Gender differences in how men and women who are referred for IVF cope with infertility stress

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BACKGROUND: Men and women use a variety of coping strategies to manage stress associated with infertility. Although previous research has helped us understand these coping processes, questions remain about gender differences in coping and the nature of the relationship between coping and specific types of infertility stress. METHODS: This study examined the coping behaviours of 1026 (520 women, 506 men) consecutively referred patients at a University-affiliated teaching hospital. Participants completed the Ways of Coping Questionnaire, Fertility Problem Inventory and the Dyadic Adjustment Scale. RESULTS: Women used proportionately greater amounts of confrontational coping, accepting responsibility, seeking social support and escape/avoidance when compared with men, whereas men used proportionately greater amounts of distancing, self-controlling and planful problem-solving. For men and women, infertility stress was positively related to escape/avoidance and accepting responsibility and negatively related to seeking social support, planful problem-solving and distancing. CONCLUSIONS: By analysing relative coping scores, this study identified key gender differences in how men and women cope with infertility. This was particularly true for men’s coping processes that had previously remained hidden because of less frequent use of coping strategies when compared with women.

Key words: coping/gender/infertility stress/in vitro fertilization/marital adjustment

Introduction

Coping, in its most traditional definition, is a way of controlling and regulating stress (Lazarus and Folkman, 1984). For men and women experiencing infertility, coping can play an important role in managing heightened demands unexpectedly placed upon them. For most men and women, infertility is a life-changing experience that often carries unexpected stressors and potential stigmatization (Nichols and Pace-Nichols, 2000). As a result, couples may experience changes in their social networks, family relationships and even potential threats to their future together. Men and women referred for in vitro fertilization (IVF) may face additional stress undergoing this treatment, as it is physically rigorous, financially costly and emotionally taxing.

Several studies have examined how men and women cope with infertility. Research has examined how men and women cope using cognitive appraisal (Stanton, 1991; Stanton et al., 1991; Benyamini et al., 2004), and how they cope when treatments fail (Hynes et al., 1992; Litt et al., 1992; Terry and Hynes, 1998; Daniluk, 2001). There have also been studies examining the relationship between coping and marital adjustment (Slade et al., 1992; Peterson et al., 2003, 2006; Schmidt et al., 2005) and gender differences in coping with infertility (Jordan and Revenson, 1999).

For men and women, the strategies used for coping with infertility have similarities and differences. A meta-analysis examining eight studies that explored gender differences and coping with infertility found that women engage in seeking social support, escape/avoidance and positive reappraisal more often than their partners (Jordan and Revenson, 1999). However, although differences were found in the style of coping between husbands and wives, the authors concluded that ‘there is more similarity than difference’, as men and women did not differ on five of the eight coping scales (p. 353).

In general, women consistently report higher levels of infertility stress when compared with men (Greil, 1997). Because women experience greater levels of distress, they often report using coping strategies more frequently than men. However, these findings may be influenced by the use of raw coping scores which measures the total amount of coping one engages in. Because it is not uncommon for women to cope more often than men across a wide variety of strategies, men’s lower scores may mask the fact that certain strategies are used less often by men, but still represent their preferred manner of coping.
Although studies examining infertility, coping and distress have been critical in advancing the field’s knowledge base, they have been limited by a number of factors. First, the majority of studies examining the coping strategies of infertile men and women rely on general measures of psychological distress and marital adjustment. Very few studies use infertility-specific measures that capture the complexity of stress directly related to the infertility experience (Newton et al., 1999). Second, past research efforts examining infertility, coping and distress have overemphasized the role of women in the infertility experience (Greil, 1997), and third, most studies use raw coping scores in their analysis which tend to overestimate women’s coping and underreport men’s coping behaviours. The current study addressed these limitations by studying the relationship between coping and infertility stress for men and women by coupling a general measure of coping with a measure designed specifically to capture the complexities of the infertility experience. In addition, the analyses were conducted with a large sample of men and women using relative coping scores which allowed for gender differences in coping to be more accurately examined.

In the present study, the authors sought to understand gender differences in coping and how they relate to infertility stress and marital adjustment. We hypothesized that coping would have a positive and a negative relationship to infertility stress, depending on the coping strategy. We further hypothesized that gender differences would be found in how men and women cope with infertility. And finally, we hypothesized that the use of relative coping scores would help us to identify these gender differences in a way not previously identified in prior research.

**Materials and method**

**Procedures**
The sample for this study was comprised of men and women, diagnosed with infertility, who were referred to a university-affiliated teaching hospital for IVF. Methods of data collection were reviewed and approved by a university review board for research involving human subjects. In addition, prior to data collection, informed consent was obtained from all study participants.

Data were collected over a 6-year period (1995–2001). Approximately 2 months prior to treatment, prospective participants were mailed a series of self-report measures including: the Ways of Coping Questionnaire (WCQ), Fertility Problem Inventory (FPI) and Dyadic Adjustment Scale (DAS). Couples were asked to complete the instruments separately and to return them by mail before making a pretreatment appointment with the program staff. Study participants needed to complete each of the three questionnaires to be included in the present study.

A total of 1139 individuals completed the materials. Only participants with primary infertility (e.g. no children in prior or current relationships) were included in the study. One hundred and thirteen participants with secondary infertility (e.g. one or more children from their current or a previous relationship) were omitted, resulting in 1026 participants, which constituted the final sample. Participants in the final sample completed all questionnaires prior to their first IVF treatment cycle.

**Measures**

**Coping with infertility**
The WCQ is a 66-item scale that was used to assess the coping strategies in response to the diagnosis of infertility (Folkman et al., 1986). Participant responses are recorded on a 4-item Likert scale ranging from 0 (does not apply) to 3 (used a great deal). The instrument includes eight subscales: confrontative coping (directly challenging the stressor), distancing (making light of the infertility), self-controlling (keeping feeling about the infertility to oneself and trying to keep these feelings from interfering with daily activities), seeking social support (talking to friends or professionals about the infertility), accepting responsibility (believing one is responsible for the infertility), escape/avoidance (avoiding people and reminders of the infertility), planful problem-solving (taking action towards finding a solution to the infertility) and positive reappraisal (reevaluating the experience of infertility to find unexpected benefits or personal growth). The WCQ demonstrates both construct and content validity (Folkman et al., 1986).

**Infertility stress**
The FPI is a 46-item questionnaire that measures an individual’s level of infertility stress (Newton et al., 1999). The instrument is scored using a 6-point Likert scale and produces a global infertility stress score in addition to five subscores on scales measuring social infertility stress, sexual infertility stress, relationship infertility stress, an individual’s need for parenthood and an individual’s feelings about living a child-free lifestyle. The FPI demonstrates good reliability, discriminant and convergent validity (Newton et al., 1999).

**Marital adjustment**
The DAS is a 32-item scale developed to measure the quality of adjustment to marriage and similar dyadic relationships (Spanier, 1976). The DAS produces a global score in addition to scores on four subscales: satisfaction, cohesion, consensus and affectional expression. The DAS demonstrates concurrent and predictive validity with lower scores relating to increased probability for domestic violence, higher depression and poor communication (Stuart, 1992). The DAS also demonstrates reliability and high internal consistency for the total measure with scores as high as 0.90 or above (Stuart, 1992).

**Data analysis**
This study used quantitative statistical methods to answer the proposed research question. Independent samples t-tests, effect sizes, Pearson’s correlation coefficients and standardized betas from stepwise linear regression analyses were used for statistical analyses. Relative coping scores, which measure the contribution of each coping scale relative to all of the scales combined, were used instead of raw coping scores to more accurately reflect the relationship between coping and the study variables for both men and women (Folkman and Lazarus, 1988). Relative coping scores were calculated by expressing the average score for each scale as a proportion of the sum of the average scale scores across all eight scales. Relative scores thus reveal the degree of preference for each coping strategy relative to all the other strategies as measured by the scale.

**Results**

**Sample characteristics**
Men (n = 506) were slightly older than women (n = 520) with a mean age (±SD) of 33.9 ± 5.4 compared with 32.7 ± 4.5 for women (t = –5.8, P < 0.001). The mean duration of infertility for the couples was 3.4 years. Eighty per cent of infertility diagnoses were attributable to women (e.g. tubal factors and endometriosis), 12% of diagnoses were idiopathic (e.g. unexplained) and 8% were attributable to men (e.g. low sperm count). All of the study participants were referred to the clinic for IVF and were experiencing primary infertility.
**Gender differences in coping, infertility stress and marital adjustment**

A preliminary analysis using raw coping scores for men and women was initially conducted. When raw coping scores were examined, females reported more frequent use of coping strategies than men on seven of the eight coping measures, with men only reporting a more frequent use of distancing. However, when relative coping scores were examined, men engaged in proportionately more distancing, self-controlling and planful problem-solving, whereas women used proportionately more confrontative coping, accepting responsibility, seeking social support and escape/avoidance (see Table I). In other words, distancing, self-controlling and planful problem-solving were more characteristic of women’s style of coping.

For men and women, the pattern in the frequency of use when examining relative coping scores for each coping strategy (see Table I) was fairly similar. For both men and women, seeking social support was the most frequently used form of coping relative to all others, whereas accepting responsibility was the coping strategy used least in comparison to all others. In contrast, distancing was the second most frequently used coping strategy for men, whereas distancing ranked sixth for women (see Table I).

In terms of infertility stress, women reported significantly higher levels of stress than men on each of the five subscales and on the global scale of the FPI, with medium effect sizes for social stress, sexual stress, the need for parenthood and global stress. No significant differences were reported between men and women for marital adjustment.

Table II presents the bivariate correlations between coping, global infertility stress and marital adjustment. A similar pattern emerged for both men and women on each of the three measures. For men and women, global infertility stress was positively related to escape/avoidance and accepting responsibility and negatively related to seeking social support, planful problem-solving and distancing.

Marital satisfaction seemed to be diminished when men and women used escape/avoidance and accepting responsibility coping strategies. By contrast, coping strategies that enhanced or did not diminish marital satisfaction included seeking social support, planful problem-solving and distancing.

The correlations between coping and five subtypes of infertility stress were also examined for men and women (see Table III). Escape/avoidance and accepting responsibility had the strongest positive correlation with each of the five types of infertility stress for both men and women. Individuals who placed greater reliance on these strategies relative to others tended to experience higher levels of infertility stress. By comparison, planful problem-solving and seeking social support had a negative correlation with relationship stress and social stress for both men and women. Thus, men and women who placed a greater reliance on strategies of seeking social support and planful problem-solving experienced lower levels of social and relationship stress related to infertility.

### Table I. Comparison of men and women’s relative use of coping, levels of infertility stress and marital adjustment (n = 1026)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>t-test</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female (n = 520)</td>
<td>Male (n = 506)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td></td>
</tr>
<tr>
<td>Ways of Coping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive coping</td>
<td>0.09 ± 0.04</td>
<td>0.07 ± 0.05</td>
<td>5.9** 0.44</td>
</tr>
<tr>
<td>Distancing</td>
<td>0.11 ± 0.06</td>
<td>0.17 ± 0.11</td>
<td>−9.9** −0.71</td>
</tr>
<tr>
<td>Self-controlling</td>
<td>0.13 ± 0.05</td>
<td>0.15 ± 0.07</td>
<td>−3.9** −0.33</td>
</tr>
<tr>
<td>Seeking social support</td>
<td>0.22 ± 0.08</td>
<td>0.19 ± 0.10</td>
<td>−4.7** 0.33</td>
</tr>
<tr>
<td>Accepting responsibility</td>
<td>0.06 ± 0.06</td>
<td>0.04 ± 0.05</td>
<td>5.6** 0.36</td>
</tr>
<tr>
<td>Escape/avoidance</td>
<td>0.11 ± 0.06</td>
<td>0.09 ± 0.06</td>
<td>6.0** 0.33</td>
</tr>
<tr>
<td>Planful problem-solving</td>
<td>0.15 ± 0.06</td>
<td>0.17 ± 0.08</td>
<td>−2.9** −0.29</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>0.13 ± 0.06</td>
<td>0.12 ± 0.07</td>
<td>0.46 0.15</td>
</tr>
<tr>
<td>Fertility Problem Inventory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social stress</td>
<td>27.1 ± 11.4</td>
<td>22.4 ± 9.1</td>
<td>7.2** 0.46</td>
</tr>
<tr>
<td>Sexual stress</td>
<td>16.7 ± 7.6</td>
<td>13.9 ± 5.5</td>
<td>6.9** 0.43</td>
</tr>
<tr>
<td>Relationship stress</td>
<td>20.0 ± 9.0</td>
<td>18.6 ± 7.6</td>
<td>2.6** 0.17</td>
</tr>
<tr>
<td>Reject child-free lifestyle</td>
<td>28.4 ± 9.1</td>
<td>27.0 ± 8.4</td>
<td>2.5* 0.16</td>
</tr>
<tr>
<td>Need for parenthood</td>
<td>36.8 ± 11.0</td>
<td>32.6 ± 10.2</td>
<td>6.4** 0.40</td>
</tr>
<tr>
<td>Global stress</td>
<td>128.9 ± 35.2</td>
<td>114.5 ± 28.3</td>
<td>7.3** 0.45</td>
</tr>
<tr>
<td>Dyadic Adjustment Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consensus</td>
<td>51.5 ± 6.4</td>
<td>51.4 ± 6.0</td>
<td>0.36 0.02</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>41.3 ± 4.3</td>
<td>41.6 ± 4.0</td>
<td>−0.67 −0.07</td>
</tr>
<tr>
<td>Affectional expression</td>
<td>9.5 ± 1.9</td>
<td>9.6 ± 1.9</td>
<td>−0.7 −0.05</td>
</tr>
<tr>
<td>Cohesion</td>
<td>17.2 ± 3.5</td>
<td>17.0 ± 3.5</td>
<td>0.6 0.06</td>
</tr>
<tr>
<td>Total</td>
<td>119.5 ± 12.7</td>
<td>119.4 ± 11.8</td>
<td>0.11 0.08</td>
</tr>
</tbody>
</table>

*P < 0.05.

**P < 0.01.

### Table II. Correlations between relative coping scores and measures of infertility stress and marital adjustment

<table>
<thead>
<tr>
<th></th>
<th>Women (n = 520)</th>
<th>Men (n = 506)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Global infertility stress</td>
<td>Marital adjustment</td>
<td>Global infertility stress</td>
<td>Marital adjustment</td>
</tr>
<tr>
<td>Coping process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive coping</td>
<td>0.14**</td>
<td>−0.07</td>
<td>0.12**</td>
<td>0.06</td>
</tr>
<tr>
<td>Distancing</td>
<td>−0.24**</td>
<td>0.01</td>
<td>−0.17**</td>
<td>0.12**</td>
</tr>
<tr>
<td>Self-controlling</td>
<td>0.10*</td>
<td>−0.06</td>
<td>0.09**</td>
<td>−0.09*</td>
</tr>
<tr>
<td>Seeking social support</td>
<td>−0.32**</td>
<td>0.22**</td>
<td>−0.16**</td>
<td>0.15**</td>
</tr>
<tr>
<td>Accepting responsibility</td>
<td>0.34**</td>
<td>−0.20**</td>
<td>0.30**</td>
<td>−0.09</td>
</tr>
<tr>
<td>Escape/avoidance</td>
<td>0.51**</td>
<td>−0.25**</td>
<td>0.39**</td>
<td>−0.18**</td>
</tr>
<tr>
<td>Planful problem-solving</td>
<td>−0.31**</td>
<td>0.20**</td>
<td>−0.28**</td>
<td>0.16**</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>−0.02</td>
<td>0.04</td>
<td>0.10*</td>
<td>0.08</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (one-tailed).

**Correlation is significant at the 0.01 level (one-tailed).
Two stepwise multiple regression analyses were performed to better understand the relationship between coping strategies and the dependent study variables. For each analysis, the eight coping scales and gender were simultaneously entered into a regression model as independent variables. Infertility stress and marital adjustment were in turn examined as dependent variables. Results from the regression analyses are presented in Table IV.

Results of the analysis using global infertility stress as the dependent variable revealed that 34 and 26% of the variance in infertility stress among women and men, respectively, could be explained by coping ($R^2 = 0.34$, $P < 0.01$, women; $R^2 = 0.26$, $P < 0.01$, men). Standardized betas, which test the unique contribution of each coping strategy above and beyond the others, showed that escape/avoidance contributed the greatest amount of unique variance to the model for both women and men ($\alpha = 0.40$, $P < 0.01$, women; $\alpha = 0.32$, $P < 0.01$, men). Thus, holding all other variables constant, for every one SD increase in escape/avoidance, men and women participants were likely to have a corresponding 0.40 and 0.32 SD increase in infertility stress, respectively. Accepting responsibility and distancing showed a similar pattern of contribution for both men and women. In contrast, seeking social support significantly contributed to the model for women but not for men, whereas planful problem-solving significantly contributed to the model for men, but not for women.

When examining the results of the multiple regression analysis using marital adjustment as the dependent variable, only 8 and 7% of the variance in marital adjustment was explained by participants’ coping for women and men, respectively (see Table IV). As with infertility stress, an analysis of the standardized betas showed that escape/avoidance contributed the greatest amount of unique variance to the model for both women and men ($\alpha = –0.22$, $P < 0.01$ women; $\alpha = –0.15$, $P < 0.01$ men). Accepting responsibility also significantly contributed to the model for men and women ($\alpha = –0.15$, $P < 0.01$ women; $\alpha = –0.11$, $P < 0.01$ men). However, distancing and self-controlling only contributed to the model for men and not for women ($\alpha = –0.15$, $P < 0.01$, distancing and $\alpha = –0.10$, self-controlling).

**Discussion**

This study examined how men and women undergoing IVF cope with infertility stress. The results from this study shed new light on the relative use of coping among men and women experiencing infertility and how coping is related to infertility stress and marital adjustment.
Coping strategies

A preliminary analysis using raw coping scores showed that women reported more frequent use of almost all coping strategies than men and that scores were higher on seven of the eight scales examined. However, when coping reports were reanalysed using relative coping scores that examined the relative preference for each strategy, in relation to the others, it was found that women proportionately engaged in a greater degree of confrontative coping, accepting responsibility, seeking social support and escape/avoidance. It was expected that women would be more likely to rely on social support and to engage in escape/avoidance when compared with men (Jordan and Revenson, 1999), but it is noteworthy that women also coped proportionately more through confrontative coping and accepting responsibility. For men, the disproportionate use of distancing compared to women was unexpected (Stanton et al., 1992), but men also placed proportionately more of their coping efforts into self-controlling and planful problem-solving strategies than women. Although this had not been reported in previous studies, these findings would not be surprising to clinicians who often see men cope by distancing themselves from the infertility, keeping their feelings to themselves through self-controlling strategies and emphasizing plans to solve the problem of infertility.

One of the most consistent findings in this study was the strength of the relationship between escape/avoidance coping and infertility stress and marital adjustment. Of all the eight coping strategies measured, escape/avoidance had the strongest positive correlations with infertility stress for both women and men—a finding that is consistent with prior research (Stanton, 1991; Litt et al., 1992; Terry and Hynes, 1998). Additionally, escape/avoidance coping contributed the greatest amount of unique variance to infertility stress and marital adjustment when included in multiple regression models with the other seven coping scales. A similar pattern was also found among individuals coping with infertility by accepting responsibility. Although, overall, this was the least preferred coping strategy for both men and women, when utilized, accepting responsibility (e.g. criticized or lectured myself, believed I brought the problem on myself) was associated with higher levels of infertility stress among men and women and decreased marital adjustment in women. These findings also support prior research which has found accepting responsibility to be associated with increased distress and depressive symptoms in infertile populations (Stanton et al., 1992). Although women may be more likely than their spouses to accept responsibility for infertility (Berg and Wilson, 1991; Beaurepaire et al., 1994), some have proposed that men and women may accept blame for infertility in an effort to protect their spouses from additional stress-related burdens (Tennen et al., 1991). The results of the present study suggest that the strategy is not adaptive for men or women.

It was interesting to note that distancing as a coping strategy was related to decreased infertility stress in both men and women and decreased marital adjustment for men. This was an unexpected finding, as coping strategies which are related to reduced infertility stress are assumed to be predictive of increased relationship satisfaction. This finding, however, is consistent with the idea that coping strategies might be beneficial to an individual but may have a negative impact on the couple relationship (Peterson et al., 2006). In a related vein, it has been suggested that both male and female avoidance of problem discussion reflects a typical and stable marital type but may lead to long-term relationship dissatisfaction (Gottman, 1993). Thus, distancing may be effective for men in reducing levels of infertility stress, but it may lead to a sense of less connectedness and cohesion with their partner.

It is important to emphasize that although social support seeking appears more prominently in women’s coping repertoire than in men’s coping, men also use this coping strategy. In fact, seeking social support was the most preferred method of coping for both men and women. The importance of seeking social support for women is underscored by the study’s finding that women who placed a greater proportion of coping efforts into seeking social support reported less infertility stress. These findings support prior research that shows women who are less socially isolated report higher levels of life satisfaction and have employed more adaptive coping skills in response to the stress associated with infertility (Stanton, 1991; Daniluk, 1997; Gibson and Myers, 2002). It is unclear from this study why seeking social support does not appear to be beneficial to men, given it is their most preferred coping method. Possibly, men engage in support seeking as a joint activity to assist their spouse and derive fewer personal benefits from the activity.

It is also interesting that for men, the use of planful problem-solving (e.g. I knew what had to be done, so I doubled my efforts to make things work, I made a plan of action and followed it) was significantly related to decreases in infertility stress in the regression model and had a modest but significant positive relationship with marital adjustment for men and women. Perhaps engaging in behaviours aimed at solving the problem (which may include seeking social support) enhances men and women’s sense of control when faced with the challenges of infertility. It is also interesting that among the coping strategies available, men gave greater weight to this approach than did women. Because men are unable to solve the problem of infertility by themselves and can often feel highly restricted in terms of how they perceive and respond to infertility (Gannon et al., 2004), they often report feeling powerless to help themselves and their partner (Daniluk, 1997). As a result, engaging in planful problem-solving may lend itself to feeling a greater sense of purpose for themselves and their partner, as they do all that they can to help solve the problem. It is also possible that being actively involved in problem solving around treatment leads to a greater feeling of teamwork and mutual satisfaction, as infertility is a shared couple experience versus an individual, isolating experience. This, in fact, would be consistent with previous findings suggesting that experiencing infertility and the ensuing treatments together can strengthen a couple’s relationship (Daniluk, 2001; Schmidt et al., 2005).

Infertility stress

Regression analyses showed that a substantial amount of the variance in female and male infertility stress was explained by participants’ coping strategies. The large amount of variance in
stress explained by coping underscores the strong interrelationship between stress and coping; however, the directionality of this relationship is unclear. It is possible that the onset of infertility creates stress, which then leads to various coping behaviours. However, it is also possible that ineffective coping strategies (e.g. escape/avoidance) lead to increased infertility stress and actually become stressors themselves. While past research has identified ineffective strategies for coping with infertility, predictive of increased distress, the current study is one of the first to identify coping strategies which appear effective and are associated with decreased distress – the use of distancing among men and women, the use of seeking social support among women and the use of planful problem-solving among men.

When comparing the infertility stress of study participants, women reported higher mean infertility stress scores on each of the six scales of the FPI. These findings are consistent with an extensive body of literature reporting that women describe infertility as a more stressful life experience than men and are more likely to report greater psychological distress. For men, prior research found that infertility stress did not differ from other forms of life stress. These past findings explain why the use of raw coping scores may be potentially misleading. Because women experience greater infertility-related distress compared with men, they are likely to engage in a greater range of coping strategies and utilize each strategy more frequently. When male versus female comparisons are made, men’s lower scores may mask the fact that certain strategies are used less often by men, but still represent their preferred manner of coping. By using relative coping scores, this study was able to better understand that men cope with infertility in important ways, but these ways of coping have been underreported and overlooked in other studies.

### Study limitations

As with all research, study limitations must be considered when interpreting the results. First the study was limited to patients who completed the data collection measures prior to their first IVF treatment. Thus, study findings may not be generalizable to men and women who elect not to pursue treatment or to men and women who have completed multiple treatment cycles. Second, the diagnostic breakdown appears skewed, as 80% of infertility diagnoses were attributable to women, while only 8% were attributable to men. It is possible that men and women’s coping strategies and the relationship to infertility stress might differ if the study included more participants experiencing male factor infertility. Third, the sample was made up of primarily White middle-class patients, representative of the Canadian population during the time of the study. Future studies which include a greater diversity in their sample might be useful, as coping strategies and their relationship to stress might differ according to racial background, religion, culture and/or socio-economic status. Finally, questionnaires were sent via mail and were returned at a pretreatment appointment. Although couples were asked to complete all questionnaires separately and independently, there is no guarantee that all couples followed these instructions.

### Conclusion

In conclusion, the study highlights how men and women referred for IVF cope with infertility, and how coping is related to infertility stress and marital adjustment. Although the directionality of coping and stress remains unclear, as findings are only correlational, results of the study can be considered by practitioners and clinicians who work with men and women undergoing IVF. Strategies correlated with increased infertility stress, such as escape/avoidance and accepting responsibility, should be identified and targeted in interventions designed and introduced for men and women undergoing infertility treatments. Conversely, coping strategies related to decreased infertility stress, such as seeking social support and planful problem-solving, can be identified and encouraged.

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Coping with infertility stress


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