

The Role of Marital Satisfaction and Marital Intimacy of Mothers in Predicting Anxiety and Depression among Female Student

Zahra Hasani¹, Masoud Hejazi²

1. Master of Clinical Psychology, Department of Psychology, Faculty of Humanities and Arts, Islamic Azad University, Zanjan Branch, Zanjan., Iran. Email: Ps.zahra.h@gmail.com
2. Assistant Professor, Department of Educational Psychology, Zanjan Research Sciences Branch, Islamic Azad University, Zanjan, Iran

Abstract

The purpose of this study is to investigate the role of marital satisfaction and marital intimacy of mothers in predicting anxiety and depression in female student in Zanjan city. This study is considered as a descriptive/correlational research. The statistical population studied in this study was all female high school students in the Zanjan city and their mothers. The sample size was calculated using Cochran's formula and 367 of 8160 people were selected by stratified cluster sampling. The collected data evaluated by ENRICH: Marital Satisfaction Scale (EMS) (Olson, 1989), Depression Anxiety Scale 21-Depression Scale, Marital Intimacy Scale, (Walker). Data were analyzed by regression analysis in SPSS 25 software. Inferential analysis was performed at a significance level of 0.05. According to the results, the average of marital satisfaction was at the moderate level, marital intimacy and depression and anxiety of children were at a low level. According to the results of stepwise regression, marital satisfaction and intimacy explain 0.42 of the variance of depression and 0.15 of the variance of adolescent anxiety. In general, according to the results of the study, the marital satisfaction and marital intimacy of mothers increases but depression and anxiety of girls decreases. This result can help families and family counselors to enrich family relationships and couples to prevent adolescent depression and anxiety.

Keywords: Marital Satisfaction, Marital Intimacy, Depression, Anxiety, Adolescents

Introduction

Adolescence is the beginning of big social, physical and psychological development that have a significant impact on a person's performance in adulthood and may be associated with problems such as concerns related to the educational and professional future, sexual problems, sadness, depression, alcohol and drug usage, suicidal thoughts, creating problems at school, conflict with parents and peers (Santrock, 2016; Jackson & Goossens, 2020). It is estimated that 60 to 70% of the disability-adjusted life years in adolescents worldwide is between the ages of 12 and 24 (Patel, Flisher, & Hetric, 2007).

These problems jeopardize adolescent adjustment and the natural process of passing this course faces serious challenges, especially when combined with other traumatic factors such as inappropriate peer group membership, divorce and parental separation, insecure attachment, and the death of loved ones, especially family members, parental remarriage, unknown sexual identity, substance abuse, school dropout, unstable parental rules, abandoning or neglecting parents, parental mental illness, troubled family, lack of motivation, legal and criminal problems of parents, (Skinner & Zimmer-Gembeck, 2016; Duell, & Steinberg, 2019; McFerran, 2019; Greene & Patton, 2020). Depression is one of the most common problems in adolescents. This disorder is characterized by decreased energy and interest, feelings of guilt, difficulty concentrating, anorexia, and thoughts about death and dying confused with suicidal thoughts (Kao, Ling, & Dalaly, 2021).

Anxiety is considered as another common psychiatric disorder in adolescence that can interfere with learning, concentration and recall, and if not treated in a timely manner, it can lead to frequent absences from school, inability to complete education, low self-esteem, and abuse, drug use, interpersonal disorders, and anxiety disorder in adulthood (Jewell, & Stark, 2003; Boland, Verdiun, & Ruiz, 2021). Various factors have been identified in the causes of adolescent depression and anxiety, of which the family is one of the most important (Thapar, Collishaw, Pine, & Thapar, 2012). The family is known as the most basic social unit upon which society is built whose health ensures the health of the community. The health of the family, as the main unit of each person in life is considered as one of the most important factors for feeling satisfied with the life of people in the community. Therefore, happiness in the family and marital satisfaction is especially important to increase people's satisfaction with life (Wang et al, 2015). It can be imagined that life satisfaction and marital satisfaction of parents have a significant effect on the psychological performance of children. Every human being strives to achieve satisfaction in life. According to hedonistic approaches, each person needs to have satisfactory relationships and financial well-being to achieve such a feeling (Shariatmadar, 2011).

Marital satisfaction is considered as one of the most important factors affecting family performance. Marital satisfaction is defined as the objective feelings of satisfaction and pleasure experienced by the spouse. Some experts believe that marital satisfaction depends on the stages of the life cycle (Lavner, & Clark, 2017). Marital satisfaction is a

process that is achieved during the life of couples; because it requires adapting tastes, recognizing personality traits, creating behavioral rules and forming moral patterns. Couples who are satisfied with the type and level of their relationship have a lot of agreement with each other and plan to solve the problems well (Bulgan, & Çiftçi 2017). The concept of marital satisfaction has different dimensions; such as sexual satisfaction, receiving support from a partner, participation in the decision-making process, relationship with the spouse's family, social support, psychological well-being and life satisfaction (Bilal Russell, 2020). Furthermore, marital satisfaction depends on variables such as duration of marriage, age, number of marriages, number of children, socioeconomic status (SES) and occupational status (Olaspo, 2020).

The need for intimacy, which is considered as an advanced global and biological need in all human beings, refers to emotional closeness, similarity, and a romantic or emotional relationship with another person and requires a deep knowledge and understanding of the other person in order to express thoughts and feelings which are used as a source of similarity and closeness (Bagarozzi, 2001). Intimacy is conceptualized as a very important behavioral pattern and has strong emotional-social and social aspects that are formed based on (positive experience of alignment and equality), satisfaction (positive experience of participation), and love (Sprecher, Wenzel & Harvey, 2007). Psychologists define intimacy as the ability to communicate (without control) with another and express emotions (without inhibition) and consider it as a natural human state (Bulum, 2006). According to the results of research conducted by Wang and Krani (2010); Malabagheri, Jalal ManeshvaZaraati (2006); Bakhtiarpour, Hafezi, Kouchaki and Khajouni (2012), there is a significant relationship between marital satisfaction and behavioral disorders of female students. Atadokht et al (2015) during a study concluded that the prediction of depression, anxiety and stress disorders in children based on psychological distress of mothers is significant and 16% of the variance of adolescent depression, 25% of the variance of adolescent anxiety is explained by psychological distress of mothers. Kakajoybari, Dehkordi and Peshang (2016) concluded that there is a significant relationship between marital satisfaction of mothers and anxiety of children. According to the results reported by Fuller-Thomson & Dalton, (2011); Chen et al. (2020), marital satisfaction predicts suicidal thoughts in adolescents.

Relevant studies have focused on parental mental health-related problems and their relationship to marital satisfaction and intimacy. On the other hand, it can be said that families and parents play an important role in the lives of adolescents. Parents as a pattern have a significant impact on the development of attitudes and values, emotional and social development and in general on all aspects of adolescents' performance. If the adolescent grows up healthy, in addition to the adolescent independence is on the right path, the parents' sincere relationship with them is maintained (Kerig, Schulz, & Hauser, 2011), and therefore it is important to conduct research to identify the role of satisfaction and marital intimacy on adolescents' mental health. According to the above-mentioned measures, the question of the present study is "What is the contribution of marital

satisfaction and marital intimacy of mothers in anticipation, anxiety and depression of female adolescents?”.

Methods

The statistical population of this study includes all female adolescents in Zanjan who were in the first grade of different secondary schools in Zanjan and also their mothers totally were 8160 people. For sampling, stratified cluster sampling method has been used. Thus, after selecting 5 schools from each district, research questionnaires were provided to the students of each district and they were asked to give the parent-related questionnaires to the parents and return them to the questioner after completion by the parents. According to the Cochran's formula, 367 samples were selected for the study. Inclusion criteria in the present study were: 1- Willingness to participate in the study and exclusion criteria was a defect in completing the research questionnaires. Necessary explanations were given to the participants before completing the questionnaires about observing ethical principles of research, including informed consent, discretion to withdraw from the research and confidentiality of the information provided. Pearson correlation coefficient and stepwise regression in SPSS-25 software were used to analyze the data.

Included Research instruments

1. ***Enriching and Nurturing Relationship Issues, Communicating and Happiness (Enrich)***: This questionnaire was developed by Fowers, & Olson, (1989) to evaluate potentially problematic and strengthen marital relationships. This test has two 115 and 125-question forms, which consists of 12 subtests. The main form made the subjects tired due to the high number of questions. Soleimanian (1993) developed a short form of this questionnaire, including 47 questions which has been used in the present study. 5-point Likert scale (strongly agree to strongly disagree) was used in this study. Each of the options is given from one to five points. Soleimanian (1993) by calculating Cronbach's alpha coefficient, reported that the reliability of the questionnaire is equivalent to 0.95. In this study, the reliability of this questionnaire was calculated to be 0.86 by Cronbach's alpha method. This questionnaire has a good construct validity and criteria. Sanai (2009) reported that the correlation coefficient of this questionnaire with other marital satisfaction scales ranged from 0.41 to 0.60; these values indicate the validity of its construct. Satisfied and dissatisfied couples are also distinguished by all subscales of this questionnaire and this feature indicates the validity of its criterion. A high score in this questionnaire indicates marital satisfaction and a low score indicates dissatisfaction with the marital relationship.
2. ***The Intimacy Scale (IS) developed by Walker and Thompson***: The Intimacy Scale (IS) developed by Walker and Thompson. (1983) consists of 17 items to assess intimacy between couples. It is a part of a larger instrument that assesses different aspects of intimacy, but has been reported by its developers as an independent scale.

In the intimacy scale, the subject score is calculated by obtaining the sum of the scores of the questions and dividing it by 17. The scores vary between 1 and 7, and a higher score is a sign of greater intimacy. The scale was first performed on 166 girls, 166 mothers of these students and 148 grandmothers. The average intimacy scale was 6.21 for mothers and 6.04 for girls (Sanai, 2008). Alexis J. Walker and Linda Thompson (1983) used Cronbach's alpha and reported that the scale reliability vary 0.91 to 0.97. In Iran, Etemadi (2005) reported that Cronbach's alpha coefficient calculated for the scale was 0.96 and 0.85, respectively. The reliability of the scale obtained using Cronbach's alpha coefficient was equal to 0.85 and using split-half method it was equal to 0.82. Validity of this scale through implementation of the Bagarozzi Marital Intimacy Questionnaire and estimation of the correlation coefficient simultaneously, was obtained and it was equal to 0.82, which indicates a good validity for this scale (Etemadi, 2005).

3. ***The Depression, Anxiety and Stress Scale - 21 Items (DASS-21)***: This questionnaire was developed in 1995. This tool was used for 400 people in Mashhad, which was obtained for depression 70%, anxiety 66% and stress 76%. Each of the Depression, Anxiety, and Stress subscales consists of 7 questions, and the final score was obtained by summing the scores of the related questions. Questions 3-5-10-13-16-17-21 were related to depression, questions 2-4-7-9-15-19-20, anxiety and questions 1-6-8-11-12-14-18 were related to stress. Scores 0-14 indicate normal conditions (no stress), 15-18 mild stress, 19-25 moderate stress, 26-33 severe stress and above 33 very severe stress. Dimensions of questions related to depression and anxiety were used in this study according to the objectives of the study (SahebiAsghari, & Salari, 2005).

Results

Table 1 presents the demographic characteristics of the participants.

Table 1. demographic characteristics of the participants

Variable		Frequency	percent
Grade	Seventh	113	30.8
	Eighth	120	32.7
	ninth	134	36.5
Age of mothers	Under 30 years	37	10.1
	35-31 years	148	40.3
	40-36 years	113	30.8
	Over 40 years	69	18.8
Employment status of mothers	Employed	106	28.9
	Unemployed	261	71.1
Duration of marriage of mothers	Under 20 years	161	43.9
	25-21 years	113	30.8
	Over 25 years	93	25.3

According to the results of Table 1, most of the students were studying in the ninth grade. Most mothers were in the age range of 31-35 years. Most mothers were unemployed. Most of the mothers have married for less than 20 years.

Table 2 shows the mean and standard deviation of the variables as well as the results of the normality study.

Table 3. Average and standard deviation of research variables

Variable	Average	The standard deviation	Kolmogorov - Smirnov Statistics	Significance level
Marital Satisfaction	138.33	18.53	1.38	0.22
Marital intimacy	67.28	7.58	1.21	0.10
Depression in girls	13.54	8.42	0.82	0.20
Anxiety of girls	15.41	9.79	0.89	0.20

According to the mean and standard deviation of the research variables listed in Table 2, the mean of marital satisfaction is at moderate level, the average of marital intimacy is at moderate level, and the average of depression and anxiety of girls are at a low level. According to the results of Kolmogorov–Smirnov test (K–S test or KS test), the data have a normal distribution ($P < 0.5$).

Table 3 shows the correlation between research variables.

Table 3. correlations between marital and intimacy satisfaction, anxiety, depression

Variables	1	2	3	4
MS	1			
MI	0.72**	1		
anxiety	-0.18**	-0.37**	1	
depression	-0.35**	-0.63**	0.65**	1

Note. * $p < .05$; ** $p < .01$. MS: marital satisfaction, MI: marital intimacy

The correlation matrix reveals the existence of significant interrelations between all the variables at the $p < .01$ level.

Table 4 reports the results of regression of marital satisfaction and intimacy on girls' anxiety.

Table 4. Results of stepwise regression model for predicting girl's anxiety based on marital satisfaction and intimacy of parents

Model	Variable	F	P	R ²	B	SE	Beta	t	P
1	Marital intimacy	56.38	<0.001	0.13	-0.068	0.009	-0.36	7.50	<0.001
2	Marital Satisfaction	31.19	<0.001	0.15	0.070	0.029	0.16	2.31	<0.01

As shown in Table 4, the, marital intimacy ($\beta = -0.36$, $t = 7.50$) and marital satisfaction ($\beta = 0.16$, $t = 2.31$), can explain the variance of girls anxiety significantly and in general, these two variables explained 0.15of the variance of girls anxiety.

Table 6 reports the results of regression of marital satisfaction and intimacy on girls' depression.

Table 5. Results of stepwise regression model for predicting girl's depression based on marital satisfaction and intimacy of parents

Model	Variable	F	P	R ²	B	SE	Beta	t	P
1	Marital intimacy	241.37	<0.001	0.39	-0.14	0.011	-0.78	13.72	<0.001
2	Marital Satisfaction	132.17	<0.001	0.42	0.091	0.024	0.21	3.77	<00.01

As shown in Table 5, the, marital intimacy ($\beta = -0.78$, $t=13.72$) and marital satisfaction ($\beta = -0.21$, $t=3.77$), can explain the variance of girls anxiety significantly and in general, these two variables explained 0.42of the variance of girls anxiety depression.

Discussion

This study aimed to investigate the role of marital satisfaction and marital intimacy of mothers in predicting anxiety and depression in female adolescents. According to the results of correlation coefficient, there is an inverse relationship between marital satisfaction and marital intimacy with anxiety and depression in female adolescents, that is, as marital satisfaction and intimacy of mothers increases, the anxiety and depression of daughters reduces and vice versa. Regression results also showed that marital satisfaction -0.36 and marital intimacy 0.16 predict the variance of girls' anxiety. Regression results also showed that marital satisfaction -0.78 and marital intimacy 0.21 predict the variance of depression in girls. The results of this study are consistent with the findings reported by Khoshnevisan and Afrooz (2016).

In order to explain the findings, it can be said that Marital satisfaction is a stable state of happiness that is achieved through economic, social, cultural interaction, agreement on various issues, sexual satisfaction and the creation of appropriate conditions. Couples who are satisfied with the type and level of their relationship have a lot of agreement with each other and plan their time and financial issues well (Bulgan & Çiftçi, 2017). Satisfaction with married life leads to the creation of a healthy and appropriate emotional

environment for the growth of children, and this satisfaction can be effective in the interaction between children and parents (Murray, 2010).

Satisfaction with marriage and having a satisfying marital relationship positively affect interaction with children. The results of Fesco and Gritch's research (quoted in Santrock, 2014) show that parents that are happy with their marriage are more likely to be warm and supportive of their children. Research also shows that marital satisfaction is associated with positive and effective parenting (Cowan, Cowan, & Barry, 2011) and is negatively associated with parental stress and children's behavioral problems (Robinson, & Neece, 2014). Satisfactory marital relationship expresses more love and intimacy in interacting with children and creates a positive atmosphere in the family (Gritch's, quoted by Santrock, 2014). When the intimate relationship between the couple is damaged and marital satisfaction is reduced, destructive and negative effects on the mental health of the family as well as the mental health of the children, so that it can lead to depression and anxiety of the children. Therefore, it is expected that with decreasing parental satisfaction and intimacy, children's mood disorders and anxiety will increase.

Conclusion

In general, according to the results of the present study, marital satisfaction and marital intimacy can predict anxiety and depression in female adolescents. The case study of the present study is the city of Zanjan, so the generalizations to other cities should be done with caution. The population in this study included girls and their mothers, so it is necessary to generalize to other classes and cultures with caution. Due to the large size of the statistical population, it was not possible to use randomly sample and collect data using interviews. According to the results of this study, it is suggested to conduct other researches with more samples and to adopt entry criteria such as educational level, family income, the history of marriage, number of children, occupation and education, considering cultural-linguistic contexts in marital satisfaction and marital intimacy. It is suggested that similar studies must be conducted in other cities and cultures, as well as on the involvement of sons and fathers.

Disclosure Statements

According to the authors, this study has no sponsorship or conflict of interest

ORCID

0000-0002-1662-2360

References

- Allan, B. A., Kim, T., Liu, T. Y., & Deemer, E. D. (2020). Moderators of involuntary part-time work and life satisfaction: A latent deprivation approach. *Professional Psychology: Research and Practice*, 51(3), 257.

- Atadokht A, Daneshvar S, FathiGilarlou M, Soleymanyi I. (2014).The Psychological Distress Profile of Mothers and Adolescents´ Depression, Anxiety and Stress in Ardabil in 2014. *JRUMS*. 14 (7) ,549-560
- Bagarozzi, D. A .(2001).*Enhancing intimacy in marriage: A Clinician's Handbook*.London, UK: Brunner-Routledge.
- Baumann, D., Ruch, W., Margelisch, K., Gander, F., & Wagner, L. (2020). Character strengths and life satisfaction in later life: an analysis of different living conditions”. *Applied Research in Quality of Life*, 15(2), 329-347.
- Boland, R., Verdiun, M., & Ruiz, P. (2021). *Kaplan &Sadock's Synopsis of Psychiatry*. Lippincott Williams & Wilkins.
- Bradbury, T. N., Fincham, D. F., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family*, 62, 4, 9
- Bulgan, G., &Çiftçi, A. (2017).Psychological adaptation, marital satisfaction, and academic self-efficacy of international students”. *Journal of International Students*, 7.3: 687-702.
- Bulum,T.W. (2006). *Becoming a family counselor : a bridge to family therapy theory and practice*. Published by John Wiley & Sons, Inc., Hoboken, New Jersey.Published simultaneously in Canada.
- Callaci, M., Vaillancourt-Morel, M. P., Labonté, T., Brassard, A., Tremblay, N., Péloquin, K., & Péloquin, K. (2021). Couple and Family Psychology: Research and Practice.
- Chen, J., Zheng, X., Li, C., Xiong, Q., Yu, Q., Shi, S., & Hu, Y. (2020). The association between parental marriage satisfaction and adolescent suicidal ideation: The moderating effect of breastfeeding duration. *Children and Youth Services Review*, 118, 105459.
- Cowan, C. P., Cowan, P.A., & Barry, J. (2011). Couple groups for parents of preschoolers: ten-year outcome of randomized trail. *Journal of family psychology*, 25, 240-250.
- Debra J. Mashek. Arthu P. Aron.(2004). *Handbook of Closeness and Intimacy*.Lawrence Erlbaum Associaton Publishers Mbhwah, New Jersey.
- Duell, N., & Steinberg, L. (2019).Positive risk taking in adolescence. *Child development perspectives*, 13(1), 48-52.
- Etemadi, Ozra. (2005). Evaluation and comparison of the effectiveness of psychological-educational approach based on behavioral cognition and therapeutic communication and intimacy of couples referring to counseling centers in Isfahan. PhD Thesis, TarbiatModares University
- Fowers, B. J., & Olson, D. H. (1989). ENRICH Marital Inventory: A discriminant validity and cross-validation assessment. *Journal of marital and family therapy*, 15(1), 65-79.
- Fuller-Thomson, E., & Dalton, A. D. (2011). Suicidal ideation among individuals whose Goldenberg H, Goldenberg I. “Family Therapy an Overview”. Cengage Learning, Brookscote.
- Greene, M. E., & Patton, G. (2020).Adolescence and gender equality in health. *Journal of Adolescent Health*, 66(1), S1-S2.

- Jackson, S., & Gossans, L. (Eds.). (2020). *Handbook of adolescent development*. Psychology Press.
- Jewell, J. D., & Stark, K. D. (2003). Comparing the family environments of adolescents with conduct disorder or depression. *Journal of Child and Family Studies*, 12(1), 77-89.
- Joybari, A. A. K., Dehkordi, M. A. A., & Pashang, S. H. (2016). The effect of marital satisfaction in mothers on anxiety of adolescent girls. *World Scientific News*, (54), 87-97.
- Kao, T. S. A., Ling, J., & Dalaly, M. (2021). Parent-adolescent dyads' efficacy, coping, depression, and adolescent health risks. *Journal of Pediatric Nursing*, 56, 80-89.
- Karney, B. R., & Bradbury, T. N. (2020). Research on marital satisfaction and stability in the 2010s: Challenging conventional wisdom. *Journal of Marriage and Family*, 82(1), 100-116.
- Karney, B. R., & Bradbury, T. N. (2020). Research on Marital Satisfaction and Stability in the 2010s: Challenging Conventional Wisdom". *Journal of Marriage and Family*, 82.1: 100-116.
- Katz, S. (2008). Individual and environmental factors associated with college adjustment. (Doctoral Dissertation), Wayne State University.
- Khoshnevisan, Z., & Afrooz, G. A. (2016). The Relationship between Parents' Marital Satisfaction and Anxiety, Stress and Depression in Children", 3rd International Conference on Recent Innovations in Psychology, Counseling and Behavioral Sciences, Tehran.
- Kirby, J., S. (2005). The interpersonal Process model of intimacy in marriage: A daily-diary and multilevel modeling approach. *Journal of Family Psychology*, 119(2), 314-325.
- Lavner, J. A., & Clark, M. A. (2017). Workload and marital satisfaction over time: Testing lagged spillover and crossover effects during the newlywed years". *Journal of Vocational Behavior*, 101, 67-76.
- McFerran, K. (2019). *Handbook of Music, Adolescents, and Wellbeing*. Oxford University Press, USA.
- Molabaghery, M., Molabaghery, S., Jalalmanesh, H. (2006). Considering the rate symptoms of Depression of the adolescents and its relation with the marital satisfaction of their mothers in township of Tuyserkhan in 2004. *Journal of Fundamentals of Mental Health*, 8(30), 43-50.
- Murray, J. (2010). Risk Factors for Conduct Disorder and Delinquency: Key Findings from Longitudinal Studies. *The Canadian Journal of Psychiatry*, 55(10), 633-642.
- Nelson, J. R. (2006). *Human Relationship Skills. Fourth edition published*. New York; Routledge.
- Patel, V., Flisher, A., & Hetric, S. P. M. (2007). *Mental health of young people: a global public health challenge*. *Lancet* 369, 1302-13.
- Robinson, M., & Neece, C. L. (2014). Marital Satisfaction, Parental Stress, and Child Behavior Problems among Parents of Young Children with Developmental Delays. *Journal of Mental Health Research in Intellectual Disabilities*, 8(1) 23-46.
- Sahebi A, Asghari MJ, Salari RS. (2005). Validation of depression anxiety and stress scale (DASS-21) for an Iranian population. *Iran Psychol*. 4(1):299-313.

- Sanai, B. (2009). *Family and Marriage Scales*. Tehran First Edition of Besat Publications.
- Santrock, J. W. (2014). *Adolescence*. New York: Mc Graw-Hill education.
- Shariatmadar, A. (2011). Development of a training program for awareness, existential augmentation and awareness-raising based on Islamic ethics and comparing their effectiveness on increasing life satisfaction."(PhD Thesis), AllamehTabatabai University, Tehran.
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2016). *The development of coping: Stress, neurophysiology, social relationships, and resilience during childhood and adolescence*. Springer.
- Soleimani, A.A. (1993). The study of the effect of irrational thoughts on marital dissatisfaction. Master Thesis. University of Teacher Training.
- Thapar, A., Collishaw, S., Pine, D. S., &Thapar, A. K. (2012). Depression in adolescence. *Lancet (London, England)*, 379(9820), 1056–1067.
- Thompson, B. (2021). Marital Satisfaction in Older Adults. In *Aging and the Family: Understanding Changes in Structural and Relationship Dynamics*. Emerald Publishing Limited.
- Vita, G., Ivanova, D., Dumitru, A., García-Mira, R., Carrus, G., Stadler, K., ...&Hertwich, E. G. (2020). Happier with less? Members of European environmental grassroots initiatives reconcile lower carbon footprints with higher life satisfaction and income increases". *Energy Research & Social Science*, 2020, 60, 101329.
- Walker, A.J & Thompson,L. (1983). Intimacy and intergenerational aid and contact among mothers and daughters.*Journal of Marriage and Family*,45,841-849.
- Wang, L., & Crane, D. R. (2001).The relationship between marital satisfaction, marital stability, nuclear family triangulation, and childhood depression. *American Journal of Family Therapy*, 29(4), 337–347
- Wang, Y. H., Haslam, M., Yu, M., Ding, J., Lu, Q., & Pan, F. (2015). Family functioning, marital quality and social support in Chinese patients with epilepsy. *Health and quality of life outcomes*, 13(1), 1-8.

