

Structural Relationships between Self - Differentiation and Subjective Wellbeing, Mental Health and Marital Quality "Fitting Bowen's Theory"

Naser Yousefi, MSc^{••}, Ozera Etemadi, Ph.D^{*}, Fateme Bahrami, Ph.D^{*}
Maryam Al-Sadat Fatehezade, Ph.D^{*}, Seyyed Ahmad Ahmadi, Ph.D^{*}
Kaumars Beshlideh, Ph.D^{**}

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Objective: Many theorists have attempted to illustrate family functions. The aim of this study was to examine the relationship between self-differentiation, mental well-being and welfare and the quality of an individual's married life, specifically in the framework of Bowen's theory.

Methods: The sample size for this descriptive research project consisted of 560 participants who were chosen at random from the clients referred to a number of counseling centers in the city of Isfahan, located in central Iran. Assessment tools utilized in this project consisted of Differentiation of Self Inventory-2 (DSI-2), General Health Questionnaire (GHQ), Satisfaction with Life Scale (SWLS) and Positive and Negative Affects Scales (PANAS) as well as Revised Dyadic Adjustment Scale (RDAS).

Results: Measurements were carried out to ensure the validity of this research: First, the validity of each subject questionnaire was examined by the Confirmatory Factor Analysis (CFA). Then, the structural model for the conceptualization of the relationship between differentiation of self and other factors along with the quality of an individual's married life was presented and accordingly adjusted by reviewing preceding studies in the framework of Bowen's theory.

Conclusion: It was concluded that the questionnaires were indeed valid to be used in both research and clinical settings.

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Keywords: Self-differentiation • Subjective well-being • mental health • marital quality • Bowen's theory • Modeling and Structural equations.

Introduction

Many theorists have attempted to illustrate family functions. One of the more well-known theorists in this area is Bowen (1) who developed the theory of the family system. It is fundamentally based on the concept of differentiation of self (2, 3).

Bowen's family systems theory (2, 3) has played an important role in theoretical and clinical development in the field of family therapy (1, 3).

Self-differentiation, the most central concept in Bowen's theory, has both intra-psychic and interpersonal dimensions. On an intra-psychic level, differentiation refers to the ability to distinguish emotional feelings from other intellectual processes. With the interpersonal level in mind, differentiation involves the capacity to develop a balance of autonomy while maintaining closeness with others. Intra-psychic dimensions of differentiation include emotional reactivity and difficulty in taking an "I" position, while interpersonal dimensions include emotional

Authors' affiliation: * Department of Psychology, Isfahan University. *** Department of Psychology, Shahid Chamran University.

• **Corresponding author:** Naser Yousefi, Student of Family Therapy, Department of Psychology, Isfahan University, Isfahan, Iran
Tel: +98 918 376 3989
E-mail: naseryousefi@yahoo.com

cut-off and fusion with others. These persons tend to engage in fusion with or emotional cut-off from others in most of their close relationships when under stress. Highly differentiated individuals, on the other hand, are not overwhelmed by strong emotions, thus do not feel the need to cut-off emotionally, and are able to take the "I" position in relationships i.e. to acknowledge ownership of one's thoughts and feelings without the need to conform to others' expectations (3-5).

In interpersonal situations, poorly-differentiated persons are thought to engage in fusion or emotional cut-off in response to stress or overwhelming anxiety (6).

Two major situations characterize couples with poor differentiation: (a) a state of fusion, where the anxiety to stay alone leads to diffusion of the boundaries between "I" and "We," or (b) a state of emotional cut-off, when the diffusion of the boundaries causes one of the partners to feel anxious about losing oneself, and as a result use physical or emotional avoidance or create conflicted relations with the other (7, 8).

Mental health is a state defined by well-being, partial release from anxiety and symptoms and the capacity for establishing constructive relationships as well as the ability to overcome daily pressures (9-11). A construct close to mental health is subjective well-being which consists of positive feelings and satisfaction with life including satisfaction with self and others in domains such as family and work (12).

Bowen says that low differentiation levels contribute to marital conflicts (1, 3). In view of this, the marital quality is assessed. Marital quality is a multi-dimensional concept; such dimensions include adjustment, satisfaction and cohesion (13). Adital (14) reasons that marital quality is calculated by taking into account a combination of contentment and adjustment within the relationship. When a family struggles with powers related to unity, anxiety arises. If unity overcomes, the family is directed toward more emotional function and person's self-obedience decreases and in the wake of this, his/her mental health falls into jeopardy (1, 3, 15, 16). In marital relationship, whenever the differentiation level falls low, fusion takes place between couples,

leading to low marital quality and compatibility (17, 18). Also, physical and mental health of the family members is endangered (10).

In particular, Bowen's family systems model (1, 3) emphasizes the strong positive relationship of self-differentiation with psychological well-being. These family patterns are believed largely to reflect the cultural values of individualism and independence (19). Bowen (1) argued that his theory was universal. Nevertheless, we assumed that Bowen's construct of differentiation seems to have relevancy to Iranian culture as well (20, 21).

Empirical findings support these claims regarding the ability of highly-differentiated individuals to manage the stresses of life. Highly-differentiated individuals were found to suffer from lower levels of avoidant and intrusive thoughts (21), general psychiatric distress (22), behavioral dysfunctions, trait anxiety and depression (23).

Empirical researches have supported Bowen's theory that links differentiation with psychological well-being (24). For instance, Skowron and Friedlander (25) reported that higher levels of differentiation were related to lower levels of psychological symptoms and that differentiation explained 42% of the variance in psychological distress in the sample. Using a sample of Israeli students, Peleg-Popko (26) reported that self-differentiation was negatively correlated with social anxiety and physiological symptoms. Surveying 221 adults, Skowron, Holmes and Sabatelli (27) also found that differentiation was significantly related to psychological well-being. Using a Philippine sample, Tuason and Friedlander (23) tested the cross-cultural applicability of Bowen theory and reported a significant influence of differentiation on psychological well-being and anxiety, similar to the results from USA samples. Chung and Gale (28) tested the cross-cultural applicability of Bowen theory and reported that there was a significantly different differentiation of psychological well-being, self-esteem and depression mood between Korean and European American students. Most studies concerning couples' differentiation examined its contribution to partners' marital adjustment

and marital satisfaction. Haber (29), for example, found that couples with higher levels of differentiation had lower levels of relationship conflicts. Another study of married couples also found a significant relationship between differentiation and marital satisfaction (30). In a similar vein, Skowron (31) found a positive correlation between differentiation and marital satisfaction, with husbands' emotional cut-off scores particularly correlating with both husbands' and wives' marital satisfaction scores (32).

Preceding researches have examined the relationship between differentiation-of-self level and subjective well-being (12, 33), mental health dimensions and symptoms of psychic disorders (34, 35), marital adjustment (31, 36), styles of marital relationship (16,37-39), couple's compatibility (40), marital satisfaction (41-43, 10), cordiality and sexual satisfaction (10,17,44, 45).

The present study will attempt to examine the Structural relationships between self-differentiation and subjective wellbeing, mental health and marital quality through Structural Equation Modeling (SEM) and to Bowen's theory.

Materials and Methods

Design: Research method in this study is in the format of descriptive-correlation. Researchers attempted to examine, the validity of the relevant research tools is examined by Confirmatory Factor Analysis (CFA). Then, the presented conceptual model (diagram 1) is fitted by using χ^2 , Akaike's Information Criterion (AIC), Non-normed Fit Index (NNFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Square Error of Approximation (RMSEA) and by applying SPSS15 and Lisrel 8.53 software. Byrne (46), Bentler's (47), Toit, & Stephen (48), believe above indices are important in terms of accuracy and fit of the model.

Samples: The population in this study included 1024 married couples (i.e. 2048 subjects) referred to clinical and spiritual counseling centers in Isfahan province (both rural and urban) in Iran in autumn, winter and

spring of 2008. The Sample size included 720 subjects which were chosen randomly from among 2048 subjects mentioned above (therefore sample includes females or males, (no married couples). The Participants were asked to complete the self-report questionnaire either in counseling centers or outside the counseling centers and returns them at the next counseling session. Out of 720 subjects who were randomly chosen, 160 subjects did not return the questionnaires because they did not return to clinical and spiritual counseling centers the next session. The remaining 560 (298 males and 262 females) participated in this study.

In brief, statistics for demographic variables were as shown in table 1.

Table1. Summary statistics for demographic variables

Variables		Males	Females
Age	Sex	n =298	n =262
	Mean	34.6	31.3
	SD	2.54	3.12
Religion	Islam	n =292	n =260
	Other religions	n =6	n =2
Education	Below Junior level	44.51%	57.14%
	High school	30.23%	38.54%
	4-year college	24.82%	4.07%
	Master or Doctorate	0.4%	0.1%
Employed	Yes	69.2%	22%
	No	30.8%	88%
Length of marriage	Mean	9	7
	SD	11.7	9.4
	Range	3-18	2-19
Income per month (Dollars)	Mean	323.87	141.26
	SD	418.17	357.51
Current living situation	Living with spouse	79.2%	20.4%
	Living with parents	8.6%	79.2%
	Living alone	12.1%	0.1%

Instruments

Differentiation of Self Inventory-2 (DSI-2): The DSI (49) is a 43-item questionnaire ranging from 1, (not all true for me) to 6 (very true for me) using 6-point type scales. DSI contains four subscales: The 11-item

Emotional reactivity (ER) scale, this scale Scores are reversed. The 11-item "I" position (ID) scale. The 13-item emotional cut-off (EC) scale. The 9 - item fusion with others (FO) Scale. CFA by Skowron, Stephen, Razia (35) has confirmed the aforementioned subscales. The reliability of the questionnaire was calculated by internal consistency using Cronbach's Alpha. For ER, ID, EC and FO, we had 0.89, 0.81, 0.84 and 0.86, respectively (49). In present study, this questionnaire was translated and submitted to instructors of counseling department of Isfahan University in order to examine its content validity. Then, the questionnaire was tested on 40 clients (17 men and 23 women). These clients were chosen randomly from those who referred to counseling centers throughout Isfahan. The subjects were asked to note down whatever ambiguity or question they had about items. Results have revealed that there was no need to correct the items. At the end, Cronbach's Alpha for each scale was 0.89, 0.91, 0.81 and 0.86, respectively, which are acceptable for research purposes.

General Health Questionnaire (GHQ): 28-item form of the questionnaire used in this research was developed by Goldberge and Williams (50) and its questions were extracted based on CFA. This questionnaire consists of four subscales: Somatic Symptoms (Scale A), Anxiety/Insomnia (Scale B), Social Dysfunction (Scale C), and Severe Depression (Scale D). The research by Bahmani and Asgari (51) has investigated and validated its four scales and is scored "1" for "no more than usual" to "4" for "much more than usual". To test the reliability, the internal consistency of the Questionnaire was measured using Cronbach's Alpha coefficient. The Alpha for physical symptoms was 0.85, for insomniac anxiety 0.78, for disorder in social action 0.79, major depression 0.91 and for whole sample 0.5. In this research Cronbach's Alpha for each of those factors was 0.81, 0.84, 0.89, and 0.91, respectively, which is aliquot for research purposes and CFA (Confirmatory Factor Analysis) has confirmed, structure of this questionnaire in Iran.

Satisfaction with Life Scale (SWLS): This questionnaire is a measure of life satisfaction developed by Diener, Emmons, Larsen and

Griffin (52). It consists of 5 items scored from 1 for 'totally disagree' to 4 for 'totally agree'. The research by Diener and colleagues (52) showed that it represented single factor. Also, it enjoys criterion validity and acceptable internal validity (53). Validity for this questionnaire by using Cronbach's Alpha in Mozaffari's study (54) was 0.85 and by test-retest method was 0.82 and CFA has confirmed SWLS structure of this questionnaire in Iran. In present study, Validity for the questionnaire by using internal consistency (Cronbach's Alpha) was 0.86.

Positive Affect and Negative Affect Scales (PANAS): This schedule is a 20-item self-report measure of positive and negative affect developed by Watson, Clark & Tellegen (55). It is a 20-item questionnaire, half of which belongs to negative affects and another half to positive affects, ranging from 1 (so little) to 5 (so much) by using 5-point type scales. Items of this questionnaire are operable in such states as "today, this time, some days ago, a week ago, some weeks ago, a year ago and totally". Cronbach's Alpha in "totally" state for PA is 0.88, for NA is 0.87 and in test-retest method for these scales are respectively 0.67 and 0.71(55). In Iran and in a study by Mozaffari, Cronbach's Alpha for mentioned scales were respectively 0.83 and 0.62 and in test-retest method were respectively 0.65 and 0.68 (54). In present study Cronbach's Alpha (Internal Consistent) for mentioned scales is respectively 0.86 and 0.88.

Revised Dyadic Adjustment Scale (RDAS): This scale is a self-administered 14-item survey and developed by Busby, Crahe, Larsen and Christensen in 1995 (quoted from Holist, Cody and Miller) (56). Raging from 1(so little) to 6 (so much) by using 6-point type scales, point Likert formal ranging from "always agree" to "always disagree". ". The RDAS is an update of Spanier's (1979) form and originally has 32 items. It is based on Lewis & Spanier's theory (1979) about marital quality (56). This instrument contains 3 subscales as agreement, satisfaction and unity showing marital quality score. Higher scores indicate higher marital quality and CFA has confirmed 3-scale structure of this questionnaire in USA (56). In Holist and Miller study (56) validity of this questionnaire

is reported to be ranging from 0.30 to 0.20 by Cronbach's Alpha. In present study, after carrying out CFA, Cronbach's Alpha has calculated for each scale. Cronbach's Alpha for agreement, satisfaction and unity scales has been calculated respectively 0.81, 0.86 and 0.92. CFA has confirmed scales structure of this questionnaire in Iran (57).

Results

The result of CFA for DSI-2: CFA revealed that this questionnaire had acceptable adequacy. The relationship between every item and every scale has been considered in the same way that Skowron (50) had calculated it and the questionnaire was divided into 4 scales and the conceptual model was fitted. The indices are shown in table 2. T indicators for all roots were meaningful ($T > 1.96$) and proved that there is no need for deleting roots.

Table 2. Fit indices of conceptual model for DSI-2

AGFI	GFI	AIC	NNFI	RMSEA	df	χ^2
0.89	0.91	1066	0.92	0.07	896	1052

$\chi^2 = 1052$, RMSEA = 0.07, NNFI= 0.92, AIC= 1066, GFI= 0.91 and AGFI = 0.89.

The renewed fit indices are shown in table 3 and it shows that $\chi^2 = 901$, RMSEA = 0.01, NNFI = 0.99, AIC = 935, GFI = 0.98 and AGFI = 0.96. Totally, fit indices of model have been promoted.

Table 3. Fit indices of corrected conceptual model for DSI-2

AGFI	GFI	AIC	NNFI	RMSEA	Df	χ^2
0.96	0.98	935	0.99	0.01	886	901

The results of CFA for PANAS: In this section, the relationship between every question (item) and every scale was considered based on Watson, Clark & Tellegen (57) and the model was fitted. The model's indicators are shown in table 4.

Table 4. Fit indices of corrected conceptual model for PANAS

AGFI	GFI	AIC	NNFI	RMSEA	df	χ^2
0.94	0.96	270	0.98	0.001	169	196.95

T indicator was calculated for all meaningful roots ($T > 1.96$). χ^2 was 196.95, RMSEA= 0.01, NNFI = 0.98, AIC=270, GFI = 0.96 and AGFI= 0.94. Totally, Indicators show adequacy and validity of the questionnaire.

Note: It should be mentioned at this point that the General Health Questionnaire (GHQ), questionnaire used by Bahmani and Asghari (51), the Satisfaction With Life Scale (SWLS) questionnaire used by Mozafari (54) and the Revised Dyadic

Adjustment Scale (RDAS) questionnaire used by Esanezhad and Yousefi (57) were confirmed in terms of CFA. Therefore in this study the CFA was not used for the instruments.

The renewed fit indices are shown. The structural model of diagram 1 was fitted and the results are shown in Table 5.

Table 5. Fit indices for corrected structural model

AGFI	GFI	AIC	NNFI	RMSEA	Df	χ^2
0.88	0.91	686	0.94	0.06	2749	3147

T indicator was obtained by all meaningful roots ($T > 1.96$). As it appears in Table 4, the model is totally acceptable.

The results of new model fit are shown in table 6.

Table 6. Fit indices for corrected structural model

AGFI	GFI	AIC	NNFI	RMSEA	df	χ^2
0.92	0.94	435	0.97	0.03	2734	3147

As it is shown in table 6, $\chi^2 = 3147$, RMSEA = 0.038, GFI = 0.94, AGFI = 0.92, NNFI=0/97 and AIC =435. The corrected model is well-fitted with the data in diagram 2.

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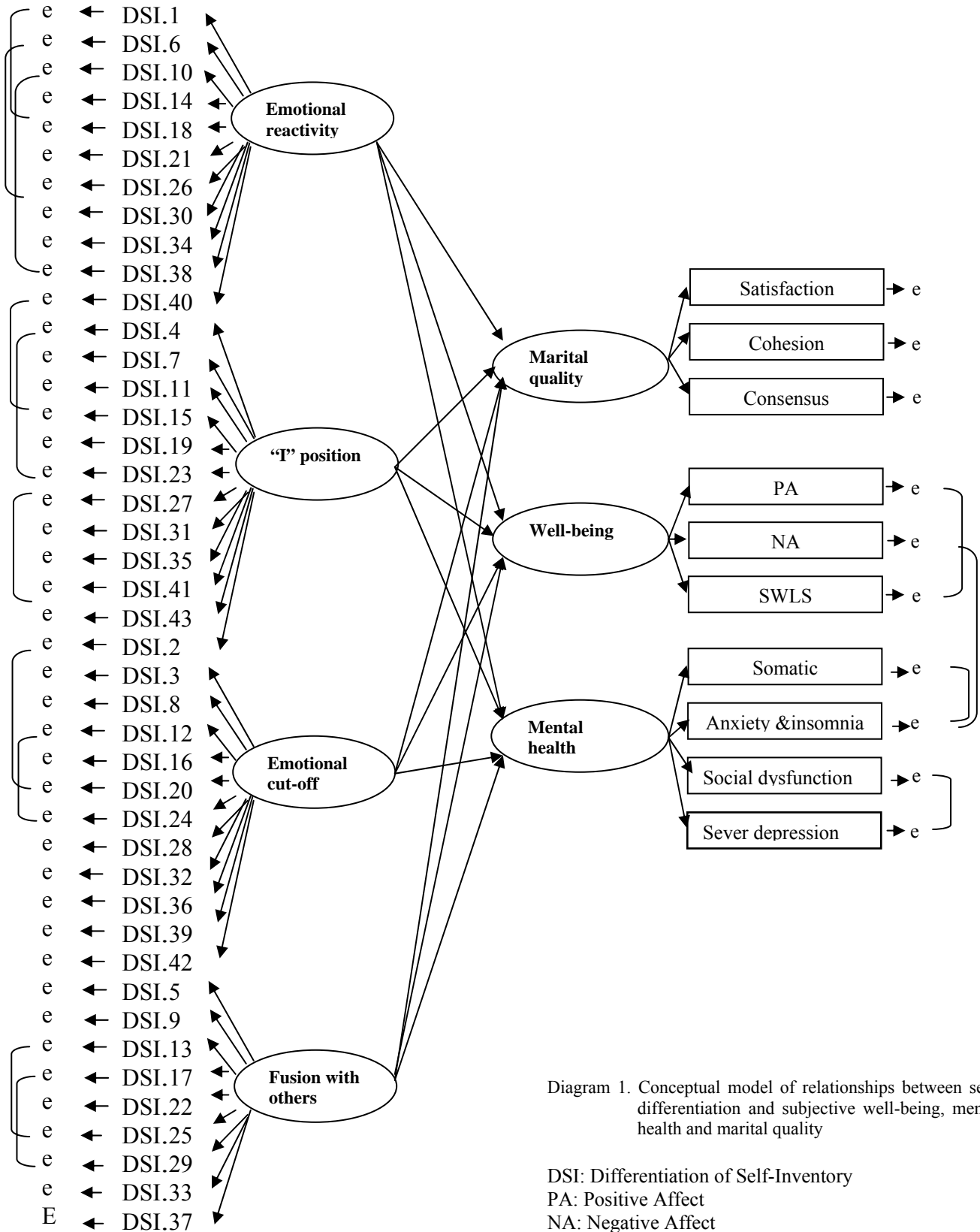


Diagram 1. Conceptual model of relationships between self-differentiation and subjective well-being, mental health and marital quality

DSI: Differentiation of Self-Inventory
 PA: Positive Affect
 NA: Negative Affect
 SWLS: Satisfaction With Life Scale

Table7. the mean and the standard deviation of the scores for males and females in the applied questionnaires

Variable	Males		Females		
	Mean	SD	Mean	SD	
Marital quality	Satisfaction	10.66	5.78	9.23	6.38
	Cohesion	11.73	5.74	13.84	9.87
	Consensus	17.70	9.33	15.41	8.12
Mental health	Physical symptoms*	23.08	5.31	24.16	7.22
	Anxiety*	21.25	7.10	18.37	6.14
	Social disorder*	20.61	56/6.56	22.63	5.48
	Depression*	19.45	6.06	17.31	5.14
Positive Affect and Negative Affect	Positive-Affect	32.32	10.26	27.21	9.28
	Negative Affect*	20.35	9.52	24.58	10.14
Self - differentiation	Emotional reactivity	36.30	9.63	31.46	7.12
	“I” position	38.13	12.36	31.32	9.61
	Emotional cutoff	45.00	11.32	41.34	10.04
	Fusion with other	31.80	9.09	36.71	11.17

Those variables having asterisk (*) are scored reversely

Table 7 shows the mean and the standard deviation of the scores for men and women.

Discussion

The results of research (table 2, 3) have shown that the four-scale structure of differentiation of self inventory (DSI-2) was consistent with the data and this questionnaire enjoys acceptable validity by using correction indices, so Skowron’s 4-scale model was confirmed. Also, considering the adequate internal consistency of data, it can be concluded that this questionnaire is a useful instrument in research and clinical settings. The results of CFA for PANAS showed that Watson, Clark & Telegen (55) model fitted the data well (table 4) and the 4-factor model was acceptable. From this view, findings of this study are consistent with those of Crawford and Honry (58), Ostir, Pamela, David and Kenneth (59) in the case of ‘factor analysis of psychometrical features of PANAS’. The results of the full structural model fit showed that this model fitted the data and was therefore acceptable. Although a similar model was not found by reviewing related literature, the present model fits with findings of showers (50) and Bohlander (33) in the case of positive

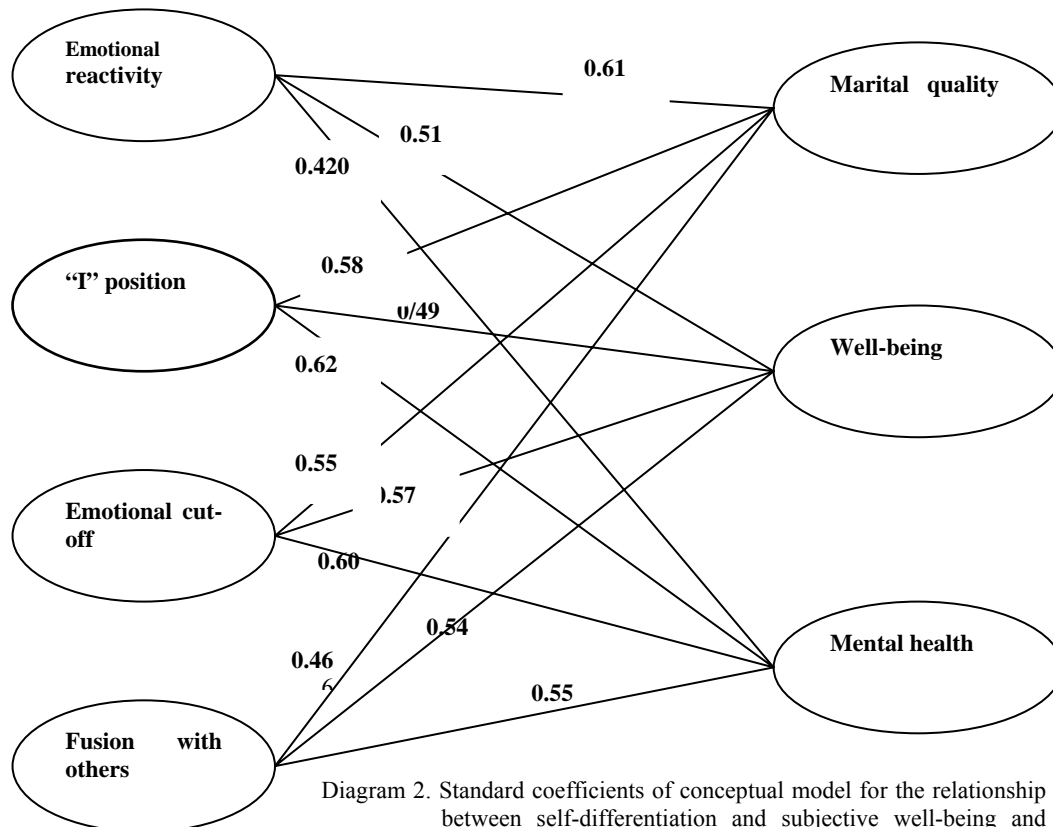


Diagram 2. Standard coefficients of conceptual model for the relationship between self-differentiation and subjective well-being and mental health

relationship between self-differentiation and subjective-well-being, those of Skowron, Stephen & Razia (34) Arpita (10), Murray, Daniels, Harry and Christine (35), in the case of positive relationship between self-differentiation and sanity dimensions and negative relationship between self-differentiation and Mental disorders signal, and those of Richards (30), Tina (36), Kwon (41), Harrison (17), McCullough (60), Arpita (10) and Hollander (39) in the case of positive relationship self-different and marital quality. Therefore, according to our findings and considering the whole model, it can be said that in Bowen's theory in the studied population, having cultural differences were acceptable.

Finally, it is expected that those people having high self-differentiation enjoy adequate mental health and satisfaction. In view of cultural features of studied population, this conclusion seems remarkable, because in the typical Iranian family, close relationships are always desirable even though bold and independent remarks are considered as arrogance. Also, under the expressions such as sharing other people's sadness, happiness, forgiveness, generosity, and respect to one's elder and supporting parents in old age, people prefer to meddle in other's feelings and ideas and wrongfully consider those feelings as their own, while research shows that people who distinguish the boundaries of their ideas and affections with others better enjoy an elevated state of mind, subjective well-being and higher marital quality.

Conclusion

To sum up, the findings of this study contributed to introduction and analysis of Skowron's self-differentiation and Positive and Negative Affects Scales (PANAS) which can be used as an effective and new instrument in research and clinical affairs. The results of the study point to several issues related to prevention and intervention of psychological distress in Iranian families. Although Iranian individuals and families are considered collectivist and thus do not necessarily encourage individuals to achieve psychological separation and independence

from their parents and rather emphasize family ties and inter-dependence (61), we believe that there is a valid need for Iranian individuals to strive for differentiation. As noted by Tuason and Friedlander (62), in a collectivist culture, respect for the process of differentiating a self means working with, not against, the family's values and norms. Indeed, in such a situation, clinicians need to be very attentive to the fact that the differentiation process in the Iranian clients is very different from that in other cultures. This study clearly shows that both the process of differentiation and connectedness are equally necessary for psychological well-being in each culture. It is interesting to note that interdependence is the most important factor for psychological well-being of individuals. Although Iranian are likely to over-emphasize the process of interdependence and pay less attention to the process of differentiation, therapists need to be sensitive to the needs of differentiation of couples while maintaining close relationships with their spouse. Furthermore, therapists should not take "either/or" position in terms of relations of individual's value orientation and differentiation with psychological adjustment. Rather, they should take a more balanced and "both/and" position, especially when working with families. In order to increase therapeutic effects on couples that experience psychological distress, counselors and psychotherapists need to make effort to increase self-differentiation, which is closely related to the term of "well-family functioning". In the collectivist and hierarchical Iranian culture, a family's functioning level can be improved when therapists, using the Bowen approach, focus on the more differentiated member in the family and thus protect the dignity of the individual and honor the good name of the family. Again, it needs to be highlighted that effective therapeutic strategies with couples need to incorporate unique family characteristics. Considering that the Bowen model is one of the most popular models used among Iranian researchers and therapists, the assumption of the model and particularly the concept of self-differentiation needs to be examined carefully for their appropriateness and relevance. We expected the results of the present study to

have meaningful implications for the assessment and treatment of individuals and families (30).

Future research on this issue should include several types of participants and include individual-couple measures to discern whether the similarities and differences found in the present study result from individual level of value orientation or from various characteristics of each couple. It will also be valuable to examine the differences in the relationship of family functioning with self-differentiation, since the definition of well-family functioning may be different across different cultures.

References

1. Bowen M. Family therapy in clinical practice. New York: Aronson; 1978: 25-39.
2. Goldenberg I, Goldenberg H. Family therapy: an overview. 4th Ed. Pacific Grove, CA: Brooks/Cole.; 2000: 170-211.
3. Roytburd LF, Myrna L. Predictors of Soviet Jewish refugees' acculturation: Differentiation of self and acculturative stress. *Cultural Diversity and Ethnic Minority Psychology* 2008; 14:67-74.
4. Kerr ME, Bowen M. Family evaluation. New York: Norton; 1988:34-89
5. Skowron E, Friedlander M. The differentiation of self inventory: Development and initial validation. *Journal of Counseling Psychology* 1998; 28:235-46.
6. Nichols MP, Schwartz RC. Family therapy: Concepts and methods. 5th Ed. Boston: Allyn & Bacon; 2000: 114-67.
7. Murphy FM. Is the Bowen theory universal? Level of differentiation of self and marital adjustment among Asian-Americans. Doctoral Thesis. The Wright Institute; 1999: 65-89.
8. Harrison MD. Partners' level of differentiation of self and perceived relationship quality in gay and lesbian couples. Doctoral Thesis. Fielding Graduate Institute 2003; 87-111.
9. Kruse, N. The Relationship between Self Differentiation and the Levels of Trust, Shame, and Guilt in Intimate Relationships. Doctoral Thesis. Alliant International University, Los Angeles; 2007:35-88.
10. Arpita L. Relationship among differentiation of self, relationship satisfaction, partner support, depression, monitoring/blunting style, adherence to treatment and quality of life in patients with chronic lung disease [dissertation]. The Ohio State University; 2006: 124-167.
11. Asch M. Dictionary of psychology. New Delhi; 2003:p. 68-109.
12. Showers CJ, Ryff CD. Self-differentiation and well-being in a life transition. *Personality and Social Psychology Bulletin*; 1996. 22:448-450.
13. Troxel, W. M. Marital quality, communal strength, and physical health [dissertation]. University of Pittsburgh; 2006:243-67.
14. Adital B, Yoav L. Dyadic characteristics of individual attributes: attachment, neuroticism, and their relations to marital quality and closeness. *American Journal of Orthopsychiatry* 2005; 4:621-39.
15. Murphy FM. Is the Bowen theory universal? Level of differentiation of self and marital adjustment among Asian-Americans [dissertation]. The Wright Institute; 1999:56-98.
16. Campos B. Culture and Teasing: The Relational Benefits of Reduced Desire for Positive Self-Differentiation. *Personality and Social Psychology Bulletin* 2007; 33:3-14.
17. Harrison MD. Partners' level of differentiation of self and perceived relationship quality in gay and lesbian couples [dissertation]. Fielding Graduate Institute; 2003: 87-166.
18. Kruse N. The Relationship between Self Differentiation and the Levels of Trust, Shame, and Guilt in Intimate Relationships [dissertation]. Alliant International University, Los Angeles; 2007: 98-167.
19. Gushue GV, Constantine, MG. Examining individualism, collectivism, and self-differentiation in African American College Women. *Journal of Mental Health Counseling* 2003; 25(1): 1-5.
20. Kagitcibasi, C. Autonomy and relatedness in cultural context: Implications for self

- and family. *Journal of Cross-Cultural Psychology* 2005; 36(4):403-22.
21. Killen M, Wainryb C. Independence and interdependence in diverse cultural contexts. In: Harkness S, Raeff C, Super CM, editors. *Variability in the social construction of the child: New directions in child and adolescent development*. San Francisco: Jossey-Bass: 2000. p.5-22.
 22. Bartle-Haring S, Gregory P. Relationship between differentiation of self and the stress and distress associated with predictive cancer genetic counseling and testing: Preliminary evidence. *Families Systems and Health* 2003; 21: 357-81.
 23. Tuason MT, Friedlander MI. Do parent's differentiation levels predict those of their adult children? And other tests of Bowen theory in a Philippine sample. *Journal of Counseling Psychology* 2000; 47: 27-35.
 24. Haber JF. An investigation of the relationship between differentiation of self, complementary psychological need patterns, and marital conflict. Unpublished doctoral dissertation, New York University; 1984:87-156.
 25. Skowron E, Friedlander M. The differentiation of self inventory: Development and initial validation. *Journal of Counseling Psychology* 1998; 28:235-46.
 26. Peleg-Popko O. Bowen theory: A study of differentiation of self, social anxiety, and physiological symptoms. *Contemporary Family Therapy* 2002; 24(2):355-69.
 27. Skowron E, Holmes SE, Sabatelli RM. Deconstructing differentiation: Self regulation, interdependent relating, and well-being in adulthood. *Contemporary Family Therapy* 2003; 26:29-38.
 28. Chung H, Gale H. Comparing Self-differentiation and Psychological Well-being between Korean and European American Students. *Contemporary Family Therapy* 2006; 28:367-81.
 29. Haber JF. An investigation of the relationship between differentiation of self, complementary psychological need patterns, and marital conflict. Unpublished doctoral dissertation, New York University; 1984: 76-125.
 30. Richards ER. Self reports of differentiation of self and marital compatibility as related to family functioning in the third and fourth stages of the family life cycle. *Scholarly Inquiry for Nursing Practice: An International Journal* 1989; 3:163-75.
 31. Skowron E. The role of differentiation of self in marital adjustment. *Journal of Counseling Psychology* 2000; 47:229-40.
 32. Beal E. Children of divorce: A family systems perspective. *Journal of Social Issues* 1979, 35: 140-54.
 33. Bohlander JR. Differentiation of self, need fulfillment, and psychological well-being in married women [dissertation]. New York University; 1996: 125-200.
 34. Skowron E, Stephen RW, Razia A. Differentiation of Self Mediates College Stress and Adjustment. *Journal of Counseling and Development* 2004; 82: 69-89.
 35. Murray TL, Daniels M, Harry M, Christine E. Differentiation of self, perceived stress, and symptom severity among patients with fibromyalgia syndrome. *Families, Systems & Health*; 2006; 24:147-59.
 36. Tina, T. The effects of differentiation of self, adult attachment, and sexual communication on sexual and marital satisfaction: A path analysis [dissertation]. Purdue University; 1999: 201-56.
 37. Michelle M, Hobby L. Adult daughters of alcoholic fathers: Differentiation of self in family of origin and couple relationships [dissertation]. Alliant International University, San Francisco Bay; 2004: 234-76.
 38. Baum N, Shnit D. Self-Differentiation and Narcissism in Divorced Parents' Co-Parental Relationships and Functioning. *Journal of Divorce & Remarriage* 2005; 42:33-55.
 39. Hollander S. Differentiation of Self and Emerging Adulthood [dissertation]. Florida International University; 2007: 154-36.
 40. Richter SD. Couple similarity in differentiation of self [dissertation]. Texas Woman's University 1998; 24-67.

41. Kwon DO. The relationships between marital satisfaction, self-esteem, and Bowen's differentiation of self [dissertation]. California School of Professional Psychology - Los Angeles; 2000: 132-54.
42. Adams AM. Perceived influences of differentiation of self on marital and sexual satisfaction [dissertation]. University of Louisiana at Monroe; 2003: 98-104.
43. McCullough RB. The relationship among ethnic identity, differentiation of self, and marital and partner satisfaction in Latino Americans [dissertation]. Columbia University; 2005: 65-112.
44. Bradbury T, Fincham F, Beach S. Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family* 2000; 62: 964-80.
45. Birditt KS, Antonucci TC. Relationship Quality Profiles and Well-Being Among Married Adults. *Journal of Family Psychology* 2008; 21:595-604.
46. Byrne M. Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming. Mahwah, NJ: Lawrence Erlbaum Associates, Inc; 1998: 134-79.
47. Bentler's H. Cut-off criteria for fit indexes in covariance structure analysis conventional criteria versus new alternatives. *Structural Equation Modeling*; 1999. 6(1): 1-55.
48. Toit D, Stephen T. Interactive LISREL: User's Guide. SSI (Scientific Software International); 2001: 156-217.
49. Skowron E. The differentiation of self inventory: Construct validation and test of Bowen Theory [dissertation]. State University of New York at Albany; 1995: 76-99.
50. Goldberg, D. P., Williams, P. The User's Guide to the General Health Questionnaire. NFER-Nelson: Windsor; 1988: 21-34.
51. Bahmani B, Askari E. [Psychometric of General Health Questionnaire (GHQ).] Seminar third of mental health in Iran 2006: 62-63.Persian.
52. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction with Life Scale. *Journal of Personality Assessment* 1985; 49(1):71-5.
53. Matt V. A note on the score reliability for the Satisfaction with Life Scale: an RG study. *Social Indicators Research* 2008; 86:47- 58.
54. Mozafari S. [The effect of happiness on mind among students] [dissertation]. University of Shiraz in Iran, 2002: 124-56. Persian.
55. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology* 1988; 47:1063-70.
56. Hollist CS, Miller RB. Perceptions of attachment style and marital quality in midlife marriage. *Family Relations* 2005; 54: 46-58.
57. Esanezhad O, Yousefi. [Psychometric of Revised Dyadic Adjustment Scale (RDAS).] Seminar third of mental health in Iran 2008:290. Persian.
58. Crawford JR, Henry D. The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *The British Journal of Clinical Psychology* 2004; 43: 245-61.
59. Ostir GV, Pamela MS, David S, Kenneth JO. Reliability of the Positive and Negative Affect Schedule (PANAS) in medical rehabilitation. *Clinical Rehabilitation* 2005; 19:767-9.
60. McCullough RB. The relationship among ethnic identity, differentiation of self, and marital and partner satisfaction in Latino Americans [dissertation]. Columbia University; 2005:98-189.
61. Tang NM. Some psychoanalytic implications of Chinese philosophy and child-rearing practices. *Psychoanalytic Study of the Child* 1992; 47:371-89.
62. Tuason MT, Friedlander MI. Do parent's differentiation levels predict those of their adult children? And other tests of Bowen theory in a Philippine sample. *Journal of Counseling Psychology* 2000; 47:27-35.