson, 2009; Pliner et al., 1990; Tiggesmann & Lynch, 2001) and test-taking anxiety (McCarthy & Goffin, 2005).
Additionally, the results showed moderation by sex in the form of a negative link between Overall Interview Anxiety and interview performance for males, but not for females (see also Feiler & Powell, 2013). When considering the individual dimensions that make up Overall Interview Anxiety (Table 1), we found that sex significantly moderated the relations of Appearance Anxiety and Social Anxiety with job interview performance. Each of these dimensions negatively predicted interview performance for males but not for females.

It is also interesting that interviewers did not rate females as being more anxious despite the fact that females reported higher levels of interview anxiety than males did. These results suggest that females were able to effectively cope with their anxiety and mask their levels of anxiety from interviewers, providing further support for SCT. Also consistent with the SCT, the results of Study 2 found that females engaged in more effective coping orientations for job interviews than did males. These findings are important and may be extended further by future work that considers gender differences with respect to other individual differences, such as dominance (d = .41) and affiliation (d = .26; Powell, Goffin, & Gellatly, 2011).

The fact that our hypothesis concerning Performance Anxiety was unsupported may be due, in part, to the fact that this type of anxiety had a weaker relation with interview performance for both males and females (see Table 1), which left less room for gender moderation effects. Still, the correlations were in the predicted directions. As explained earlier, we did not have specific expectations for gender-moderation of the relations of Behavioral or Communication anxiety with interview performance. Supplementary analyses found that there was, in fact, no significant moderation by sex difference in the prediction of interview performance by either type of anxiety.

Interestingly, none of the self-reported interview anxiety dimensions significantly predicted interview performance for females (Table 1). Thus, although women typically reported higher anxiety than did men, there was no significant impact of this anxiety on females’ interview performance. This is noteworthy because a negative anxiety-performance relationship has been found for female applicants in other preselection scenarios such as GMA assessments (McCarthy & Goffin, 2005). This may suggest that the coping strategies preferred by women, Problem and Emotion-oriented coping, are more effective in the context of employment interviews than in GMA and other assessments. In contrast to GMA assessments, interview performance includes social components (Posthuma, Morgeson, & Campion, 2002; Salgado & Moscoso, 2002) that may be improved by Problem-oriented and Emotion-oriented coping. For example, Problem-oriented coping might well focus on techniques for decreasing anxiety, improving social skill, and improving impression management, all of which might increase interview performance. In contrast, coping strategies are likely to have less utility for GMA selection tests because GMA tests are relatively resistant to coaching or formal instruction (e.g., Hausknecht, Halpert, Di Paolo, & Moriarty Gerard, 2007; Powers, 1985).

5. Limitations

Two issues may limit the generalizability of our findings. First, we focused exclusively on job interview anxiety, limiting our ability to generalize findings to other employment contexts. There may be value in ascertaining whether sex plays a similar role in moderating anxiety-performance relations with other selection procedures. Second, Study 2 relied on management students in a laboratory context. The use of students in an artificial context may limit the generalizability of our findings. However, as discussed earlier, the sample of management students we used in Study 2 had ample interview experience. Furthermore, we found that gender moderated the relations of Overall, Appearance, Social, and, (marginally) Performance interview anxiety with interview performance in Study 1, and this study utilized true job applicants.

6. Implications

Our results imply that, contrary to popular belief, with regards to interview anxiety, females may not be particularly disadvantaged in personnel selection contexts such as job interviews. First, interviewers assigned quite similar interview performance ratings to males and females (Table 1). Second, as previously reviewed, interviewers rated males and females as being similarly anxious even though females reported higher levels of anxiety. These results suggest that females are better than males at concealing their levels of anxiety during employment interviews. Third, interview anxiety only negatively predicted the interview performance of males (Tables 1 and 2) even though females, on average, exhibited higher levels of the five types of interview anxiety. As a result, male interview performance ratings may contain more criterion-irrelevant variance and, in turn, have lower predictive validity than females. Although this suggestion is speculative, existing research has found that the relationship between a variety of selection tests and job performance is, indeed, weaker for males (Rothstein & McDaniel, 1992; Schat & Hausdorf, 2000; Schmitt, Mellon, & Bylenga, 1978; Swarthout, Synk & Goode, 1984, as cited in Hartigan & Wigdor, 1989). The adverse role of anxiety for males might be one of the variables accounting for these findings. Interestingly, McCarthy et al. (2013) found that test-taking anxiety did not diminish the predictive validity of employment tests overall, but our findings suggest that interview anxiety could potentially lower the predictive validity of job interviews when male applicants are considered independently. Future research is required to...
examine whether interview anxiety masks males’, but not females’, true likelihood of success on the job, resulting in the selection of less promising candidates.

Male interviewees might benefit from training programs that emphasize greater use of Problem and Emotion-oriented coping, but less use of Avoidance-oriented coping. Interview training for males might also be improved by targeting the types of interview anxiety that can best be addressed by effective coping, that is, Appearance Anxiety and Social Anxiety. For example, males who suffer from Appearance Anxiety could be given coaching and feedback on the appropriateness of their business attire and general appearance. Males who suffer from Social Anxiety could be taught techniques to enhance interviewer perceptions of positive affectivity and how to create a feeling of similarity with the interviewer, which have both been shown to predict ratings of interview performance (Fox & Spector, 2000).

Finally, because Communication Anxiety was the most potent predictor of interview performance for both genders, our findings suggest that both male and female interviewees could benefit from role-playing exercises that focus on communication skills in high-stakes situations. Training could include mock interview sessions, as well as workshops on presentations skills. Clinical anxiety-reducing techniques, such as verbal self-guidance and mental imagery programs, may complement the practical training described above (Macan, 2009). Ultimately, applicant preparatory sessions that effectively reduce interview anxiety could increase the predictive validity and utility of the interview process.

Acknowledgement

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Note

1. Portions of the data from Study 1 have been previously published in McCarthy & Goffin (2004) to test distinctly different research questions.

References


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