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# STAGES OF RELATIONSHIP CHANGE AND INDIVIDUAL AND COUPLE ADJUSTMENT

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## ABSTRACT OF THESIS

### STAGES OF RELATIONSHIP CHANGE AND INDIVIDUAL AND COUPLE ADJUSTMENT

Although Prochaska and DiClemente (1984) considered the Transtheoretical Model of Change (TTM) to be relevant to couples therapy, there is a paucity of research in this area. Understanding how couples initiate change in their relationship still proves difficult due to barriers in the collection of couple level data and the fact that the majority of research on the TTM is individualistic in nature (Fowers, 2001; Schneider, 2003). Schneider (2003) reported that research suggests a relationship between change processes and relationship adjustment in couples. To my knowledge this study is the first test of the reliability and correlates of relationship change, beyond Schneider's initial work. The purpose of the present study was to examine how individual adjustment and readiness to change affect relationship adjustment. Data were collected from a sample of 389 married and cohabitating individuals using a self-report survey. Readiness to change was found to partially mediate the relationship between individual well-being and relationship adjustment. This link underscores the concept of women as health gatekeepers of the family. The present study validates research on the TTM with individuals but draws further attention to the idea that changing a dyadic relationship is not an individual process.

**KEYWORDS:** Relationship Adjustment, Individual Adjustment, Readiness for Change, Well-being, Gatekeeper

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April 24, 2008

STAGES OF RELATIONSHIP CHANGE AND INDIVIDUAL AND COUPLE  
ADJUSTMENT

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THESIS

Jacob A. LaCoursiere

The Graduate School  
University of Kentucky

2008

STAGES OF RELATIONSHIP CHANGE AND INDIVIDUAL AND COUPLE  
ADJUSTMENT

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THESIS

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A thesis submitted in partial fulfillment of the  
requirements for the degree of Master of Science in the  
College of Agriculture  
at the University of Kentucky

By

Jacob A. LaCoursiere

Lexington, Kentucky

Director: Dr. Kay Bradford, Associate Professor of Family Studies

Lexington, Kentucky

2008

For my parents, Alan and Mary. I am ready to change anything but you.

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## CHAPTER 1

### Introduction

#### *Statement of the problem*

Although Prochaska and DiClemente (1984) considered the Transtheoretical Model of Change (TTM) to be relevant to couples therapy, there is a paucity of research in this area. Even Prochaska's own couples therapy research makes only passing reference to the TTM (Hefner & Prochaska, 1984). The TTM is intended to be a general model of change that can be applied to many populations and domains of change. However, most studies utilizing this model have investigated addiction-related topics or individual psychotherapy. The TTM was never intended to explain only addiction-related phenomena, but was to apply to all types of self-initiated change. Given its promise, expanding influence, and staying power in other fields, couples therapy researchers would do well to investigate this theory.

To date, the difficulty in couples research lies within the individualistic viewpoint and analysis of marriage. Individualism portrays marriage as a choice that individuals make on the basis of present satisfaction and perceived future potential gratification with the relationship (Fowers, 2001). The social science of marriage by and large continues to focus on the individualistic perspective. Generally, this hindrance stems from either the lack of couple data during collection or from assessments that do not measure dyadic properties. Therefore, understanding how couples initiate collaborative change in their relationship still proves difficult due to barriers in the collection of couple level data and the fact

that the majority of research on the TTM is individualistic in nature (Fowers, 2001; Schneider, 2003). However, we do know this: changing a dyadic relationship is not an individual process.

## CHAPTER 2

### Literature Review

#### *Transtheoretical Model of Change*

The Transtheoretical Model of Change (Prochaska, DiClemente, Norcross, 1994) attempts to define the underlying structure of change. The TTM is a model of intentional change that focuses on the decision making of the individual and comprises three dimensions. Ten processes describe the ‘how’ of change. Five levels outline the ‘what’ of change, arranged hierarchically from symptom/situational to intrapersonal conflicts level. Lastly, there are the six stages of change, which describe the ‘when’ of change. According to the TTM (Prochaska & DiClemente, 1984, 1992), behavioral change occurs in a series of discrete stages. Stage status and movement between stages are thought to be influenced by (a) the perceived pros and cons of a problem behavior (and the decision balance between them), (b) self-efficacy (i.e., confidence in one’s ability to change the problem behavior), (c) temptations to revert to the problem behavior, and (d) 10 “processes of change,” which are basic coping mechanisms used to modify a problem (Prochaska & DiClemente, 1984, p. 33).

## *Stages of Change*

In the early 1980s, Prochaska, DiClemente, and their colleagues began to develop the stage model of behavioral change when working on smoking cessation. They drew on the work of Horn (1972, 1976, cited in DiClemente & Prochaska, 1982), who proposed four stages of progress in changing health-related behavior (contemplating change, deciding to change, short-term change, and long-term change) and Prochaska's analysis of the common elements of various systems of psychotherapy. In a subsequent article, also on smoking cessation, Prochaska and DiClemente (1983) identified five stages of change: precontemplation, contemplation, action, maintenance, and relapse. Their initial assumption that change "involves movement through an invariant series of stages" (Prochaska & DiClemente, 1984, p. 21) was illustrated with a wheel, showing unidirectional, cyclical movement through the stages. This was later modified to allow for backward movement or regression in the stage sequence. After the mid 1980s, relapse was viewed as an example of backward movement rather than a separate stage. Later, the wheel was replaced with an upward spiral pattern to illustrate cyclical movement and eventual progression through the stages of change (Prochaska, DiClemente, & Norcross, 1992). By 1991, the group had identified a stage they called *preparation*. Like decision making, preparation is located between contemplation and action, but is defined in terms of past and present behavior and future intentions.

The stage construct is the key organizing construct of the model. It is important in part because it represents a temporal dimension. However, this aspect was largely ignored by alternative theories of change. Behavior change was often construed as an event, such as quitting smoking, drinking, or over-eating. The TTM construes change as a process involving progress through a series of six stages:

*Precontemplation.* People are not intending to take action in the foreseeable future, usually measured as the next six months.

*Contemplation.* People are intending to change in the next six months.

*Preparation.* People are intending to take action in the immediate future, usually measured as the next month.

*Action.* People have made specific overt modifications in their life-styles within the past six months.

*Maintenance.* People are working to prevent relapse but they don't apply change processes as frequently as do people in action. They are less tempted to relapse and increasingly more confident that they can continue their change.

*Relapse.* People reverting from any stage to an earlier stage of change.

Regression occurs when individuals revert to an earlier stage of change. Relapse is one form of regression, involving regression from action or maintenance to an earlier stage. However, people can regress from any stage to an earlier stage. However, research shows few people regress all the way to the



precontemplation stage. The vast majority regress to contemplating or preparation (Prochaska & DiClemente, 1983).

### *Stages of Change Measures*

The stages of change construct has been operationalized using three major self-report questionnaires. The Readiness to Change Questionnaire (Budd & Rollnick, 1996) was first presented as offering support to TTM predictions. However, many people scored higher than average on more than one stage, and classifying people according to stage remained difficult. Results raised questions as to whether the present data fit a single continuum model rather than stage model. The University of Rhode Island Change Assessment Scale (URICA) was developed with psychotherapy patients in a general clinical setting (McConaughy, Prochaska, & Velicer, 1983). It was intended to capture all five stages of change but only four of the factors emerged. The Stages of Change Readiness and Treatment Eagerness Scale (Miller & Tonigan, 1996) was adapted from the URICA for problem drinking. Instead of TTM's five stages or the URICA's four stages, factor analysis yielded three factors. Precontemplation and preparation items were combined to form a scale called recognition. A factor resembling contemplation was called ambivalence. Action and maintenance scores loaded on a factor called taking steps. No evidence was found for a stage-like factor structure. To date, research with SOCRATES has been either mixed or disappointing (Carey, Purnine, Maista & Carey, 1999).

### *Change, Stages, and Couples*

Applying TTM principles to couples therapy is difficult because there are many areas of change that might be desirable. All of the difficulties noted by Horwath (1999) in translating the TTM to eating interventions apply equally if not more so to couples therapy. Horwath cited evidence that people are likely to be in different stages of change with respect to different health practices. There is no reason to believe that couple relationships would be different. Another possibility is that readiness to change one behavior is completely independent of readiness to change another behavior (Schneider, 2003). Not all change is considered good; what is positive for some may be problematic for others.

In the TTM as well as other social science research, the term “readiness” typically implies the use of motivation as well as self-efficacy when looking at an individual’s intent to change behavior. In this study, Readiness to change refers to affect and cognitions that lead to efforts to change (Bradford, 2008). Readiness also includes the initial behaviors (attempted change) in part because behavior change usually includes several attempts over time (Carey et al., 1999).

### *Relationship adjustment*

Relationship adjustment remains somewhat of an individualistic perspective since most measures tend to make use of an individual’s subjective interpretation of the relationship as the unit of analysis. Therefore, perception may be as important as any other factor regarding relationship adjustment. According to Hassebrauk and Fehr (2002), relationship quality is one of the most sound predictors of perceived relationship adjustment. By looking at multiple

studies, Hassebrauk and Fehr identified four common themes that are important to relationship quality: intimacy, agreement, independence, and sexuality.

Johnson, Amalozza, and Booth (1992) suggested similar components with the addition of perceived marital happiness, behavioral attribution, and divorce proneness. In this study, relationship adjustment refers to these different evaluative judgments about relationship quality. Lastly, there is also a growing appreciation for the view that a satisfying marriage is not merely a relationship characterized by the absence of distress as implied by most marital adjustment scales. (Bradbury, Fincham, Beach, 2000).

### *Individual adjustment*

Individual adjustment is often associated as the absence of depression and anxiety. For example, in determining the components of subjective distress, Lambert et al. (1996) found anxiety and depression were the most prevalent intrapsychic symptoms of distress. As McKay, Davis, and Fanning (1997) explained, it is the perception of events or situations that lead to emotions. Therefore, much like the definition of relationship satisfaction, individual distress and satisfaction are subjective interpretations. Although there are a few clear examples of individual distress, which were mentioned above, there is a vast area of uncertainty that relies on subjective interpretation. Individual adjustment can include both positive and negative affect. This can be categorized as psychological well-being versus distress. Items that measure well-being may have important treatment implications considering there are not viewed with the same dedication as anxiety and distress. Veit and Ware (1983) have suggested

that the assessment of a patient's psychological health should take into account perceived well-being in addition to anxiety and depression.

#### *Individual adjustment and Change*

An individual's perceived adjustment, or level of symptomatic distress versus well-being, would irrefutably relate to the TTM and how an individual moves between stages. Quite likely then the level of well-being versus distress within an individual would affect his or her perceptions and incentives to progress through the stages of change. It is recognized that individuals are profit orientated concerning exchange in relationships and to the extent that individuals perceive they are involved in inequitable relationships they manifest distress (Sprecher, 2001). The greater the distress engendered by an inequitable relationship the greater the effort individuals will exert toward eliminating this distress by restoring equity. Here the individual is perceiving the pros and cons of the problem and assessing his or her confidence or self-efficacy as to whether or not changes can be made in the relationship.

#### *Individual and Relationship adjustment*

Individual and relationship adjustment are somewhat overlapping principles in that individuals make up relationships. If the individuals within the relationship are experiencing distress, the relationship will inevitably have similar symptomology. Marchand and Hock (2000) explained that individual distress has a negative impact on relationship satisfaction regardless of the timing of the onset of symptoms. Similarly, the experience of relationship distress can have an effect on the presence of individual distress. Halford, Bouma, Kelly, and Young

(1999) reported that marital distress often results in the onset of depression or depressive symptoms for one or both members of the couple.

According to Halford et al. (1999), “there is a well established association between marital status and individual psychopathology” (p.180), which can be applied across multiple measures of distress. By reviewing findings of marital distress preceding the onset of depression, they explain that individual psychopathology is not the cause of marital distress. The relationship between marital satisfaction and individual distress is best understood as being reciprocal in nature (Halford et al., 1999; Marchand & Hock, 2000).

#### *Change and Relationship adjustment*

It appears from Schneider’s initial work that couples at higher stages of change make more gains in relationship adjustment than couples at lower stages of change (Schneider, 2003). However, it is posited that the acquired gains are not void of couple distress. Even if more gains are acquired from the changing aspects of the relationship, it is likely that the more change the couple is experiencing, the more couple distress will accompany it. This distress is most likely to come from the last five processes of change which are considered the behavioral processes and are used primarily for later stage transitions. It is here that the couple is now *doing* instead of *experiencing*. The couple is re-engineering behaviors and all the while trying to support one another in their endeavors. It is important for couples therapists to understand this dynamic because it is likely that these distressed couples may need more proper

interventions as they progress through the stages of change on their way to making more relationship gains.

### *Purpose of the Study*

Schneider (2003) reported that research suggests a relationship between change processes and relationship adjustment in couples. He proposed the use of the TTM with couples and created the Stages of Relationship Change Questionnaire (SRCQ) based on Prochaska's six stages of change. The purpose of the cross-sectional survey study was to examine how individual adjustment and readiness to change affected relationship adjustment. A modestly strong and consistent relationship between the predictor variable of individual adjustment and the outcome variable of relationship adjustment has been demonstrated in past and current research. Due to this relationship, the current study introduces the idea of readiness to change as a mediating variable between the predictor and outcome variable (Baron & Kenny, 1986).

To my knowledge this study is the first test of the reliability and correlates of relationship change, beyond Schneider's initial work. The study specifically sought to answer the following research questions: In a non-clinical sample does individual adjustment predict relationship adjustment? Does individual adjustment predict readiness to change? Does readiness to change mediate the relationship? Is the SRCQ a reliable and valid measure of readiness for change?

## Figure 2.1. Hypotheses in Structural Model

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1. Individual adjustment and relationship adjustment.
  - a. It is hypothesized that individuals with greater individual adjustment will have greater relationship adjustment. This relationship would be considered negative.
2. Individual adjustment and readiness to change.
  - a. It is hypothesized that individuals with greater individual adjustment will be less ready to change aspects of their relationship. This relationship would be considered positive.
3. Readiness to change and relationship adjustment.
  - a. It is hypothesized that the individuals who are less ready to change aspects of their couple relationship will have greater relationship adjustment. This relationship would be considered negative.

## CHAPTER 3

### Design and Methods

Data were from the “constituency questionnaire” survey, which was distributed through the Bluegrass Healthy Marriage Initiative (BHMI). BHMI is a collaborative effort between the University of Kentucky and Bluegrass Healthy Marriages Partnership to affirm and enable healthy marriages in central Kentucky for the purpose of increasing child well-being. This project seeks to bring together several organizations to provide a variety of educational events, programs and activities intended to help those who choose marriage for themselves to be successful in that pursuit. A single-stage non-probability sampling procedure was used for this study since the sample is chosen due to its convenience and availability.

### *Sample/Participants*

Data for this study consist of self-reported survey data from a nonstratified sample of 389 adult individuals in committed relationships who participated in BHMI. The sample was split into married and/or cohabitating couples and individuals. Of the 389 individuals adults who took the survey, 150 individuals (75 couples) emerged with surveys from both partners of the relationship. Over half of the participant data were collected from faith-based partner organizations (60%). Roughly 87% of this block reported perceptions of being at least “moderately religious.” Of the remaining portion, 20% came from social service agencies and 20% from civic organizations. The data were collected between 2006 and 2007, with oversight and consultation from an on-site, BHMI staff member for every sample.

### *Outcome Variable – Relationship adjustment*

Relationship adjustment is described as the overall satisfaction in a relationship. Specifically, this measure of overall functioning focuses on global happiness and differences in the relationship (Hassebrauk & Fehr, 2002). Relationship adjustment was measured using the Revised Dyadic Adjustment Scale (RDAS) (Busby, Christensen, Crane, & Larson, 1995), which measures three components of relationship adjustment: (a) consensus on matters of importance to relationship functioning, (b) dyadic satisfaction, and (c) dyadic cohesion. The RDAS is a 14-item Likert-type questionnaire based on Spanier’s 32-item Dyadic Adjustment Scale (DAS). The cutoff for the total score of the



Table 3.1. Demographic Characteristics of Participants (N=389)

Characteristic	Mean	SD
Age	41.5	12.3
Educational Level	5.73 (2-year college +)	1.06
Annual Household Income	4.42 (≈\$58,131)	1.57
Sex	Percent	<i>N</i>
Male	49	191
Female	51	198
Marital status		
Married	94	366
Cohabiting	6	23
Ethnicity		
White, Non-Hispanic	81	315
African American	8	31
Other (minority)	4	16
Native American	2	8
Hispanic/Latino	1	4
Religion		
Protestant	51	198
Catholic	31	121
Other/no-preference	4	16
Non-denominational	1	4

RDAS is 48. Scores at or below the cut-off indicate clinical distress and the RDAS has been shown to distinguish reliably between distressed and nondistressed samples (Busby et al., 1995). The instrument has a reported alpha reliability of .90, with each of the three subscales yielding alpha reliability coefficients of .80 or greater. Due to the scores from Chronbach's alpha reliability and Guttman and Spearman's split-half reliability coefficients, the team was able to confirm that the RDAS has internal consistency and split-half reliability. In the current study both factors were reliable, with Cronbach's  $\alpha = .88$  (males) and  $\alpha = .90$  (females). The mean score on the RDAS was  $M = 49.5$  ( $SD = 9.0$ ).

*Predictor Variable – Individual adjustment*

Individual adjustment is defined as the level of functioning in an individual, which includes an overall well-being versus distress. Moreover, individual adjustment is seen as the lack of symptomatic distress which is often associated with the absence of depression and anxiety. Individual adjustment is measured using the Outcome Questionnaire Short Form 10.2 (OQ-10.2) (Lambert, Umphress, Burlingame, Hansen, Vermeersch, & Clouse, 1996), which was developed from the Outcome Questionnaire 45.2. The OQ-10.2 is a widely used, 10-item instrument designed to provide a standardized measure of symptom severity (distress) and overall functioning (well-being) in an individual. The 5-point Likert-type scale ranges from 0 (*never*) to 4 (*almost always*). The instrument has both a positive and negative scale with the first five items worded positively and the final five items worded negatively. Scores range from 0 to 40, and are summed, with higher values indicating greater distress. Lambert et al.

(1996) reported coefficient alphas between .82 and .92. Seelert (1997) reported an internal consistency value of .88 for the OQ-10.2. In the current study, both factors were reliable, with Cronbach's  $\alpha = .90$  (males) and  $\alpha = .89$  (females) on the positive scale and  $\alpha = 0.81$  (males) and  $\alpha = 0.75$  (females) on the negative scale. The mean score on the OQ-10 was  $M = 9.8$  ( $SD = 5.5$ ).

#### *Mediating Variable – Readiness to change*

Readiness to change is defined as the extent to which an individual is motivated to change behavior. Readiness refers to affect and cognitions that lead to efforts to change (Bradford, 2008). The Stages of Relationship Change Questionnaire (SRCQ) was designed to measure several aspects of the stages of change described in the TTM, and specifically readiness for change associated with the aspects of marital satisfaction measured by the 9 subscale categories of the Marital Satisfaction Inventory-Revised (MSI-R) (Global Distress, Affective Communication, Problem-Solving, Communication, Aggression, Time Together, Finances, Sexual Satisfaction, Role Orientation, and Conflict over Childrearing). The SRCQ discerns stages according to the likert-scale response for the specific item. For each item, participants indicated whether they were not intending change (precontemplation), thinking about change (contemplation), preparing to change (preparation), making changes (action), or trying to prevent problems from returning (maintenance). The stage of change score is then calculated by finding the mean response across the 9 items. The 9 items of this scale form a composite Readiness to change score with good reliability (Cronbach's  $\alpha = .87$ ). In the current study, both factors were reliable, with

Cronbach's  $\alpha = .82$  (males) and  $\alpha = .85$  (females). The mean score on the SRCQ was  $M = 16.5$  ( $SD = 7.4$ ).

Perceived religiosity, perceived financial stress, age, and whether or not the couple would use relationship education, were statistically controlled in the study.

### *Multivariate Modeling, Design, and Analysis*

*Non-independence/Missing data.* There remains questionable validity and reliability of relationship data that are obtained from a single informant. This phenomenon is seen in family research when the respondent is asked to consider her or his own characteristics, as well as the partner's, and derive an assessment of the relationship between them. In dyadic research, the responses of the two members of the dyad are likely to be correlated, and thus considered non-independent (Kenny and Kashy, 1991).

Data sets can sometimes contain little information to allow us to decide whether the missing data are missing completely at random, missing at random, or nonignorable. In the present study, missing data were generally concentrated in a small number of variables, with a scattering of missing data on the other variables. This flux was dependant upon SES factors among different participant groups in the sample and therefore there was an informed choice that the missing data were not MCAR. Current research suggests that if data are not MCAR, missing values should be imputed (Yuan, 2000). (SRCQ = 7.0% missing; RDAS = 4.5% missing; OQ-10 = 3.0% missing).

Data were imputed using the technique of expectation maximization (EM). This approach iterates through a process of estimating missing data and then estimating parameters. The M step involves performing maximum likelihood estimation as if there were no missing data. Then, the E step finds the conditional expectation of the missing values given the observed data and current estimated parameters. These expectations then are substituted for the missing values. In many cases, the resulting parameter estimates by FIML are virtually identical to the estimates calculated by the use of EM, and therefore EM was used to impute the data (Navidi, 1997).

*Data Analyses.* The first step began with exploratory and confirmatory factor analysis of our three measures. Second, bivariate correlations between all study variables were calculated to assess correlations as well as check for multicollinearity. The last step implemented multivariate analysis by means of mixed linear modeling and structural equation modeling. Data were analyzed using SPSS statistical software and AMOS 7.0 for structural equation modeling.

*Mixed Linear Modeling.* Mixed linear models are a powerful class of models used for the analysis of correlated data and allow one to model the within-subject dependence and get a picture of the subject-level pattern of change (Kashy & Kenny, 2000). Mixed linear models are more formally referred to as hierarchical linear models (HLM). HLM is an appropriate analytic technique for analysis of nested or hierarchically structured data in which individual observations are nested within groups. Traditional statistical techniques are inadequate in modeling hierarchical data in part because they assume that there

is no dependency in the data. HLM takes into account the dependence between these couples' observations.

Multivariate analysis consisted of a two-pronged approach that incorporated both HLM and SEM. The analysis began with HLM due to the existence of a subset of participants within the larger sample who had matched-pair coupled data. The primary strength of this multilevel model is the simultaneous incorporation of measurement error at the individual level into a model accounting for the matched-pair design (Barnett et al., 1993). Therefore, the analysis began by using the entire sample (n = 389). Three separate blocks were run: a direct model, a mediational model, and a full model that included all variables of interest. The direct model tested both the positive and negative OQ scales with the RDAS. Religiosity, age, financial perceptions, and use of relationship education were tested as control variables. The mediational model tested both the OQ positive and negative on the mediating variable, the SRCQ. The full model tested both the positive and negative OQ scales, the SRCQ, and religiosity with the RDAS. Secondly, HLM allows for the test of covariation, which ultimately is the most central feature of this model for couples' data. As demonstrated by Barnett et al., "the covariance captures the dependence of pairs of residuals computed from the same subject" (p. 798), which in this case was the couple itself. Ultimately, this aided in the efficiency of performing SEM and drawing appropriate conclusions based on the coupled sample (n = 150).

*Structural Equation Modeling (SEM)*. Once HLM was complete, it was anticipated that results would show a significant covariance among the matched-pair coupled data. Thus, a structural model was designed with the variables of interest in order to test the hypothesized model with couple level data. Even though there is distinct overlap in HLM and SEM, SEM offers some distinct advantages. In terms of appropriate model specification, SEM offers the ability to estimate factor loadings rather than assume them all to be equal as in HLM (Li et al., 1998). This feature alone allows more flexibility than HLM and serves to improve overall model fit. Using SEM, the goal was to take previous results from the HLM model to test all pathways for men and women. SEM allowed the testing of gendered effects and therefore examined how men's and women's responses were differentially predictive. The SEM model incorporated the couple subset which included only matched-pair data ( $n = 150$ ). Two structural equation models were run: a direct model and a full model. The purpose of testing the direct model was grounded in the theoretical assumptions of this paper. This involved the OQ positive as the predictor, with observed variables for both males and females. The outcome variable was the RDAS for both males and females. Religiosity was the continuous control variable.

## CHAPTER 4

### Results

#### *Factor Analyses*

Principle component factor analyses were run on both the OQ-10 and RDAS. Alpha reliabilities were consonant with scores on the measures' original formations. A maximum-likelihood confirmatory factor analysis was performed on the SRCQ using Amos 7.0. The fit for the measurement model for males was good ( $\chi^2 = 12.8$ ,  $df = 10$ ,  $CFI = .994$ ,  $p = .00$ ,  $RMSEA = .039$ ). The model fit for females was acceptable ( $\chi^2 = 15.3$ ,  $df = 13$ ,  $CFI = .996$ ,  $p = .00$ ,  $RMSEA = .030$ ). These data are available upon request.

#### *Bivariate Correlations*

All correlations between the variables of interest were statistically significant at  $p < .05$ , moderate in strength, and in the directions hypothesized. The predictor variable of individual adjustment was most strongly correlated with relationship adjustment ( $r = -.618$  for men;  $r = -.519$  for women). Readiness to change was significantly correlated with relationship adjustment ( $r = -.250$  for men;  $r = -.373$  for women). Lastly, readiness to change was correlated with individual adjustment ( $r = .236$  for men;  $r = .253$  for women).



## *Multivariate Analysis*

*Hierarchical Linear Modeling.* Results of the HLM direct model showed that individual well-being was significantly correlated with relationship adjustment while individual distress was not. Test statistics for significant paths were:  $F(1,336) = 94.0, p = .000$  for individual well-being and  $F(1, 340) = 5.08, p = .025$  for religiosity (output shown as unstandardized). Individual distress was not significant,  $F(1, 339) = 1.31, p = .252$ . The remaining control variables of age, financial perception, and use of relationship education also were not significant in the model. The covariance of coupled data was statically significant, ( $\rho = .485, p < .001$ ), with  $\chi^2 = 2333.7$ .

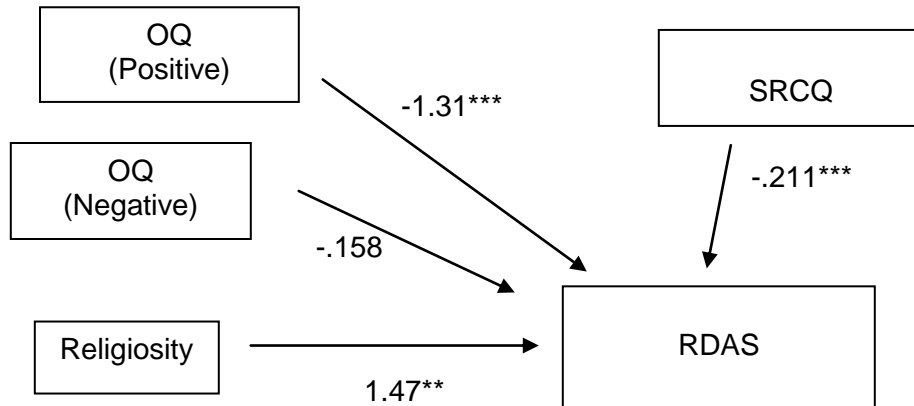
The HLM mediational model showed individual well-being was significantly correlated with readiness to change while individual distress was not. Test statistics for significant paths were:  $F(1, 376) = 9.80, p = .002$  for individual well-being. Individual distress was not significant,  $F(1, 382) = .750, p = .387$  (output shown as unstandardized). The covariance of coupled data was statistically significant, ( $\rho = .555, p < .001$ ), with  $\chi^2 = 2612.1$ . Results of the full HLM model showed individual well-being, readiness to change, and the control variable of religiosity were significantly correlated with relationship adjustment while individual distress was not. Test statistics for significant paths were:  $F(1, 373) = 108.0, p = .000$  for individual well-being,  $F(1, 361) = 18.6, p = .000$  for readiness to change, and  $F(1, 360) = 7.87, p = .005$  for religiosity (output shown as unstandardized).

Table 4.1. Bivariate Correlations, Means, and Standard Deviations

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Individual adjustment	1	.904**	.865**	.253**	-.519**	.529**	.144*	-.031	.045	-.107	.056	-.184**	.258**	.043
2. Individual Adjust (positive)	.881**	1	.568**	.241**	-.574**	.557**	.129	-.003	.118	-.165*	.092	-.212**	.288**	.001
3. Individual Adjust (negative)	.839**	.481**	1	.205**	-.326**	.364**	.127	-.057	-.055	-.012	.000	-.107	.158*	.083
4. Readiness to change	.234**	.251**	.145*	1	-.375**	.545**	.198**	.110	.254**	-.113	-.002	-.166*	.266**	-.018
5. Relationship adjustment	-.620**	-.652**	-.399**	-.259**	1	-.753**	-.127	.031	-.114	.178*	-.126	.126	-.201**	.030
6. Need change in relationship	.608**	.596**	.439**	.408**	-.705**	1	.234**	.010	.167*	-.163*	.076	-.206**	.253**	.014
7. Would use Relationship Ed.	-.063	-.158*	.062	.166*	.136	.001	1	.033	-.028	.072	-.195**	-.027	.020	-.116
8. Marital Status	-.071	-.012	-.116	-.008	-.085	.078	-.057	1	.139	-.254**	.212**	-.452**	.164*	-.348**
9. Race (dichotomous)	-.195**	-.201**	-.131	.125	.195**	-.043	.001	-.062	1	-.202**	.042	-.220**	.096	.059
10. Education	-.002	-.060	.067	-.093	.120	-.029	.174*	-.043	-.202**	1	-.251**	.391**	-.262**	.168*
11. Perceived religiosity	.139	.259**	-.040	-.047	-.309**	.204**	-.228**	.191**	.046	-.251**	1	-.153*	.227**	-.242**
12. Income	.043	.052	.019	-.189**	.052	-.049	-.041	-.084	-.160*	.269**	-.084	1	-.519**	.362**
13. Perceived financial stress	.116	.106	.091	.199**	-.230**	.176*	-.089	.086	.064	-.301**	.046	-.449**	1	-.199**
14. Age	-.008	-.014	-.001	-.110	.115	.023	-.090	-.121	.110	.200**	-.006	.371**	-.178*	1
Mean (Men)	9.11	3.56	5.55	16.26	50.10	1.89	0.74	1.04	1.09	5.83	1.77	4.67	2.70	40.47
Standard Deviation (Men)	5.20	3.23	2.81	6.77	7.98	.964	.438	.201	.285	1.02	.681	1.39	.731	12.0
Mean (Women)	10.73	3.79	6.94	18.75	48.66	2.26	0.84	1.09	1.21	5.73	1.65	4.28	2.71	42.11
Standard Deviation (Women)	5.55	3.39	2.88	7.87	9.12	1.01	.364	.280	.406	1.07	.676	1.64	.867	12.47

Note: Men's scores in bottom left. Women's scores in top right.

Figure 4.1. HLM: Full model (n = 389)



Note: Coefficients listed as unstandardized. (\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ )

Individual distress was not statistically significant,  $F(1, 371) = 1.21, p = .271$ . The covariance of coupled data was significant, ( $\rho = .285, p < .05$ ), with a  $\chi^2 = 2506.6$ . The statistically significant level of covariation confirmed my a priori assumption that couple observations were dependent based on shared relational characteristics. Since individual distress was not significant in all three models a second run of each of the models was executed without this variable. The change in the chi square statistic was not statistically significant. Therefore, individual distress was removed from the model ( $\Delta\chi^2 = 0.9; p < .61$ ).

*SEM - Direct model.* The direct relationship between individual well-being and relationship adjustment was tested prior to the full model. For both husbands and wives, individual well-being predicted relationship adjustment ( $\beta = -.50, p < .001$ ;  $\beta = -.41, p < .001$ ; husbands and wives respectively). Wives' individual well-being was not significantly related to husbands' relationship adjustment ( $\beta = -.001, p < .98$ ) while husbands' individual well-being was significantly related to wives' relationship adjustment ( $\beta = -.28, p < .01$ ). The only statistically significant

control variable was the relationship of wives' religiosity to husband's relationship adjustment ( $\beta = .22, p < .05$ ). Since the model was saturated, fit indices were perfect and equal to 1 (RSMEA = 0).

*SEM - Full model.* Once the direct links between individual well-being and relationship adjustment were determined, the final step was to include readiness for change in the model to test for mediation through possible indirect effects. Therefore, the full model tested the direct effects of individual well-being with relationship adjustment and the indirect effects of individual well-being through readiness to change with relationship adjustment. Lastly, the control variable of religiosity was added. The fit for this model was considered good ( $\chi^2 = 3.49, df = 4, CFI = .978, p = .000, RMSEA = .217$ ).

As in the direct model, individual well-being predicted relationship adjustment for both husbands and wives ( $\beta = -.37, p < .001; \beta = -.36, p < .001$ ; respectively). Results generally confirmed Hypothesis 1 and showed that couples with higher individual well-being had higher relationship adjustment. Individual distress was not predictive in the structural model and was contrary to the hypotheses. However, in the presence of readiness to change, the direct effect of wives' individual well-being remained insignificantly related to husbands' relationship adjustment ( $\beta = .06, p < .54$ ) while husbands' individual well-being was not significant with wives' relationship adjustment ( $\beta = -.16, p < .14$ ). Also, in testing the full model, the continuous control variable of religiosity was not significantly related to any variable in the model. Whereas wives' religiosity was significantly linked with husbands' relationship adjustment in the direct model ( $\beta =$

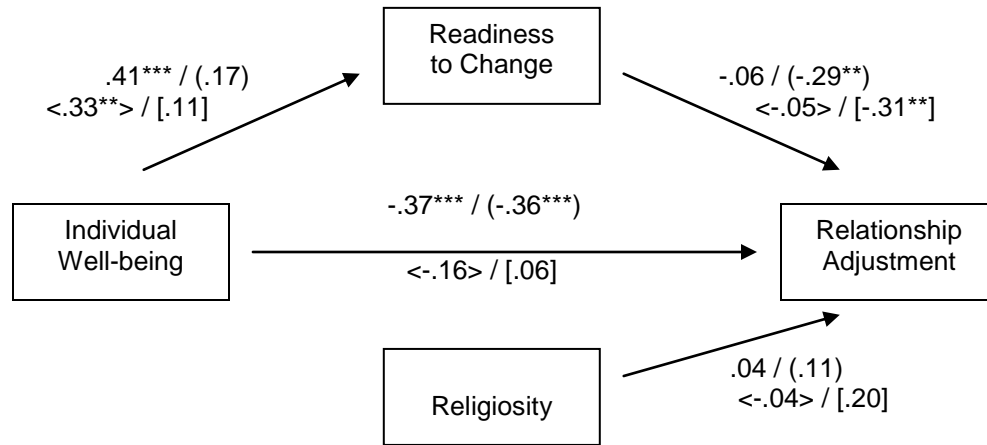
.22,  $p < .05$ ), this relationship was not statistically significant in the full model ( $\beta = .20$ ,  $p < .054$ ).

With the addition of readiness to change to the model, there were distinct associations between husbands' individual well-being and readiness to change. Husbands' individual well-being was significantly linked to wives' readiness to change ( $\beta = .33$ ,  $p < .01$ ) as well as husbands' readiness to change ( $\beta = .41$ ,  $p < .001$ ). Both of these estimates were of moderate strength. On the other hand, wives' individual well-being was not significantly correlated with either husbands' or wives' readiness to change. Results generally confirmed Hypothesis 2 and showed that couples with higher individual well-being were less ready to change aspects of their relationship.

There were also distinct associations between wives' readiness to change and relationship adjustment. Wives' readiness to change was significantly linked with both husbands' ( $\beta = -.31$ ,  $p < .01$ ) and wives' ( $\beta = -.29$ ,  $p < .01$ ) relationship adjustment. Conversely, husbands' readiness to change was not significantly correlated with either wives' or husbands' relationship adjustment. Results generally confirmed Hypothesis 3 and showed that couples who were less ready to change aspects of their relationship had greater relationship adjustment.

*SEM - Indirect effects.* The direct pathway between husbands' individual well-being and relationship adjustment was significant as noted but there were also two indirect pathways that were significant, through wives' readiness to change. Thus it appeared that wives' readiness to change mediated the relationship between husbands' individual and relationship adjustment.

Figure 4.2. SEM: Full model w/ coupled data



Note: Men's score → Men's score = no parentheses; Women's score → Women's score = ( )  
 Men's score → Women's score = < >; Women's score → Men's score = [ ]

Therefore, in the presence of wives' readiness to change, husbands' individual well-being was linked to husbands' relationship adjustment both directly ( $\beta = -.37$ ,  $p < .001$ ) and indirectly via husbands' individual well-being with wives' readiness to change ( $\beta = .33$ ,  $p < .01$ ) and wives' readiness to change with husbands' relationship adjustment ( $\beta = -.31$ ,  $p < .01$ ). Thus all pathways were significant which suggested partial mediation. Baron and Kenny (1986) illustrated that a hand-calculable significance test for indirect effects can be executed with models including only three variables. Using unstandardized estimates, the standard error of  $ab$  is:  $SE_{ab} = [b^2 SE_a^2 + a^2 SE_b^2 + SE_a^2 SE_b^2]^{1/2}$ . The ratio  $ab/SE_{ab}$  is interpreted as a  $z$  statistic that can be used to test the significance of both the indirect and total effects and conclude whether or not the indirect effect is significant. With this standard error,  $z = (-.254) / (.023) = -11.04$ , which is statistically significant at  $p = .01$ . This result shows that wives' readiness to change is a significant partial mediator of the link between husbands' individual

well-being and relationship adjustment. What this appears to show is that women's individual well-being does not aid in motivating women to make changes in their relationship but their husband's lack of well-being does. Further, it suggests that men's readiness to change has no bearing on his or his wife's relationship adjustment while women's readiness to change has bearing on both. It appears from these findings that men seem to be motivated to change by their lack of well-being while women are motivated by their concern for their partner's lack of well-being.

## CHAPTER 5

### Discussion

To my knowledge this study was the first test of the reliability and correlates of relationship change beyond Schneider's (2003) initial work. The purpose of the present study was to examine how individual adjustment and readiness to change affected relationship adjustment. In addition, the study sought to answer whether the SRCQ was a reliable and valid measure of readiness for change. Generally, the results supported the existing linkages in the literature. I was able to expand upon these existing linkages by showing a bifurcation of individual adjustment into distress and well-being, where only well-being was statistically significant in the model. Finally, with the use of structural equation modeling, the three hypotheses in SEM were generally supported. However, these hypotheses were not always supported when responses were gender-separated, thus meaning wives' scores on some variable were not always predictive in the path to husbands' scores on that same variable and vice

versa. In the structural model, trends showed that it was one's own individual well-being that predicted their own relationship adjustment; while men's individual well-being predicted readiness for change; and lastly, the women's readiness for change predicted relationship adjustment. Also, through this trend, readiness to change was found to be a partial mediator between individual and relationship adjustment.

In regard to the construct of individual adjustment, findings suggested that it may not be the individual's level of distress that creates more distress in the relationship but rather the lack of well-being and other positive, possibly subjective traits. These findings are consonant with Seligman and Csikszentmihalyi's (2000) work on "positive psychology," the scientific study of the strengths and virtues that enable individuals to thrive. Positive psychology is considered a catalyst for change that will move the focus of psychology from remediation of the negative, to also building the positive. It does this by examining those virtuous characters that are often ignored areas of human experience. Positive aspects of mental health (well-being) could be an important indicator related to an individual's coping ability or potential for mobilizing psychological resources to facilitate change processes. Similar to the results of the current study, Seelert (1999) found a significant correlation between well-being and perceived health, while no relationship was found between perceived health and distress. Conway and MacLeod (2000) argue for the existence of well-being as a separate dimension from distress and conclude that there is now substantial evidence that therapeutic approaches that focus on promoting well-



being and quality of life are effective. To date, readiness to change within the TTM has been described on a continuum of distress which then precipitates an individual's self-efficacy toward action. With regard to intervention, my current findings on well-being point to the importance of deemphasizing distress and emphasizing wellness. This would be a promising direction for further studies on the explication of the TTM with couples.

As an instrument, the SRCQ was found to be a reliable measure for both men and women. Notably, readiness to change partially mediated the path between individual well-being and relationship adjustment. While the path coefficients were modest at best, it still demonstrated the idea that one's level of readiness to change aspects of the couple relationship does have implications for relationship adjustment. However, this link was only found significant in one pathway of the structural model. Specifically, only the wife's readiness to change was a significant partial mediator of the link between husband's individual well-being and relationship adjustment. This finding may not be surprising at first glance since Schneider's (2003) findings from applying the TTM to couples therapy showed that husbands' use of change processes was unrelated to change in their own or their wives' relationship satisfaction. On the other hand, wives' use of change processes produced change in their own and their husbands' relationship satisfaction. These findings might suggest the rather unlikely case that there is nothing a husband can do to improve the relationship. However, a more likely explanation is recent research that suggests women tend to be farther along in readiness for change. Bradford (2008) found the majority of

men and women were in earlier stages of change, with women more often in the contemplation stage and men most often in the precontemplation stage. Further, women's higher readiness to change may be partially explained by the concept of "maternal gatekeeping." To explain wives' impact on husbands' involvement, Allen and Hawkins (1999) presented a definition of maternal gatekeeping where ultimately there are restraints to collaborative efforts between men and women in family decision-making. This research points to the more global idea that wives' are considered the "health gatekeepers" of the family. Historically, women have been the primary health care providers and health decision-makers for their families (Young & Dunniway, 2001). As the health gatekeepers of their family, women influence the men in their families, their children, and family decisions. Therefore, if they are not healthy, their family may not be healthy. Quite likely then, this idea transcends overall health and possibly includes the couples' well-being which appears to be driven from the mothers' and/or wives' of the family. These views underscore the importance of men in the link between individual and relationship adjustment and suggest the need for further explication of the TTM for couples' therapy – a sense of an almost needed "catch up" for husbands.

The motivational interviewing approach developed by Miller and Rollnick (1991) may be one addition to a couples' level stages of change construct that might further advance this idea. Motivational interviewing is a therapeutic approach that is designed to help people increase their intrinsic motivation to work toward change. It is believed to be particularly useful in those situations in

which clients have not yet begun to consider change necessary or are ambivalent about change. Using motivational interviewing, Cordova (2001) and colleagues created the Marriage Checkup (MC), which consisted of thorough relationship assessment and individualized feedback. They contend that once the initial move toward changing has begun, the naturally occurring contingencies are theorized to maintain partners' momentum toward action.

Findings from this study must be considered within the context of its limitations. First, the sample consisted mostly of those involved in marriage education and potentially creates a “self-selection” regarding those who elected to fill out a survey of this nature. Some distinctions need to be drawn as to whether they, by nature, were more ready to make changes or perhaps in healthier relationships overall. Second, a small to average sample size (mostly white) drawn from convenience limits both the reliability and generalizability of the findings. Data also were self-reported and social desirability may have affected responses. The sample consisted of individuals drawn from local religions, social, and civil service agencies. Thus, the sample consisted predominantly of first-marriage individuals and couples who consider themselves at least moderately religious. Lastly, even though missing data were accounted for in the study, there is still potential for bias.

Despite its limitations, this study provides a foundation for future research. The recent study validates research on the TTM with individuals but draws further attention to the idea that changing a dyadic relationship is not an individual process. First, more empirical attention needs to be paid to the validity

and utility of the TTM with couples. Second, findings reflect the importance of addressing the difficulties faced in these women's lives of being the "health gatekeepers" for their family, while also attending to the ambiguity of men and their role in the couple's relationship adjustment. As a first step to rectify this, further research may need to explicate an unknown variable that may better account for the gendered differences in one's readiness to change the relationship. Finally, given the evidence-based approach of motivational interviewing and the current findings on positive psychology, efforts should focus on additional strategies for couples' that highlight a client-centered and strength-based approach. By focusing more on building the positive by examining those virtuous characters that are often ignored areas of human experience, these approaches may further capitalize on clients' intrinsic readiness to change.

## References

- Allen, S. M., & Hawkins, A. J. (1999). Maternal gatekeeping: Mothers' beliefs and behaviors that inhibit greater father involvement in family work. *Journal of Marriage and Family, 61*, 199-212.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Bradbury, T. N., Fincham, F. D., & Beach, S.R. H. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family, 62*, 964-980.
- Bradford, K. (2008). Readiness for change among marriage education participants as measured by the stages of relationship change questionnaire. *Manuscript in preparation.*
- Budd, R. J., & Rollnick, S. (1996). The structure of the Readiness to change Questionnaire: A test of Prochaska & DiClemente's transtheoretical model. *British Journal of Health Psychology, 1*, 365-376.
- Busby, D. M., Christensen, C., Crane, D.R., & Larson, J.H. (1995). A revision of the dyadic adjustment scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy, 21*, 289 – 308.

- Carey, K. B., Purnine, D. M., Maisto, S. A., & Carey, M. P. (1999). Assessing readiness to change substance abuse: A critical review of instruments. *Clinical Psychology: Science and Practice, 6*, 245-266.
- Fowers, B.J. (2001). *Beyond the myth of marital happiness*. San Francisco: Jossey-Bass.
- Gove, W.R., Hughes, M., & Style, C.B. (1983). Does marriage have positive effects on the psychological well-being of the individual? *Journal of Health and Social Behavior, 24*, 122-131.
- Halford, W.K., Bouma, R., Kelly, A., & Young, R.M. (1999). Individual psychopathology and marital distress: Analyzing the association and implications for therapy. *Behavior Modification, 23*, 179-216.
- Hassebrauk, M., & Fehr, B. (2002). Dimensions of relationship quality. *Personal Relationships, 9*, 253-270.
- Hefner, C. & Prochaska, J.O. (1984). Conjoint versus concurrent marital therapy. *Social Work, 29*, 287-294.
- Horwath C. C. (1999). Applying the transtheoretical model to eating behavior change: Challenges and opportunities. *Nutrition Research Reviews, 12*, 281-317.
- Johnson, D.R., Amalozza, T.O., & Booth, A. (1992). Stability and developmental change in marital quality: A three-wave panel analysis. *Journal of Marriage and the Family, 54*, 582-594.

- Kashy, D.A., & Kenny, D.A. (2000). The analysis of data from dyads and groups. In H.T. Reis & C. M. Judd, *Handbook of research methods in social and personality psychology*. Cambridge: Cambridge University Press.
- Kenny, D. A., & Kashy, D. A. (1991). Analyzing interdependence in dyads. In B. M. Montgomery & S. Duck (Eds.), *Studying interpersonal interaction*. New York: Guilford.
- Lambert, M. J., Finch, A. M., Okiishi, J., Burlingame, G. M., Mckelvey, C., & Reisinger, C. W. (1998). *Administration and scoring manual for the OQ-10.2*. American Professional Credentialing Services, LLC.
- Lambert, M.J., Umphress, V., Burlingame, G.M., Hansen, N.B., Vermeersch, D.A., Clouse, G.C., et al. (1996). The reliability and validity of the outcome questionnaire. *Clinical Psychology and Psychotherapy*, 3, 249-258.
- Marchand, J.F., & Hock, E. (2000). Avoidance and attacking conflict resolution strategies among married couples: Relations to depressive symptoms and marital satisfaction. *Family Relations*, 49, 201-207.
- McConaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research, and Practice*, 20, 368-375.
- McKay, M., Davis, M., & Fanning, P. (1997). *Thoughts and feelings: Taking control of your moods and your life*. Oakland, CA: New Harbinger Publications.

- Miller, W. R., & Tonigan, J. S. (1996). Assessing drinkers' motivations for change: The stages of change readiness and treatment eagerness scale (SOCRATES). *Psychology of Addictive Behaviors, 10*, 81-89.
- Navidi, W. (1997). A graphical illustration of the EM algorithm. *The American Statistician, 51*, 29–31.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*, 1102-1114.
- Prochaska, J. and C. DiClemente (1984). *The transtheoretical approach: Crossing traditional boundaries of therapy*. Homewood, Ill., Dow Jones-Irwin.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting & Clinical Psychology, 51*, 390-395.
- Prochaska, J. O. and C. C. DiClemente (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research & Practice, 19*, 276-288.
- Prochaska, J. O., & Velicer W. F. (1996). On models, methods and premature conclusions. *Addiction, 91*, 1281-1292.
- Rollnick, S., Heather, N., Gold, R., & Hall, W. (1992). Development of a short “readiness to change” questionnaire for use in brief, opportunistic interventions among excessive drinkers. *British Journal of Addiction, 87*, 743-754.



- Schneider, W. J. (2003). *Transtheoretical model of change with couples*. Doctoral dissertation, Texas A&M University.
- Seelert, K. R., Hill, R. D., Rigdon, M. A., & Schwenzfeier, E. (1999). Measuring patient distress in primary care. *Family Medicine Journal*, 31, 483-487.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Sprecher, S. (2001). Equity and social exchange in dating couples: Associations with satisfaction, commitment, and stability. *Journal of Marriage and Family*, 63, 599–613.
- Veit, C.T. & Ware, J.T. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting Clinical Psychology*, 15, 730-742.
- Young, K. & Dunniway, D. (2001). Women's services without walls. *Nurse Management*, 32, 25-27.
- Yuan, K.H. and Bentler, P.M. (2000). Three likelihood-based methods for mean and covariance structure analysis with non-normal missing data. *Sociological Methodology*, 165-200. Washington, D.C.

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