# Examining Congruence Between Partners' Perceived Infertility-Related Stress and Its Relationship to Marital Adjustment and Depression in Infertile Couples

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Because studies examining the emotional impact of infertility-related stress generally focus on individuals, there has been little research examining how relationship and individual dariables are linked. The purpose of this study was to explore the impact of congruence (e.g., agreement) between partner's perceived infertility-related stress and its effects on depression and marital adjustment in infertile men and women. Couples referred for infertility treatments at a University-affiliated teaching hospital completed the Fertility Problem Inventory (FPI), the Beck Depression Inventory (BDI), and the Dyadic Adjustment Scale (DAS) 3 months prior to their first treatment cycle. Study findings show that men and women in couples who perceived equal levels of social

infertility stress reported higher levels of marital adjustment when compared to men and women in couples who perceived the stress differently. In addition, women in couples who felt a similar need for parenthood reported significantly higher levels of marital satisfaction when compared to women in couples where the males reported a greater need for parenthood. While couple incongruence was unrelated to depression in males, incongruence over relationship concerns and the need for parenthood was related to female depression. These findings provide initial support for the theory that high levels of agreement between partners related to the stresses they experience help them successfully manage the impact of these stressful life events. Possibilities for future research examining the construct of couple congruence are discussed.

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Infertility, or the inability to conceive or carry to live birth a pregnancy after one year of regular sexual relations without the use of contraceptives, affects one in six couples (17%) of childbearing age (Ulbrich, Coyle, & Llabre, 1990). When a couple discovers that they may not be capable of having biological children, it is stressful, unexpected, and often a life-changing experience. Although researchers have often studied the impact of infertility on individuals, there has

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been little research that examines partner data and how relationship and individual variables are linked. Rather, research has commonly focused on individuals' (primarily women) reactions to infertility without an examination of how the other member of the couple is reacting to the same event or how each partner's experience is affecting the other partner. Griel (1997) noted that, since 1980, relatively few studies have examined the couple as the unit of analysis (Andrews, Abbey, & Halman, 1991; Draye, Woods, & Mitchell, 1988; Hirsch & Hirsch, 1988; Levin, Sher. & Theodos, 1997; Sabatelli, Meth, & Gavazzi, 1988; Stanton, Tennon, Afflexk, & Mendola, 1991; Ulbrich et al., 1990) and called for an increase in such studies to address this gap in the literature.

The present study was partially guided by family systems theory, which proposes that individuals are best understood by examining processes between people in relationships rather than solely the individuals themselves. Particularly because the experience of infertility is a shared problem between members of a couple, it might be best understood from a system's perspective. Greil (1997) noted that, when studying the psychological consequences of infertility, "an individual's response is likely to be dialectically related to the response of that individual's partner" (p. 1699). Greil's supposition was supported by the work of Andrews et al. (1991) who found that, for infertile couples, each spouse's perception of their quality of life influenced the quality of life of the other.

The current study was also guided by the stress and coping theoretical framework which suggests that the adaptation to stress experienced by the family is dependent on the family's resources, the meaning family members make of their situation, and how they cope with the stressor they experience (Lazarus & Folkman, 1984; McCubbin & Patterson, 1983). Stanton (1991) noted that most studies do not examine couples who are coping with the same stressful situation, and that, "the shared nature of the infertility experience allows extension of stress and coping frameworks to the marital dyad" (p.100).

A key aspect of the stress and coping framework used in this study is the concept of congruence. Couple congruence, a concept developed by McCubbin, Thompson, Thompson and McCubbin (1993), refers to a sense of agreement between a couple in relation to their definition of a stress and their appraisal of the severity of the stressor. High levels of congruence, or agreement between couples' perceived levels of stress, is commonly related to higher levels of adaptation to the stressor encountered. For example, Patterson (1989) studied congruence as a factor in the adaptation of couples after undergoing treatment for coronary artery disease. She found that congruence was critical in couples' successful adaptation to this stressful life event. Patterson (1993) also studied the role of family meaning and adaptation to chronic illness and disability. She found that family congruence generally predicts lower levels of stress during crises events. In addition, Snell and Rosen (1997) found that parents who had successfully navigated the stress of raising special-needs children generally had high levels of congruence regarding how they viewed this challenge.

Congruence between partners experiencing infertility has rarely been studied. Abbey, Andrews and Halman (1991) found that couples in crisis may be at "different points of adjustment" when dealing with the stress of infertility (e.g., one partner views the situation as highly threatening and stressful, while the other perceives it as a minor inconvenience). However, studies examining partners' congruence regarding the severity of infertility stress have not been conducted. To the authors' knowledge, this study is the first to examine how congruence related to infertility stress is related to depression and marital satisfaction in infertile couples.

This study attempted to address the following research questions: (a) how is the level of congruence between partners' infertility stress related to marital satisfaction and depression in infertile men and women? and (b) Do men and women in couples with congruent levels of infertility-related stress score lower on individual measures of depression and higher on measures of marital satisfaction than men and women in couples who lack such congruence?

#### METHOD

## Participants

The initial sample consisted of couples (1,153 women and 1,149 men) consecutively referred to a university-affiliated teaching hospital in Ontario Canada for infertility treatment between 1992 and 1998. Couples were referred for In Vitro fertilization (IVF), Intra Uterine Insemination (IUI), or Donor Insemination. Of the 618 couples who completed all study questionnaires, the 525 couples with primary infertility (couples who have not previously had a child) were included in the final sample (N=525).

#### Instruments

Fertility problem inventory (FPI). The Fertility Problem Inventory (FPI; Newton, Sherrard, & Glavac, 1999) is a 46-item questionnaire measuring the level of an individual's infertility-related stress. The questionnaire produces a global infertilityrelated stress score as well as scores on five subscales: Sexual Concern, Social Concern, Relationship Concern, Need for Parenthood, and Rejection of AChildfree Lifestyle. Stress related to sexual concern indicates diminished sexual enjoyment or sexual self-esteem; stress related to social concerns indicates sensitivity to comments and reminders of infertility, feelings of social isolation, and alienation from family or peers; stress related to relationship concern indicates difficulty talking about infertility with one's partner and concerns about the

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impact of infertility on the relationship; stress related to the need for parenthood stems from perceiving parenthood as a primary or essential goal of life; and stress related to rejecting a childfree lifestyle indicates that one's future satisfaction or happiness is dependent on having a child. The FPI demonstrated high internal consistency (Cronbach's alpha between .77 and .93). Test-retest reliability after a 30-day interval was 0.83 for global stress for women and 0.84 for men. The FPI also demonstrated discriminant and convergent validity.

Dyadic adjustment scale (DAS). The DAS, is a -32-item scale developed by Spanier (1976), that measures the byerall adjustment individuals experience within their relationship. The DAS contains four sub-scales: Dyadic Satisfaction, Dyadic Cohesion, Dyadic Consensus, and Affectional Expression. Mean overall scores of 100 or greater typically indicate well-adjusted couples. The measure has demonstrated good internal consistency, and acceptable content validity, criterionrelated validity, and construct validity (Spanier, 1976).

Beck depression inventory (BDI). The Beck Depression Inventory (Beck, Rush, Shaw. & Emery, 1979) was used to assess participants' severity of depression. The reliability and validity of the BDI have been demonstrated through a wide body of research (Beck, Steer, & Garbin, 1988). In accordance with the testing guidelines, a score of 10 or greater indicates the presence of clinically meaningful depression symptoms.

#### Procedures

Three months prior to treatment, prospective patients were mailed a series of self-report measures including The Fertility Problem Inventory (FPI), the Beck Depression Inventory (BDI), and the Dyadic Adjustment Scale (DAS). Both husbands and wives were asked to complete the instruments separately and to return them by mail before making a pretreatment appointment with the program staff. In an effort to minimize pretreatment bias of socially desirable responses, participants were informed in writing that completing the study questionnaires was strictly voluntary and that their responses would not be a factor in determining their receipt or nonreceipt of infertility treatment.

Measuring congruence. Examination of the couple as the unit of analysis using a dvadic variable was a critical component of this study. This dyadic variable was created using a difference score on the FPI for each couple. Each female's global and subscale scores were subtracted from her male partner's global and subscale scores and the difference was converted to an absolute value (Larsen & Olsen, 1990). Since congruence in this study refers to couples' level of agreement regarding their perceptions of the severity of infertilityrelated stress, examining couple differences regarding these perceptions allowed the assessment of the relationship of couple congruence to individual outcomes of depression and marital satisfaction. In other words, the conversion of individual scores to a dyadic measure enabled the examination of the relationship between couple congruence (a dyadic variable) and indicators of each partners' adjustment. However, using absolute values alone does not rule out the possibility that individual variation in male and female stress scores will be related to the dependent variables. and inflate the perceived impact of couple congruence. Thus, partial correlations and analysis of covariance were used to control for male and female stress in order to obtain the most accurate measure of the pure impact of couple congruence.

### RESULTS

Sample characteristics. Males were older than females with a mean age of 33.8

years, compared to 32.3 years for females (t = -7.8, p < .001). Participants reported a mean marital duration of 7.1 years and a history of infertility for an average of 3.5 years. Seventy-one percent of infertility diagnoses were directly attributable tofemale participants (e.g., tubal factors, endometriosis), 17% were unexplained infertility, and 11% were male factor infertility. Couples were predominantly Caucasian, reflecting the Canadian population during those years. While specific information on socioeconomic status was not collected, treatment was fully paid by the Ontario government prior to 1996. Since 1996, the cost of treatment has been paid only for couples with bilateral fallopian tube blockage. In addition, over 40% of the sample had no education beyond high school. Therefore, there was no reason to conclude that the patient sample was particularly affluent.

Respondents' scores on each of the three study questionnaires are summarized in Table 1. Paired-samples t-tests were conducted to assess differences between men and women's reports of infertilityrelated stress, depression, and marital satisfaction. Females reported significantly higher levels of infertility-related stress than males on each of the five sub-scales and on the composite measure of Global Stress. Overall, females reported a higher mean global stress score compared to males (t =12.4, p < .01). Females also reported higher mean scores for depression than males (t =9.2, p < .01), and a greater percentage of females scored in the depressed range of the BDI  $(\geq 10)$  when compared to males (21% vs.)9%, respectively). Total scores on the Dyadic Adjustment Scale indicated well-adjusted couples with no differences between males and females (t = .14, p = .89).

Bivariate and partial correlations. Tables 2 and 3 compare the bivariate and partial correlations for couple incongruence and depression and marital adjustment. Partial correlations were run controlling

	Males		Females		
Variable	Mean.	SD	Mean	SD	t-Value
Beck Depression Scale					
Beck Total Score	3.4	4.5	5.7	5.9	9.2**
Dyadic Adjustment Scale					
DAS Consensus	50.8	5.9	50.8	6.1	-1.4
DAS Satisfaction	41.1	4.2	41.0	4.3	78
DAS Affect. Expression	9.4	1.9	9.3	1.9	46
DAS Cohesion	16.7	3.4	16.8	3.3	.62
DAS Total	118.0	11.9	117.9	12.25	14
Fertility-Problem Inventory					
Sexual Concern	14.3	5.5	17.8	7.8	10.6**
Social Concern	22.8	9.6	27.9	11.1	11.8**
Relationship Concern	19.3	7.8	20.9	8.7	5.0**
Rej. Childfree Lifestyle	25.8	7.7	26.6	7.9	2.3*
Need for Parenthood	33. <del>9</del>	10.3	38.9	10.2	11.2**
Global Stress	116.2	30.3	132.1	34.4	12.4**

Table 1 Means, Standard Deviations, and Paired-Samples *t*-Tests for Male and Female Depression, Marital Adjustment, and Perceived Infertility-Related Stress (N = 525)

\*\* p < .01; p < .05

for both male and female infertility stress to obtain a purer measure of the impact of couple congruence. Bivariate correlations showed a strong relationship between couple incongruence scores on all six scales of the FPI and female depression (Table 2). However, after controlling for individual stress levels, the correlations between female depression and couple incongruence for social stress, sexual stress, and rejection of a childfree lifestyle were no longer significant, while incongruity over relationship stress, the need for parenthood, and global stress remained significantly correlated with depression. Incongruence related to a couple's need for parenthood seemed to be the stressor most unaffected by partialing out individual stress. Male depression was unrelated to couple incongruence.

Bivariate correlations showed a strong relationship between couple incongruence scores on all six scales of the FPI and marital adjustment for both males and females. However, after controlling for individual stress levels, the correlations of couple incongruence for social stress, sexual stress, and relationship stress with female dyadic adjustment were no longer significant. Incongruity over the need for parenthood, rejection of childfree living, and global stress remained significantly correlated with dyadic adjustment. A similar pattern emerged for males, although the correlation between couple incongruence related to social stress was also significantly related to dyadic adjustment. The correlation between dyadic adjustment and couple incongruence related to rejection of childfree lifestyle and the need for parenthood were least affected by controlling for individual stress.

Congruence between partners: Relationship to depression and marital adjustment. In order to further explore the relationship between partner congruence about infertility-related stress and individual depression and marital adjustment, a categorical analysis was performed where couples were placed into one of three groups: (a) couples in which each partner perceived infertility as equally stressful, (congruent

Adjustment in Infertile Men and Women ( $N = 525$ )							
Couple Incongruence on FPL	Female Depression	Male. Depression	Female Dyadic Adjustment Total	Male Dyadic Adjustment Total			
Social Concern	.34**	.06	.18**	14**			
Sexual Concern	.39**	.10*	.24**	21**			
Relationship Concern	.33**	.14**	.28**	. 22**			
<b>Rejection of Childfree Lifestyle</b>	.09*	.06	.12**	·.10*			
Need for Parenthood	.09*	.02	.14**	12**			
Global Stress	.33**	.06	.21**	-,15**			

Table 2Correlations of Couple Incongruence on Infertility-Related Stress with Depression and MaritalAdjustment in Infertile Men and Women (N = 525)

\*\* p<.01 (one-tailed): p<.05 (one-tailed)</p>

couple group); (b) couples in which the man's infertility-related stress was greater than the woman's (male higher-stress group); and (c) couples in which the woman's infertilityrelated stress was greater than the man's (female higher-stress group). Couples were divided into these groups based on their FPI difference scores. Couples in the congruent group were distinguished from couples in the other two groups in that their scores on the FPI were the same. Thus, the most stringent definition of congruence was used, requiring couples to have a perfect agreement of scores on the FPI. Once the groups were created, a series of one-way analyses of variance were conducted to compare the means of these three groups for depression and marital adjustment (see Table 4). Scheffe post-hoc comparisons were conducted to determine which groups, if any, showed significant differences.

An analysis of covariance was also performed to assess the impact of couple congruence on depression and matital adjustment after controlling for individual male and female stress (Table 5). After controlling for individual stress, significant differences in depression between the three groups were eliminated for both males and females (see Tables 4 and 5). Similarly, differences between the three groups in terms of marital adjustment were also eliminated for sexual concerns, relationship concerns, and rejection of childfree living. Thus, the relationship between these types of stress, depression, and marital adjustment can best be explained by examining individual levels of infertilityrelated stress.

However, as shown in Table 5, the couple's level of congruence in terms of infertility-related social stress does affect marital adjustment even when controlling for individual stress levels. Specifically, men and women in congruent couples reported higher levels of marital adjustment when compared to couples in which one of the partners reported a greater amount of social stress. A relationship between a need for parenthood and women's marital adjustment was also significantly related to couple congruence. Women in couples who reported congruence related to their need for parenthood reported significantly higher levels of marital satisfaction when compared to women in couples where the males reported greater stress. It is notable that this relationship was only visible once the covariates of individual stress were used in the analysis.

#### DISCUSSION

This exploratory study provides initial support for the theory that men and women in couples who are congruent in their appraisals of certain forms of infertilityrelated stress may experience higher levels of marital adjustment than men and women

Controlling for Male and Female Individual Stress ( $N = 525$ )						
Female Depression	Male Depression	Female Dyadic Adjustment Total	Male Dyadic Adjustment Total			
.08	.04	07	09*			
.01	02	.01	06			
.13**	.03	06	08			
.07	.04	11**	·.09*			
.08*	.02	13**	12**			
.09*	.05	·.08*	·.08*			
	or Male and Fem Female Depression .08 .01 .13** .07 .08* .09*	r Male and Female Individual Female Male Depression Depression .08 .04 .01 .02 .13** .03 .07 .04 .08* .02 .09* .05	Female         Male         Female Depression         Male Depression         Female Dyadic Adjustment Total           .08         .04        07         .01         .02         .01           .13**         .03        06         .07         .04        11**           .08*         .02        13**         .08*         .02         .13**			

 Table 3

 Partial Correlations of Couple Incongruence on Infertility-Related Stress with Depression and Marital Adjustment in Infertile Men and Women

 Controlling for Male and Encode Laborational Stress (No. 2021)

\*\* p<.01 (one-tailed); \* p<.05 (one-tailed)

in couples who differ in their appraisals of the stress. These findings support prior research indicating that high levels of agreement between couples and families often reduces the stress they experience and increases their ability to manage stressful life events (Patterson, 1989, 1993; Snell & Rosen, 1997).

These findings were also consistent with a wide body of literature suggests that while both men and women report infertility as a stressful experience, women perceive it as more stressful and generally seem to be more affected in terms of negative life consequences (Greil, 1997; Robinson & Steward, 1996). Women reported higher overall depression scores when compared to men, and a greater percentage of women scored in the depressed range when compared to men (21% vs. 9%, respectively).

Overall, men and women in our sample reported relatively high levels of marital satisfaction. Only:6% of men and 7% of women scored in the range indicative of problematic marital adjustment. These findings are consistent with prior research indicating that "marital satisfaction among the infertile is as high, or higher than that of non-infertile individuals" (Greil, 1997, p. 1683), However, high levels of marital adjustment among study participants might also be related to the timing of data collection. Berg and Wilson (1991) found couples had above-average levels of marital satisfaction during the first 2 years of infertility treatment, but reported dramatically lower levels of martial adjustment after the third year of treatment. Alternatively, couples might have under-reported existing marital distress. Despite reassurance that responses would not influence treatment acceptance, some couples may have wanted to present a positive impression.

Adding the dyadic construct to the analysis gives us additional information regarding the impact of infertility-related stress as it relates to infertile couples. Prior to controlling for individual levels of infertility related stress, it appeared that congruence related to sexual stress, social stress, and relationship stress was strongly related to female depression. This was consistent with previous findings that symptoms of depression were more highly associated with sexual, social, and relationship stress than the need for parenthood and a couple's attitudes toward living a childfree lifestyle (Newton et al., 1999). However, after controlling for individual levels of infertility-related stress, the association between depression and couple incongruence in terms of social and sexual stresses was no longer significant, while a small but significant relationship remained between female depression and

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Variable	Male Higher- Stress Group	Congruent Couple Group	Female Higher-Stress Group	F	p value
	Mean	Mean	Mean		
Sexual Concern	( <i>n</i> =141)	( <i>n</i> =62)	(n=322)		
Female Depression	3_9	3.6	6. <del>9+</del>	17.9**	<.001
Male Depression	3.8+	1.9	3.5+	3.9*	.020
Female Marital Adjust.	119.2	122.7	116.4+	8.3**	<.001
Male Marital Adjust.	117.6+	123.0	117.2+	6.5**	.002
Social Concern	(n=146)	(n=27)	( <i>n</i> =352)		
Female Depression	4.3	3.1	6.6+	11.1**	<.001
Male Depression	4.0	1.9	3.2	3.1*	.046
Female Marital Adjust.	118.7+	126.3	116.9+	7.9**	<.001
Male Marital Adjust.	117.3+	125.3	117.7+	5.6**	.004
Relationship Concern	(n=189)	( <i>n</i> =56)	(n=280)		
Female Depression	5.0	3.1	6.8+	12.2**	<.001
Male Depression	4.0+	2.0	3.2	4.6*	.011
Female Marital Adjust.	118.1+	123.7	116.5+	8.8**	<.001
Male Marital Adjust.	115.3+	124.1	118.5+	12.9**	<.001
Reject Childfree Lifestyle	(n=208)	(n=44)	(n=273)		
Female Depression	4.7	<b>5.0</b>	6.7	7.4**	.001
Male Depression	3:1	3.4	3.6	0.8	.437
Female Marital Adjust.	119.0	119.9	116.7	2.6	.071
Male Marital Adjust.	119.2	<b>N9.9</b>	116.7	3.3*	.039
Need for Parenthood	( <i>n</i> =142)	(n=29)	(n=354)		
Female Depression	5.6	5.0	5.9	0.3	.676
Male Depression	3.5	4.7	3.2	1.5	.236
Female Marital Adjust.	116.8	120.5	118.1-	1.3	.272
Male Marital Adjust.	117.3	119.1	118.1	0.3	.702

 
 Table 4

 One-way Analysis of Variance: Examining Mean Differences for Men's and Women's Depression and Marital Adjustment for Three Groups of Couples (N=525)

\*\* p < .01; \* p < .05

 Post-hoc tests revealed significant differences between couples in male stress = female stress group and group(s) indicated

incongruence related to relationship stress and the need for parenthood.

Incongruence related to relationship concerns, the need for parenthood, and female depression may be partially explained by the divergent views menand women hold relative to the stress of infertility on their relationship. Perhaps when couples have differing views about how infertility influences their relationship or the importance of having a family, women are personally affected. Divergent views between partners in these critical areas may hinder positive communication or the sense that the partner empathizes with the other partner's point of view, which for women may lead to a feeling of isolation and depression.

Partial correlations also showed that incongruity related to a couple's need for parenthood and their attitudes about childfree living were negatively related to marital adjustment for both men and women. Incongruent couples associated with these stresses differently to questions such as "I could see a number of advantages if we didn't have a child" or "having a child is not necessary for my happiness." Perhaps couples who hold congruent views related to the importance of having a child support

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Variable	Male Higher- Stress Group	Congruent Couple Group	Female Higher- Stress	F	p value
	Adjusted Mean	Adjusted Mean	Adjusted Mean		
Sexual Concern	(n=141)	(n=62)	(n=322)		
Female Depression	5.8	6.5	5.6	0.8	.456
Male Depression	2.8	3.1	3.7	1.4	.246
Female Marital Adjust	117.7	119.1	117.8	0.4	.686
Male Marital Adjust.	117.0	119.9	118.0	1.2	.277
Social Concern	(n=146)	(n=27)	( <i>n</i> =352)		
Female Depression	6.8	5.6	5.3	2.1	.125
Male Depression	3.4	2.6	3.4	0.5	.597
Female Marital Adjust	. 116.9	123.9	117.9	3.9*	.020
Male Marital Adjust.	116.6	123.5	118.1	3.9*	.021
Relationship Concern	(n=189)	( <i>n=</i> 56)	(n=280)		
Female Depression	5.9	5.1	5.8	.5	.586
Male Depression	3.2	3.2	3.6	.3	.752
Female Marital Adjust	. 117.2	119.3	118.1	.8	462
Male Marital Adjust.	116.4	120.0	118.6	2.6	.077
Reject Childfree Lifestyle	(n=208)	(n=44)	( <i>n</i> =273)		
Female Depression	4.9	4.9	6.5	2.1	.120
Male Depression	3.3	3.4	3.4	0.0	,979
Female Marital Adjust	. 119.0	120.0	116.7	1.5	.225
Male Marital Adjust.	118.4	119.8	117.3	0.8	.458
Need for Parenthood	(n=142)	(n=29)	(n=354)		
Female Depression	6.7	4.6	5.5	2.0	.131
Male Depression	3.2	4.1	3.4	0.5	.633
Female Marital'Adjust	. 113.4	119.6	119.6	6.6	.001
Male Marital Adjust.	114.9	118.4	119.1	3.0	.052

 Table 5

 One-way Analysis of Covariance: Examining Adjusted Mean Differences for Men's and Women's Depression and Marital Adjustment for Three Groups of Couples (N=525)

\*\* p <.01; \* p < 05

each other and present a united front as they approach the challenge of infertility together.

Interestingly, the analysis of covariance showed that couples who reported equal levels of social stress (e.g., sensitivity to reminders about infertility. infertilityrelated isolation from family and friends) had higher levels of marital adjustment when compared to men and women in couples who reported differing levels of social stress. It' is notable that men and women in these couples tended to have the highest adjusted mean marital satisfaction score's (see Table 5). These couples reported feeling similarly about statements such as "I find it hard to spend time with friends with young children" and "I feel like friends or family are leaving us behind" (FPI; Newton et al., 1999). Couples who have a sense of agreement about these important issues may effectively buffer the negative impact of social stress by supporting each other, thus increasing their overall feelings of relationship satisfaction.

Increased marital satisfaction among men and women in couples congruent in terms of social stress may also be explained by the family systems theoretical framework. Stanton (1991) found that women who sought social support reported lower levels of infertility distress, and men with wives who sought social support reported lower levels of overall infertility distress. It is possible that a similar pattern is occurring here. Women in this sample who perceive the social stress of infertility similarly to their partner may be more likely to engage in, and be supported in, their efforts to seek social support since their partners may have a greater realization of their partners' stress.

For women, the relationship between couple congruence and social stress may also be explained in light of previous research indicating that infertility is linked to a dramatic change in women's social relationships compared to relatively minor changes in the social relationships of men. As a result, women experiencing infertility often feel a sense of isolation and alienation from female friends or family with children (Daniluk, 1997). Women in congruent couples who perceive similar amounts of social stress as their partners might experience greater amounts of emotional support from their partner because of the similarity of their experiences. This emotional support might serve to decrease feelings of isolation and increase overall marital satisfaction.

This study also found that women in couples who agreed with their partner about their need for parenthood (e.g., close identification with role of parent. perceived as a primary or essential goal in life) tended to have higher levels of marital satisfaction than women in couples in which men reported a greater need for parenthood. Perhaps when couples have similar views in this highly sensitive area. they are more likely to support each other and face the problem together, but when a man wants to be a parent more than his partner, it is possible that this has a more deleterious effect on the relationship than what might be considered a more typical incongruence (i.e., the woman having a greater need for parenthood). Women in couples where the man expresses a greater

need for parenthood may experience added guilt, self-blame, and concerns about the stability of their marriage without a child, which may lower reports of adjustment.

It should be noted that this study has several limitations that need to be taken into account when considering the findings. First, the sample was limited in three respects. Participants represent a subset of infertile couples whose earlier treatments have failed and who have made a decision to pursue advanced reproductive technologies. While it is estimated that approximately 75% of couples will pursue some form of infertility treatment (e.g., medication, surgery, etc.), it is unclear what percentage of infertile couples elects to pursue advanced reproductive treatment (Sadler & Syrop, 1987). Further. couples were predominantly Caucasian, reflecting the Canadian population during those years. As a result, minority groups were underrepresented, which is a common limitation in the infertility literature as a whole (Greil, 1997). And finally, over 70% of the sample had a female factor diagnosis (e.g., tubal factors, endometriosis). Thus, couples with male factor diagnosis were underrepresented since an estimated 40% of infertility is attributable to male factors (Robinson & Steward, 1996; Wright, Allard, Lecours, & Sabourin, 1989). Studies attempting to establish a link between the attribution of an infertility diagnosis (e.g., male factor, female factor, or unexplained) and psychological distress have been inconclusive. Greil (1997) suggested that the majority of studies examining an infertile diagnosis showed it did not affect the psychological distress levels of men or women. However, conflicting findings have been found (Connolly, Edelmann, & Cook, 1987: Domar. Broome. Zuttermeister. et al., 1992). In the present, study, no significant differences were found in levels of depression or marital adjustment across the three diagnostic categories for either men or women.

Finally, in categorizing couples, our definition of "congruence" was restricted to perfect agreement on couples' reports of infertility-related stress. Since no current instrumentation exists that specifically measures couple congruence, examining couple agreement seemed the most appropriate way to explore this construct and its relationship to stress-related outcomes. However, since this approach captures only couples who have perfect agreement, couples who have near perfect agreement are considered incongruent. Theoretical considerations that measure congruence in such a way as to include couples who were nearly congruent, but not in perfect agreement, are warranted, Furthermore, future studies linked with appropriate analytic designs may help enhance our understanding of how couple congruence relates to individual outcomes.

This study appears to be the first to examine the impact of couple congruence related to partners' perceptions of infertilityrelated stress on individual functioning. Carefully designed quantitative and qualitative research studies that further examine this issue are needed. In addition, the development of an instrument that appropriately measures the construct of couple congruence is warranted, because of the usefulness of understanding the relationship dynamics. In conjunction, theoretical assumptions need to be refined and linked with statistical methods that will most appropriately measure couple congruence. And finally, further examination of congruence in more depressed and less adjusted populations would be useful in enhancing the generalizabilty of these preliminary findings.

### REFERENCES

 Abbey, A, Andrews, F.M., & Halman, J. (1991).
 The importance of social relationships for interfile couples' well-being. In A.L. Stanton & C. Dunkel-Schetter (Eds.), Infertility: Perspectives from stress and coping research (pp. 61-86). New York: Plenum Press.

- Andrews, F.M., Abbey, A., & Halman, J. (1991). Stress from infertility, marriage factors, and subjective well-being of wives and husbands. *Journal of Health and Social Behavior*, 32, 238-253.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive therapy of depression. New York: Guilford Press.
- Beck, A.T., Steer, R.A., & Garbin, M.G. (1998). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8. 77-100.
- Berg, B.J., & Wilson, J.F. (1991). Psychological functioning across stages of treatment for infertility. Journal of Behavioral Medicine, 14, 11-26.
- Connolly, K., Edelmann, R., & Cooke, I. (1987). Distress and marital problems associated with infertility. Journal of Reproductive and Infant Psychology, 5, 49-57.
- Daniluk, JC. (1997). Gender and infertility. In S. R. Leiblum (Ed.). Infertility: Psychological issues and counseling strategies (pp.103-129). New York: John Wiley & Sons.
- Domar, A.C., Broome, A., Zuttermeister, P.C., Seibel, M., & Friedman, R. (1992). The prevalence and predictability of depression in infertile women. *Fertility and Sterility*, 58, 1158-1163.
- Draye, M.A.. Woods, N.F., & Mitchell, E. (1988). Coping with infertility in couples: Gender differences. Health Care for Women International, 9, 163-175.
- Greil, A.L. (1997). Infertility and psychological distress: A critical review of the literature. Social Science and Medicihe, 45, 1679-1704.
- Hirsch, A.M., & Hirsch, S.M. (1988). The effect of infertility on marriage and self-concept. Journal of Obstetrics and Gynecological Neonatal Nursing, 18, 13-20.
- Larsen, A., & Olsen, D.H. (1990). Capturing the complexity of family systems: Integrating family theory, family scores, and family analysis. In T.W. Draper & A.C. Marcos (Eds.), Family variables; Conceptualization, measurement, and use: New perspectives on family (pp.19-47). Thousand Oaks, CA: Sage Publications.
- Lazarus, R.S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Levin, J.B., Sher, T. G., & Theodos, V. (1997). The effect of intracouple coping concordance on psychological and marital distress in infertility patients. Journal of Clinical

Family Process, Vol. 42, No. 1, 2003 © FPI, Inc.

Psychology in Medical Settings, 4, 361-372.

- McCubbin, H.I., & Patterson, J.M. (1983). Family transitions: Adaptations to stress. In H.I. McCubbin & C.R. Figley (Eds.), Stress and the family: Coping and normative transitions (pp. 5-25). New York: Brunner/Mazel.
- McCubbin, H.I., Thompson, E., Thompson, A., & McCubbin, M. (1993). Family schema, paradigms, and paradigm shifts. In A. Turnbull, J. Patterson, S. Behr, D. Murphy, J. Marqquis, & M. Blue-Banning (Eds.). Cognitive coping, families, and disability (pp.239-255). Baltimore: P.H. Brookes.
- Newton, C.R., Sherrard, M.A., & Glavac, I. (1999). The fertility problem inventory: Measuring perceived infertility-related stress. *Fertility and Sterility*, 72, 54-62.
- Patterson, J.M. (1989). Illness beliefs as a factor in patient spouse adaptation to treatment for coronary artery disease. Family Systems Medicine, 7, 428-442.
- Patterson, J.M. (1993). The role of family meanings in adaptations to chronic illness and disability. In A. Turnbull, J. Patterson, S. Behr. D. Murphy, J. Marquis, & M. Blue Banning (Eds.), Cognitive coping, families, and disability (pp. 221-238). Baltimore: P.H. Brookes.
- Robinson, GE., & Stewart, DE. (1996). The psychological impact of infertility and new reproductive technologies. *Harvard Revieu* of Psychiatry, 4, 168-172.
- Sabatelli, R.M., Meth, R.L., & Gavazzi, S.M.

(1988). Factors mediating the adjustment to involuntary childlessness. *Family Relations*, 37, 338-343.

- Sadler, A.G., & Syrop, C. H. (1987). The stress of infertility: Recommendations for assessment and intervention. *Family Therapy Collections*, 22, 1-17.
- Snell, S.A., & Rosen, K.H. (1997). Parents of special needs children: Mastering the job of parenting. Contemporary Family Therapy, 19, 425-442.
- Spanier, G:B. (1976), Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and the Family, 38, 15-28.
- Stanton, A.L. (1991). Cognitive appraisals, coping processes and adjustment to infertility. In A.L. Stanton & C. Dunkel-Schetter (Eds.), Infertility: Perspectives from stress and coping research (pp. 87-108). New York: Plenum Press.
- Stanton, A., Tennen, H., Affleck, G., & Mendola, R. (1991). Cognitive appraisal and adjustment to infertility. Women and Health, 17, 1-15.
- Ulbrich, P.M., Coyle, A.T., & Llabre, M.M. (1990). Involuntary childlessness and marital adjustment: His and hers. Journal of Sex & Marital Therapy, 16, 147-158.
- Wright, J., Allard, M., Lecours, A., & Sabourin, (1989). Psychological distress and infertility: A review of controlled research. International Journal of Infertility, 34, 126-142.