

A Test of Contextual Theory: The Relationship Among Relational Ethics, Marital Satisfaction, Health Problems, and Depression

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Abstract Few studies have examined the theoretical underpinning of contextual theory. Using structural equation modeling, the relationship among relational ethics (recognized as the most important aspect of contextual theory), marital satisfaction, depression, and illness was examined. Data came from a national sample of 632 mid-life, married individuals. Results supported Nagy's contextual theory. The total score of the Relational Ethics Scale was a significant predictor of marital satisfaction, and marital satisfaction was significantly associated with depression and health problems. Vertical and horizontal subscales of relational ethics also were significant predictors of depression and health problems through the mediating variable of marital satisfaction.

Keywords Contextual theory · Relational ethics · Marital satisfaction ·
Depression · Health

Introduction

Considered a pioneer of family therapy, Ivan Boszormenyi-Nagy began work in the 1950s that led to the creation of contextual theory (Boszormenyi-Nagy 1987; Boszormenyi-Nagy et al. 1991). From his clinical experiences, issues such as family loyalty, fairness, and

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trust emerged as cornerstones of the contextual approach to therapy (Boszormenyi-Nagy et al. 1991). Contextual theory became an accepted and widely used approach to therapy through which an emphasis on relational ethics became the impetus for change (Boszormenyi-Nagy and Krasner 1986).

It has been suggested that contextual theory is a valuable resource for psychotherapists (Grunebaum 1987; Hargrave and Pfitzer 2003) and that contextual theory principles have influenced family therapists around the world (Watson 2007). Nichols and Schwartz (2001, p. 50) referred to contextual theory as being “among the most thoughtful and underappreciated approaches to family therapy.” More recently, they wrote that “Among psychodynamic family therapists, few have made more important contributions than Ivan Boszormenyi-Nagy’s contextual therapy” (Nichols and Schwartz 2008, p. 244). Contextual theory has been described and used extensively in clinical and theoretical literature (e.g., Boszormenyi-Nagy and Krasner 1986; Boszormenyi-Nagy and Spark 1984; Goldenthal 1996; Hargrave et al. 1991; Van Heusden and Van den Eerenbeemt 1987). Clinicians have found it helpful in their work with families, including children, adolescents, and couples (Jones and Flickinger 1987; Lee 1995), and aging adults (Anderson and Hargrave 1990; Hargrave and Anderson 1990; Hargrave and Hanna 1997; Jones and Flickinger 1987). Feminist therapists also have suggested that because of the ethical dimension of contextual theory, it is a desirable approach to use in working with individuals, couples, and families (Dankoski and Deacon 2000; Grunebaum 1987). The basic systems concepts of contextual theory have been applied to larger systems. For example, it has been used to enhance understanding and therapeutic application within a cultural context, including being used as a “theoretically relevant (marriage and family therapy model) to Korean cultural context” (Moon 2000, p. 9). The tenets of contextual theory were applied to better comprehend and explore intervention for the international issue of ethno-political conflict (Zeo 2001). Finally, contextual theory concepts were used as a means of understanding larger social system relationships as researchers explored difficulties among agencies that were collaborating to do research (Diamond et al. 1991).

Despite the influence of contextual therapy in the field of family therapy, there have been few attempts by researchers to study it empirically. Several studies have used contextual theory concepts as a theoretical basis for their conceptualization of a problem or for analyses (e.g., Moon 2000; Stokes 2003; Zeo 2001), although the theory wasn’t explicitly tested. Yet, in a comprehensive review of family therapy outcome research, Miller et al. (2000) reported that no contextual therapy outcome studies have been published. However, progress has been made towards creating measures that may assist in doing contextual theory research. There was an effort to develop a Contextual Family Therapy Therapist Action Index as part of an outcome study of contextual family therapy to examine the conformity of the therapists’ behaviors to contextual theory (Bernal et al. 1990). However, the results of the outcome study were never published.

Some research has focused on the development of a reliable and valid scale to measure relational ethics, called the Relational Ethics Scale (RES) (Hargrave et al. 1991). Relational ethics, which will be described later in detail, is one of the four dimensions of relating within relationships that are considered core to contextual theory. It refers to the balance of give and take that exists within relationships. In addition to the few studies to test its reliability and validity, the RES has been used to support concurrent validity of other scales (Hargrave and Sells 1997; Pollard et al. 1998) and to measure horizontal and vertical relationships in different populations (Lee 1995; Shokouhi-Behnam et al. 1997).

Burke (1999) designed a tool to measure the ledger of merits within a relationship. Comparing the concept to financial transactions, Boszormenyi-Nagy (1987, p. 154)

describes the ledger of merits as “the mutually quantitative, balance-like nature of the fluctuations of give-and-take of human relationships.” Burke’s measure has yet to be normed and reliability and validity of the tool are unknown.

Of importance to this study is the relationship between relational ethics and marital satisfaction. To date, only one study has examined the association between relational ethics and marital satisfaction (Hargrave and Bomba 1993), and this study had a sample of only 36 people. The primary focus of the study was on understanding variables that impact the RES rather than on marital relationships. In addition, no research has tested Nagy’s theoretical propositions that relational ethics is related to psychological and physical health problems. Consequently, more research is needed to examine the relationship between relational ethics and marital satisfaction, as well as psychological and physical health.

Beyond the aforementioned studies, little basic research has been done on contextual therapy concepts and theoretical propositions. The purpose of this study was to examine a key concept of contextual theory, relational ethics, and to test its hypothesized relationship to marital satisfaction, depression, and physical health.

Relational Ethics and Contextual Theory: An Overview

Relational ethics is one of four dimensions of relational reality in contextual theory, which is considered the premise on which the theory is built (Boszormenyi-Nagy et al. 1991; Boszormenyi-Nagy and Krasner 1986). The four dimensions include facts, psychology, transactions, and relational ethics, and are separated only for purposes of gaining a conceptual understanding. However, Boszormenyi-Nagy believed the dimensions are intertwined, having great impact on each other, with relational ethics being of greatest importance because this is where healing occurs in therapy when problems exist (Boszormenyi-Nagy and Krasner 1986; Hargrave et al. 1991).

The facts dimension refers to preexisting factors, conflict that is unavoidable, and consequences (Boszormenyi-Nagy and Krasner 1986). The second dimension is individual psychology. Contextual therapy places importance on considering the emotional and cognitive functioning of each individual member of the larger system, the family (Goldenthal 1993). Transactions, the third dimension, is based on concepts of family systems and refers to issues of power and transactions in family relationships. According to Goldenthal (1993, p. 6), the third dimension considers issues such as “patterns of communication among family members, triangulation, coalitions, boundaries within family members and between the family and the environment, family roles and the potential for scapegoating, and issues of interpersonal power and control.” Relational ethics, the fourth dimension of contextual theory, requires that each family member assume accountability for how his/her actions impact all relational members. When accountability is not attended to and when the give and take of relationships become imbalanced, Boszormenyi-Nagy (1987) theorized that the result may entail a plethora of problems, including depression, sexual malfunction, anorexia, stagnant relationships, and psychosomatic illness.

To illustrate the concept of relational ethics, Hargrave and Pfitzer (2003) suggest that in a horizontal relationship (i.e., a relationship between equals, such as a husband and wife, rather than between generations), both individuals are entitled to give and receive respect, care, love, intimacy, nurture, financial responsibility, and fidelity. When relational ethics are balanced, each can focus on giving these things rather than on what they are entitled to receive. However, for example, if one partner is not faithful and controls all the family resources, the other partner may become angry, depressed, manipulative, consider divorce, or have an affair in an attempt to seek what he or she is entitled to from the partner.

On the other hand, when people feel destructively entitled, they may seek what they are entitled to or become negative and hurtful to others. The unfairness that they have experienced may leave them blind to the distress of others (Dankoski and Deacon 2000). Constructive entitlement refers to the process in which people are compassionate and concerned with and for others, but not at such an expense that they lose themselves (Goldenthal 1996).

To understand how the dimensions of contextual theory interact, we need to remember that it is an intergenerational theory. Hargrave and Pfitzer (2003) explained that the dimensions interact among generations, acting as a megaphone. Facts and interactions impact individual psychology, or the manner in which we perceive the world cognitively and emotionally. Due to this perception created by facts and transactions (systems), our relational ethics are formed and passed on to other generations. Relational ethics serves as a megaphone in that the balance of give and take, loyalties, and issues of trust are amplified among the generations. Therefore, considering genetics, birth order, and other facts combined with system issues from a person's family of origin such as parentification, a person may leave his or her family of origin feeling entitled to be taken care of and may then expect his or her children to take care of him or her respectively. These actions amplify the feelings of entitlement from one generation to the next.

In creating contextual theory, Boszormenyi-Nagy offered a theoretical approach that gives insight into human behavior and offers an understanding of how to move partners and families from dysfunction to health. On this topic, Boszormenyi-Nagy et al. (1991, p. 210) wrote "Contextual therapy converges with advances in the fields of immunology, in the sense that its ultimate goal is the prevention of dysfunction and the rehabilitation and strengthening of the family's own 'immune system'—the resources of care, concern, and connection." The four dimensions of relational reality support the basis for assessment, the use of technique, and offer leverage for creating change that results in the aforementioned goal.

Contextual Theory, Marriage, Depression, and Health

Based on the premise that relationships are healed through strengthening trust, commitment, loyalty and reciprocity between family members (Boszormenyi-Nagy 1987; Boszormenyi-Nagy and Spark 1984; Hargrave et al. 1991), contextual therapy works towards balancing relationships and moving people towards health (Jones and Flickinger 1987). Boszormenyi-Nagy et al. (1991) offered insight concerning the purpose of contextual theory when they wrote that "the entry point and purpose of interventions are to provide healing for an individual's pain or symptoms, as well as to address relational problems" (p. 201). Concerning relational functioning, which is the basis of contextual theory and health, Boszormenyi-Nagy (1987, p. 311) stated:

The party who fails to earn merit vis-à-vis his relational partners or lastingly ignores his factual accountability for damaging consequences to posterity may become depressed, insomniac, anorectic, addicted, ruined by success, sexually malfunctional, relationally stagnant, accident-prone, or psychosomatically ill. As a psychological consequence, conscious or unconscious feelings of guilt may or may not accompany the person's disentanglement, i.e., the accumulation of existential guilt on his or her side.

Therefore, if a person is not ethical in the give and take of relationships, the consequences are negative and can impact physical and psychological health. Furthermore, issues of trustworthiness can abound, and Boszormenyi-Nagy (1987, p. 230) asserted that “The lack of trustworthiness in one’s relational world is the primary pathogenic condition of human life.”

From the contextual theory perspective, it is through a focus on the balance of give and take that exists within relationships that individuals, couples, and families can be healthier. Boszormenyi-Nagy et al. (1991, p. 204) explained that “the preservation of a long-term, oscillating balance among family members, whereby the *basic life interests* of each are taken into account by the others, is the criterion for healthy functioning.”

The assertion by Boszormenyi-Nagy that there is a relationship between relational functioning and problems including depression, marital dysfunction, and psychosomatic illness (Boszormenyi-Nagy 1987; Van Heusden and Van den Eerenbeemt 1987) has been supported by empirical research. Marital dissatisfaction has been shown to be linked to general psychological distress (e.g., Hawkins and Booth 2005; Whisman 1999; Williams 2003), depression and anxiety (e.g., Beach et al. 2003; Choi and Marks 2008; Fincham et al. 1997; Rodrigue and Park 1996; Thompson et al. 1995; Whisman 1999; Whisman and Bruce 1999), and post traumatic stress disorder (e.g., Whisman 1999). Marital dissatisfaction also has been linked to physical health problems (e.g., Bookwala 2005; Campbell 2003; Hawkins and Booth 2005; Umberson et al. 2006; Wickrama, et al. 1997), including chronic fatigue and immune dysfunction syndrome (Goodwin 1997), congestive heart failure (Coyne et al. 2001), angina pectoris (Medalie and Goldbourt 1976), mortality (Hibbard and Pope 1993), coronary heart disease (Orth-Gomer et al. 2000), poorer blood glucose control and increased depression among diabetics (Trief et al. 2006), and health-related behaviors (Wickrama et al. 1997). In a comprehensive review of the marriage and health research, Kiecolt-Glaser and Newton (2001, p. 472) concluded that “marital functioning is consequential for health,” and that “negative dimensions of marital functioning have indirect influences on health outcomes through depression and health habits, and direct influences on cardiovascular, endocrine, immune, neurosensory, and other physiological systems.”

The Present Study

Unfortunately, as noted, few researchers have examined contextual theory. Boszormenyi-Nagy has suggested that relational ethics, which is recognized as the most important aspect of contextual theory, is associated with marital functioning, depression, and psychosomatic illness. Therefore, the purpose of this study was to use structural equation modeling to conduct basic research to test Boszormenyi-Nagy’s theoretical proposition that there is a relationship among relational ethics, marital satisfaction, depression, and illness.

The primary research hypotheses were:

1. There will be a significant association between the RES (Hargrave et al. 1991), the horizontal and vertical RES sub-scales, and the Revised Dyadic Adjustment Scale (Busby et al. 1995), suggesting that couples who report high relational ethics will also report high dyadic adjustment.
2. Marital satisfaction will be a significant mediating variable between relational ethics and depression and physical health.
3. There will be a negative association between the RES (total, horizontal, and vertical sub-scales) and the Center for Epidemiological Studies Depression Scale (Kohout

- et al. 1993), suggesting that couples who report high relational ethics will report less depression.
4. There will be an inverse association between the RES (total, horizontal, and vertical sub-scales) and global health, suggesting that couples who report high relational ethics will have fewer reported health problems.

Methods

Procedure

Data for this research were taken from a national study of midlife marriages. The survey was mailed to 3,000 midlife married individuals throughout the country who were between the ages of 40 and 50, selected from a national probability sample purchased from InfoUSA, formally known as the Donnelly Corporation.

To maximize response to the survey, Dillman's (2000) procedures for conducting survey research were used, including an initial mailing, reminder post cards being sent two weeks after the initial mailing reminding participants to respond, and re-mailing questionnaires to non-responders after four weeks of the initial mailing. Individuals who had not sent in either questionnaire (initial or second mailing) were later called by researchers and invited to participate in the study.

Of the initial sample, 518 questionnaires were undeliverable due to incorrect addresses, and 566 members of the sample were eliminated because they did not fit the study criteria of being married and between the ages of 40 and 50. Of the remaining surveys, 632 were returned, resulting in a 33.0% response rate. While response rates are expected to vary based on the research population, survey methods used, and other variables (Babbie 2001; Dillman et al. 2007), the 33.0% response rate for this study may be considered relatively low.

Sample

Research participants were 43% female ($n = 275$) and 57% male ($n = 357$), with a mean age of 43.7 years. Ninety percent of participants were Caucasian ($n = 569$), 5% were African American ($n = 30$), and the remaining 5% were of other ethnicities ($n = 32$). Participants had been married from 1 to 30 years, with a mean of 13.7 years. The majority (64%; $n = 402$) of participants in the sample were in their first marriage, with 27% ($n = 168$) being in their second marriage, and 9% ($n = 55$) in their third or fourth marriage. The mean number of children in each participant family was 2.8, with a range of 0–10. Most of the participants reported being employed full-time (75%; $n = 473$), with only 11% ($n = 67$) reporting part-time employment. Participant family income ranged from \$10,000 to over \$150,000. The median family income was between \$70,000 and \$79,000. The mode income level reported by participants (11%; $n = 71$) was between \$40,000 and \$49,999. Two participants (.03%) reported an income of less than \$10,000 and 65 participants (10%) reported an income of \$150,000 or more.

Compared with the general U.S. population of married individuals between the ages of 40 and 50, this sample has a somewhat above-average percentage of college graduates (43%). In addition, minority mid-life married people are underrepresented in the sample. However, the median income of the participants in this study is consistent with the national

median income of \$75,482 for married people in this age group (U.S. Census Bureau 2002).

Description of Measures

Relational Ethics Scale

The main independent variable for the study was the Relational Ethics Scale (RES), a 24-item scale that was developed to measure the contextual theory concept of relational ethics. The RES includes two 12-item subscales to measure vertical and horizontal relationships. Examples of items on the vertical subscale include, “I could trust my family to seek my best interests,” “I received the love and affection from my family that I deserved,” “At times, I was used by my family unfairly,” and “I felt life was dominated by my parents’ desires.” Examples of items on the horizontal subscale include, “I try to meet the emotional needs of my spouse,” “My spouse stands beside me in times of trouble or joy,” “When I feel angry, I tend to take it out on my spouse,” and “I am taken for granted or used unfairly by my spouse.” Negative items were reversed scored, and higher scores on the RES, including the two sub-scales, suggest better relational ethics. A Cronbach’s alpha demonstrated the scale’s reliability (.93), and concurrent validity was established by finding significant correlations between the RES and the Dyadic Adjustment Scale, as well as the Personal Authority Questionnaire (Hargrave et al. 1991).

Revised Dyadic Adjustment Scale

The Dyadic Adjustment Scale (DAS; Spanier 1976) is a standardized assessment used to assess the quality of the marital relationship (Busby et al. 1995). The Revised Dyadic Adjustment Scale (RDAS; Busby et al. 1995) is a 14-item measure that was created from the DAS. Like the DAS, the RDAS also assesses marital quality, but is more brief. Furthermore, previous research has demonstrated adequate internal consistency, split-half reliability and construct validity (Busby et al. 1995). Low scores on the RDAS suggest greater marital distress, whereas higher scores represent marital non-distress, with a cutoff score of 48. Nondistressed couples are expected to score 48 and above on the RDAS and scores of 47 and below are indicative of distressed couples.

The Center for Epidemiological Studies-Depression Scale

The Center for Epidemiological Studies-Depression Scale (CES-D) was designed to measure symptoms of depression in the general population (Radloff 1977). It is intended for use in research rather than for clinical work (Radloff and Teri 1986). Originally consisting of 20 items, a shortened 11-item CES-D was used for this study (Kohout et al. 1993). When compared to the original CES-D, the 11-item CES-D has been shown to tap into the same dimensions, is briefer, and does not lose its reliability. Likelihood of having clinical depression is indicated by higher scores on the scale. The scale ranges in score from 0 to 22. Testing of the CES-D has shown the scale to be valid and reliable, with Chronbach’s alphas ranging from .85 to .92 (Radloff 1977; Radloff and Teri 1986).

Health Questions

This study used two questions to assess and compare general health to the RES. The first question asked the participant “Compared to people your own age, how would you rate your overall physical health at the present time?” The participant could then check a box indicating “Excellent,” “Good,” “Fair,” or “Poor.” Because the distribution of responses was skewed towards good health, the variable was recoded a zero for responses of excellent, good, or fair health, and a one for poor health. The second question was “What major health problems do you presently have? (Circle all that apply.)” The participants were given a list of 21 health problems, including items such as “Heart conditions,” “Diabetes,” “Alcoholism,” “Anxiety problems,” and “Other,” with a space provided where they could fill in any health problem not listed. The items from the two measures were combined and summed, creating a scale ranging from 0 to 22. Measures of self-reported global health and self-reported health problems have been shown to be valid measures of health when compared with doctors’ evaluations of health (Ferraro and Farmer 1999). Moreover, previous research has successfully combined these measures (Kahn and Fazio 2005), with one study finding factor loadings of over .90 when using these two measures to assess health (Sandberg et al. in press).

Control Variables

Several control variables were included as part of the data analysis, including gender, years married, and education. These variables were included because they have been shown to interact with marital satisfaction (e.g., Burr 1970; Holman et al. 2001; Miller 2000; Whyte 1990). Gender, number of years married, and education were measured using standard demographic questions. The education measure had seven response options ranging from “completed grade school” to “completed a graduate degree.”

Results

Correlations

Before testing the hypotheses, correlations were conducted among the variables used in the study. As indicated in Table 1, the RES and its subscales were all significantly correlated with measures of marital satisfaction, depression, and health problems. In addition, marital satisfaction, depression, and health problems were significantly intercorrelated.

Structural Equation Models

Three Structural Equation Models (SEM) using LISREL (Linear Structural Relationships; Joreskog and Sorbom 2003) were performed to test the hypotheses of the study. The three models were similar in that they tested the effect of RES on marital satisfaction, depression, and health problems. Marital satisfaction was an intervening variable between RES, depression, and health problems. The models also included gender, education, and years married as control variables. Disturbance correlations were included between depression and health problems to represent the correlation between the two variables, which shared common variance due to questions concerning depression from the CES-D. One model

Table 1 Correlation matrix of variables representing RES total, RES horizontal, RES Vertical, depression (CESD), health problems, marital satisfaction (RDAS), and control variables

	CESD	RES total	Horizontal	Vertical	Health problems	RDAS	Years married	Education
CESD	1.00							
RES Total	-.349**	1.00						
Horizontal	-.340**	–	1.00					
Vertical	-.220**	–	–	1.00				
Health problems	.470**	-.208**	-.143**	-.182**	1.00			
RDAS	-.391**	.506**	.752**	.099*	-.171**	1.00		
Years married	.051	-.018	-.038	.006	.083*	-.04	1.00	
Education	-.068	.078	.032	.087*	-.142**	.039	-.073	1.00

* $p < .05$ (2-tailed); ** $p < .01$ (2-tailed)

used the total RES score for the main exogenous variable, while the second model used the horizontal subscale of the RES, and the third model used the vertical subscale of the RES.

SEM was used in these analyses for two reasons. First, an advantage of SEM over traditional regression procedures is that SEM controls for measurement error, which leads to more accurate regression, or path, coefficients, than does regression analysis (Byrne 2001). Second, SEM allows the testing of direct paths between the main variables, as well as indirect paths (Kline 2005). The analyzed indirect paths included the paths from RES (total score, horizontal, and vertical) to depression and to health problems via their prior effect on marital satisfaction.

Before examining the path coefficients to the three models, it was necessary to test the goodness-of-fit of the models. Hu and Bentler (1999, 1998) have recommended reporting the Standardized Root Mean Square Residual (SRMR), the Root Mean Square of Approximation (RMSEA), and the Comparative Fit Index (CFI). Kline (2005) recommended a cutoff value for the SRMR of .10 or less to show goodness of fit. For the RMSEA, cutoff values of $\leq .05$ have been suggested to report good fit. Scores greater than .90 suggest good model fit using the CFI. Hu and Bentler (1998) explain that chi-square statistics are so sensitive to sample size that reporting them is of little value in studies with large samples. Therefore, chi-square statistics were not reported.

Total RES Model

Model 1 (Fig. 1) represents the path model that includes the variable for the total RES score. Based on the goodness of fit models reviewed and the recommended cutoff criteria, model 1 appeared to be an acceptable fit to the data (SRMR = .054, RMSEA = .081, and CFI = .94). Significant paths included the direct paths between the RES and marital satisfaction, marital satisfaction and depression, and marital satisfaction and health problems. The estimated standard path coefficient for the direct effects of RES on marital satisfaction was .51 ($p < .01$). Statistically significant inverse relationships existed between marital satisfaction and depression and between marital satisfaction and health problems, with respective estimated standardized paths of $-.39$ ($p < .01$) and $-.17$ ($p < .01$). Estimated standard path coefficients for the direct effects of the control variables on marital satisfaction were not significant.

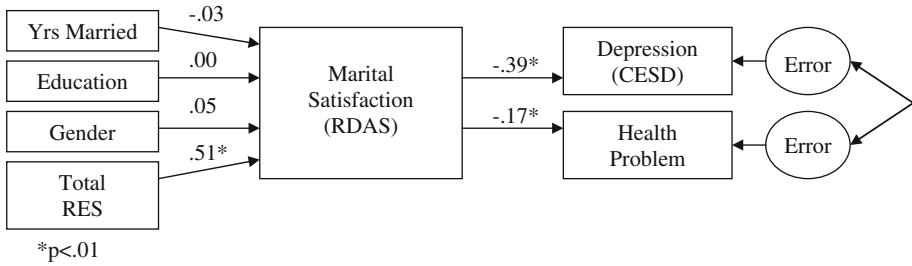


Fig. 1 Model 1. SEM path model including RES total score. Path values are standardized. *Note.* Indirect paths were calculated, but not illustrated on the figure so it is easier to read. ^aIndirect path coefficient from RES to depression via its prior effect on marital satisfaction was $-.199$ ($p < .01$). ^bIndirect path coefficient from RES to health via its prior effect on marital satisfaction was $-.087$ ($p < .01$). SRMR = .054; RMSEA = .081; CFI = .94

In addition to the direct paths, the indirect paths from RES to depression and from RES to health problems were calculated and analyzed. The indirect estimated path coefficients were $-.199$ ($p < .01$) and $-.087$ ($p < .01$) respectively. Both indirect paths were significant.

Horizontal Subscale Model

Model 2 (Fig. 2) represents the path model that replaces the RES total score with horizontal RES. Concerning goodness of fit, Model 2 appeared to be a good fit to the data (SRMR = .04, RMSEA = .054, and CFI = .998). The estimated standard path coefficient for the direct effect of horizontal RES on marital satisfaction was $.76$ ($p < .01$). The estimated standard path coefficients for the direct effects of marital satisfaction on depression and on health problems were $-.39$ ($p < .01$) and $-.17$ ($p < .01$) respectively. The estimated standard indirect path coefficients from horizontal RES to depression and to health problems were both significant at respective values of $-.296$ ($p < .01$) and $-.129$ ($p < .01$).

Gender was the only control variable that had a significant effect on marital satisfaction, with the estimated standard direct path coefficient value of $.08$ ($p < .01$). This indicates

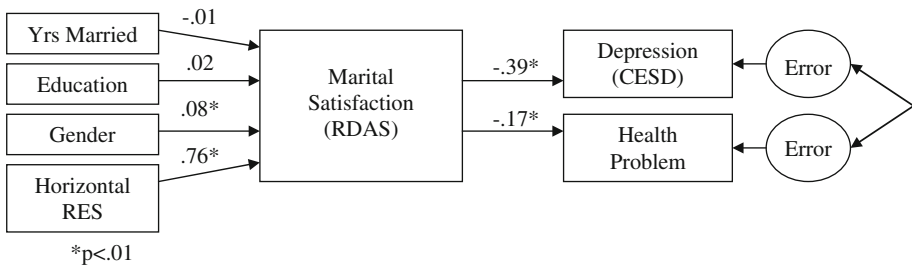


Fig. 2 Model 2. SEM path model including horizontal RES. Path values are standardized. *Note.* Indirect paths were calculated, but not illustrated on the figure so it is easier to read. ^aIndirect path coefficient from RES to depression via its prior effect on marital satisfaction was $-.296$ ($p < .01$). ^bIndirect path coefficient from RES to health via its prior effect on marital satisfaction was $-.129$ ($p < .01$). SRMR = .04; RMSEA = .054; CFI = .98

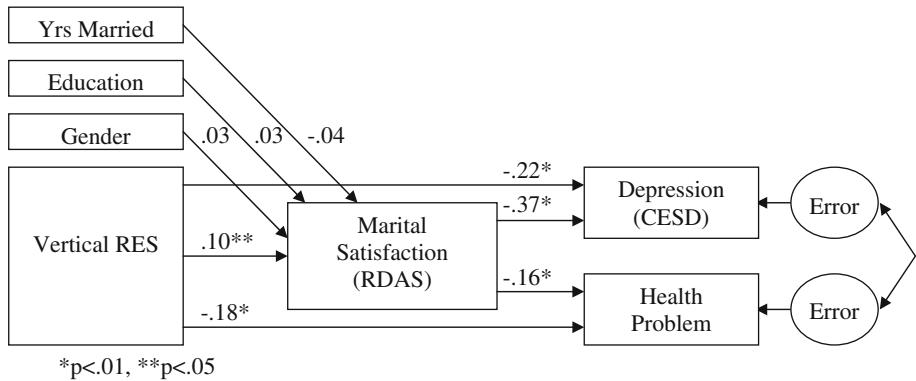


Fig. 3 Model 3. SEM model including vertical RES and added paths. Path values are standardized. *Note.* Indirect paths were calculated, but not illustrated on the figure so it is easier to read. ^aIndirect path coefficient from vertical RES to depression via its prior effect on marital satisfaction was $-.037$ ($p < .01$). ^bIndirect path coefficient from vertical RES to health via its prior effect on marital satisfaction was $-.016$ ($p < .01$). SRMR = .037; RMSEA = .058; CFI = .96

that female participants had lower levels of marital satisfaction while controlling for the horizontal subscale of RES, as well as age and number of years married.

Vertical Subscale Model

Initially, Model 3 (Fig. 3) was designed exactly as model 1 and model 2, except for analyzing variable relationships with vertical RES instead of the total RES or horizontal RES. Goodness of fit statistics revealed that this model provided unacceptable results (SRMR = .061, RMSEA = .085, and CFI = .89). All three scores were beyond the recommended cut-off values suggested by Hu and Bentler (1998, 1999) and Kline (2005). Therefore, the model was rejected.

Tests of the missing paths in the initial model indicated that two additional direct paths would contribute significantly to the goodness-of-fit of the model: vertical RES on depression and vertical RES on health problems. After reviewing the data and theory, it was evident that the additional paths were supported in the literature. Specifically, the direct paths were added to better reflect the contextual theory proposition that, while vertical relationships have a strong and lasting impact on marital functioning (i.e., loyalty conflicts; Boszormenyi-Nagy 1987; Boszormenyi-Nagy and Krasner 1986), they also can result directly in depression and health problems without marital functioning as an intervening variable (Boszormenyi-Nagy 1987; Boszormenyi-Nagy and Krasner 1986). The added direct paths from vertical RES to depression and to health problems improved model fit, resulting in the model fitting the data well (SRMR = .037, RMSEA = .058, CFI = .96). This was a substantial improvement over the initial model.

The estimated standard path coefficient for the direct effects of vertical RES on marital satisfaction was .10 ($p < .05$). While the z -value (2.26) revealed this to be a significant path, it is much lower than the path between total RES and marital satisfaction (.51, $p < .01$) and between horizontal RES and marital satisfaction (.76, $p < .01$). The estimated standard path coefficient from vertical RES to depression was $-.22$ ($p < .01$) and from vertical RES to health problems was $-.18$ ($p < .01$). In addition, the indirect paths from vertical RES to depression ($-.037$, $p < .01$) and from vertical RES to health problems

($-.016, p < .01$) were significant. There were no significant path coefficients from the control variables to marital satisfaction.

Applying the results of the three SEM models to the hypotheses for the study indicates that all of the hypotheses were supported. The significant relationships between the total RES, horizontal RES, and vertical RES scales with marital satisfaction supported the first hypothesis. In all of the models, marital satisfaction was significantly related to depression and health, which supports the second hypothesis. There were significant direct paths between vertical RES and depression, as well as significant indirect effects between total, horizontal and vertical RES and depression. These results support the third hypothesis. Similar results for health as the dependent variable support the fourth hypothesis.

Discussion

Relational Ethics

Of all variables examined in the three models, the strongest relationship was between horizontal relational ethics and marital satisfaction. The RDAS, which was used to examine marital satisfaction, focuses on aspects of the horizontal relationship (the relationship between equals rather than among generations) of the couple. Couples who are responsible for their own actions and who offer due merit and consideration in their marital relationships are more likely to be satisfied in their marital relationship. They are also more likely to experience no or low depression, and are at decreased risk for health problems.

While horizontal relational ethics appears to have a significant effect on marital satisfaction, results from this study revealed that vertical relational ethics had a significant relationship with marital satisfaction as well, even when horizontal relational ethics were not considered. Boszormenyi-Nagy (1987), Boszormenyi-Nagy and Krasner (1986), and others (e.g., Goldenthal 1996; Hargrave and Pfitzer 2003) have explained that when conflicts, such as destructive parenting or abandonment occur to a child, the child may attempt to realize unjust obligations to obtain love and acceptance from his/her family of origin, and that these destructive attempts often occur in horizontal relationships. For example, a man may be loyal to his physically abusive father by mistreating his wife. In this case, his loyalty to his father is damaging to the horizontal relationship with his wife. Therefore, his vertical relationship with his father would have an impact on marital satisfaction.

In addition to the relationship with marital satisfaction, reported vertical RES scores were inversely related to depression and health. Study participants who reported low vertical RES scores, or poor vertical relationships with their family of origin, were more likely to experience depression and an increased number of health problems via their previous effect through marital satisfaction. Therefore, lower scores on the vertical relational ethics scale were significantly associated with an increase of depression scores and number of health problems, with marital satisfaction acting as a mediating variable. For this model (Model 3), the direct paths between vertical relational ethics and depression and between vertical relational ethics and health problems were examined as well. These relationships were significant, suggesting that regardless of marital satisfaction, participants who indicated poor vertical relational ethics scores were more likely to experience depression and an increased number of health problems.

These findings are consistent with contextual theory. Boszormenyi-Nagy and Krasner (1986) identified depression as one of the grave consequences of poor vertical and/or

horizontal relationships that can surface in children and adults alike. An individual may internalize lack of trust after poor vertical relationships, resulting in depression or other symptoms, such as psychosis. Hargrave and Pfitzer (2003) refer to this internalization as shame, resulting in feeling unlovable. Concerning vertical relationships and health, Boszormenyi-Nagy and Krasner (1986) clearly theorized that when a generational violation of trust occurs (or when poor vertical relationships exist) psychosomatic illness may result.

Boszormenyi-Nagy and Krasner (1986) believed that the heart of contextual therapy, derived from contextual theory, is the improvement of client quality of life. Given the statements that have been made concerning the relationship between relational ethics and marital functioning and physical and mental health, or illness (Boszormenyi-Nagy 1987), it is understandable that an emphasis on improved quality of life would be made. With the sample studied, it appears that there is support for the contextual theoretical claim that people who fail to relate ethically may be more prone to have stagnant relationships (as evidenced by the relationship between relational ethics and marital satisfaction), become more depressed, and deal with health problems (Boszormenyi-Nagy 1987).

Limitations of the Study

The primary limitation of this study concerns the generalizability of the findings. This sample, although large, underrepresented minority and less-educated populations and was restricted to married individuals between the ages of 40 and 50. Hargrave and Bomba (1993) studied small participant populations ranging in age from 20 to 68 years, but their primary purpose was to further validate the Relational Ethics Scale. This study goes beyond the goal of scale validation to testing key propositions of contextual theory. However, additional research needs to be conducted with other samples that span greater age, education, and ethnicity ranges.

While the results from this study suggest that there is a significant relationship between relational ethics and number of reported health problems, the specifics of this relationship were not explored. Future research should examine not only the number of health problems, but also should consider etiology, severity, environmental and socioeconomic influences, and other factors that influence health.

A general limitation of research using structural equation modeling is the potential omission of predictor variables that impact the total criterion variance, referred to as specification error (Kline 2005). While literature was reviewed and variables were discussed and examined for this study, there is a possibility that specification error exists.

Directions for Future Research

This basic research study has set the foundation for other questions to be asked and answered about contextual theory. For example, the focus was on the contextual theory dimension of relational ethics. As basic research also focuses on the other key dimensions of the theory-facts, psychology, and transactions-answers about the relationship among the four dimensions can be explored, and the overall theory can be tested empirically in a more holistic manner.

There is also a need to test the effectiveness of contextual theory in its clinical application. Questions that need to be answered include the following: If therapy focuses on the dimension of relational ethics with clients, will significant and lasting improvement result? If the same variables used in this study are applied to an outcome study where therapists

use the concept of multidirected partiality to create change in therapy, will there also be a change in reported RES as Boszormenyi-Nagy and Krasner (1986) have proposed? And would the change in RES result in a change in marital satisfaction, depression, and health problems?

It has been acknowledged throughout this article that relational ethics is the pinnacle of contextual theory because it is the entry point where leverage for change and balancing occurs and where therapists can mobilize the most powerful factors for healing (Boszormenyi-Nagy 1987; Boszormenyi-Nagy and Krasner 1986; Hargrave and Pfitzer 2003). Research that supports the concept of relational ethics supports the most important and greatest defining characteristic of contextual theory. Using a basic research design, this study serves not only as evidence of the statistical significance of the relationships and overall models analyzed, but it also may serve to lay the foundation for outcome studies to further examine this “thoughtful and underappreciated” theory (Nichols and Schwartz 2001, p. 50).

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