

Loneliness and Depression in Self-Care Students in Mashhad Northeastern Iran

Samaneh Sadat Fattahi Massoom,^{1,*} and Hossein Salimi Bajestani¹

¹Department of Counseling Psychology, College of Education and Psychology, Allameh Tabataba'i University, Tehran, IR Iran

*Corresponding author: Samaneh Sadat Fattahi Massoom, Department of Counseling Psychology, College of Education and Psychology, Allameh Tabataba'i University, Tehran, IR Iran. Tel: +98-9128180149, E-mail: samifat986@yahoo.com

Received 2015 August 5; Revised 2015 August 31; Accepted 2015 September 27.

Abstract

Background: Who takes care of the children after school? is a question in many researches. Children may feel lonely and depressed if they open the house door and find no body in the house.

Objectives: The study examines loneliness and depression in students who regularly care for themselves after school (latchkey students) and compared with students who enjoy the parent's company

Patients and Methods: This study comprised 270 students, aged between 7 to 13 years in Mashhad, selected by convenience and cluster random-assignment sampling, using depression self-rating questionnaire and loneliness self-rating scale.

Results: Using a causal-comparative research method, independent t-test results showed significant differences in loneliness (-4.32, $P \leq 0.05$) and depression (-3.02, $P \leq 0.05$) between latchkey and non-latchkey students. Using the Pearson correlation test, significant correlation between depression and loneliness was observed among latchkey students ($r = 0.59$, $P \leq 0.05$). However, no significant difference between loneliness and depression was observed ($r = 0.02$, $P \geq 0.05$) in non-latchkey students. Multiple regression analysis also showed that depression variance can be determined by gender 22% and loneliness 34% (boys and girls).

Conclusions: The findings of this study, specifically the significant difference between latchkey and non-latchkey children, regarding feelings of loneliness and depression, carries clear message for parents. It can be concluded that mothers who spend most of their time working out of the house and deprive their children of their presence at home may cause some form of mental distress like loneliness and depression in youngsters. Moreover, gender differences affect the degree of these psychological disorders.

Keywords: Loneliness, Depression, Self-care Students, Latchkey and non-Latchkey Students, Gender

1. Background

How parents care for their children is an issue many families are struggling with, particularly since nowadays, the number of mothers who work outside the house in the hope of providing better economic conditions for their children is a growing social phenomenon. Under the circumstances, their children are forced to take care of themselves after school in the absence of their parents. These self-care children are called latchkey children. The term refers to the latchkey to a house door. The key is often hung around the child's neck or left hidden under a mat (or some other object) in front of the door to the house. The term is claimed to have originated from a national broadcasting company (NBC) documentary in 1944, due to the common phenomenon of children being left alone at home during and after world war II, when one parent was enlisted into the armed forces, and the other one had to get a job. In general, the term latchkey designates those children between the ages of five and thirteen who care for themselves after the school until their parents or guardians return home (1). Similarly, Berk (2) states that

latchkey children referred to children whose parents are working outside the house and so they have to take care of themselves. Nowadays, the term latchkey children refers to those who stay at home alone after school and care for themselves. It can also be used to describe children who are cared for by their older brothers or sisters in the absence of a parent (3).

The reasons that lead to a latchkey situation vary in different countries. Nevertheless, according to Vandivere et al. (4) the following issues may contribute to this situation: family income, having full-time working parents, parents with mental problems, aging parents who are incapable of taking care of their children, the presence of an older sibling, and the children's age and their physical and psychological maturity. In addition, home environment, neighbors, and the neighborhood can affect parents' decision to leave their children alone at home (5). A research conducted by Ruiz-Casares and Heymann in Bostwana, Mexico and Vietnam (6) showed that among 538 working parents, poverty, social rules and regula-

tions, local norms and child's growth can affect parents' decision to leave their children alone at home.

Some studies indicated the adverse effect of self-care on educational achievements of children, whereas, on the contrary, some researches showed the positive results (7). The adverse consequences of the latchkey situation are anger, indifference, depression, isolation, low self-esteem and loneliness (8). Hence, it is necessary to examine the effect of the parents' decisions on leaving their children alone at home after school and the impact of resultant loneliness and depression on their children (9).

1.1. Loneliness

The feeling of loneliness is a major crisis in childhood and adolescents, which can harm the child's adaptability to the environment. Elhageen (10) defines loneliness as an unpleasant personal experience in which one feels different and suffers from visible behavioral disorders like sadness, anger and depression. There is also an incongruity between one's expectations and dreams and the possibility of unrealized social relationships that lead to losing touch with others. Loneliness is a shared experience that occasionally affects 80% of people under the age of 18 and 40% of those above 60 years (11). Although it gradually declines in the youth, it shows an upward trend among the middle-aged and the elderly (12). Loneliness is also defined as agitation perceived both quantitatively and qualitatively, and accompanied by recognizing one's social needs in the social environment (12, 13). Some studies, has equated loneliness to social isolation, although not an objective social isolation. People can just about live alone and do not experience feelings of loneliness or can have a good and fulfilling life alongside of feeling lonely (14).

An important factor to consider is the demands of a mother's job in relation to latchkey children's feelings of loneliness. Mothers who spend much of their time working outside of the house tend to cause a sense of more loneliness in their children (15). Therefore, there is a serious concern over the harmful effects brought upon children due to the decline in the amount of quantitative and qualitative time mothers spend with them (16, 17). The potential change in lifestyle associated with mother's job can be detrimental to both children and mothers' health and mental well-being (18, 19). In addition, Jia and Tian (20) have found that children who do not get attention, in comparison with those who do, experience more loneliness. Similarly, children under the care of grandparents and are in poor economic conditions, specifically those who do not have a good relationship with their parents, are more in danger of feeling lonely.

It is apparent that one of the most important factors in feelings of loneliness is their relationship with mother and their feeling of attachment toward them. Some researchers consider Bulby's attachment theory as related to feeling of loneliness and believe that this theory can

provide a framework for examining how loneliness develops (21). Similarly, Berlin et al.'s study revealed that loneliness in insecure children is high; whereas in secure children it is below average (21). In another research conducted by Hecht and Baum (22), it was found that the threat of separation and attachment quality in insecure children play an important role in their loneliness. In other words, feeling lonely, one's conceptual understanding of intimate emotional attachment, is a more determining factor than just being alone. In contrast to this insecure attachment, Newcomb et al. (23) stated that welfare, favorable economic conditions, good health, educational achievement and educating the child correlate with intimate emotional relationship between parents and children in authoritative families. Similarly, Galambos et al. (24) found that authoritative parents can have a more influential role in adopting adolescents.

Several studies have reported that loneliness can be a predictive factor of adolescents' depression (25). Witvliet (26) showed that in the correlation between depression and social isolation, loneliness can be a moderating factor. It was also found that isolation and loneliness can be critical factors in aggravating depression in adolescents. Among the factors that cause depression, poor relationship and interaction with parents have been reported to be more crucial (27). A significant relationship between depression and loneliness has also been reported by Han and Richardson (28).

1.2. Depression

Regarding the etiology of depression, several views have been proposed. Depression in people leads to pessimistic outlook on themselves, the world, and the future. They have negative and dark thoughts which are reflections of traumatic events in their lives and commonly have cognitive bias. When an individual faces significant events in life, he or she interprets them and looks for the underlying causes (29).

In medical terms, depression is considered a mood disorder, associated with symptoms such as sadness and great anxiety, feeling worthless and guilt, avoiding contact with others, losing appetite and sexual desire, insomnia and lack of interest in routine activities (30). The predictive factors of depression include troubled relationship with parents and peers, bad relationship with family members, and inappropriate interactions (31). Parents, specifically mothers, not being available can bring about adverse psychological consequences in children including depression, in addition to feeling lonely. A study conducted by Chatterji et al. (32) revealed a significant correlation between working hours of mothers with children above 6 months-old, and symptoms like depression and motherly stress, but found a negative correlation between working hours and mental health. Baker et al. (33) also found that mothers' work outside the house would have noticeable effect on children, less

satisfaction in parent-child relationship, and an increase in depression symptoms on children. On the other hand, de Minzi (34) has found that parents' availability and children's reliance on parents are the most crucial factors in alleviating depression in children.

1.3. Impact of Gender

In addition to the factors described in the aforementioned reports, the moderating role of gender was also examined in this study. This was vital to deal with adequately as several studies have revealed differences among men and women (35-38). Some studies have shown the significant role of gender in the relationship between depression and loneliness. For instance, in one study which examined the role of gender and loneliness in the relationship between self-esteem and the quality of life, found a relationship between gender and loneliness which could affect people's quality of life (39). Zeiders et al. (40) have also shown that there is a significant difference between male and female adolescents regarding the occurrence of depressive symptoms, and indicated that the girls experienced more depression. Another study conducted by Asher et al. (41) found a significant difference between the role of gender and loneliness and depression. Moreover, Wiseman et al. (42) showed that females experienced more depression, whereas men suffer more from feelings of loneliness.

Latchkey children who spend sometimes alone at home after school are at risk of several emotional and mental distress and miss their parents more than their peers, especially adolescents who are in highest need of sharing their feelings with their parents. Emotional problems related to this need would be hard to overcome, as loneliness and depression are most common after puberty. This study attempted to determine the relationship between these problems and the latchkey situation.

2. Objectives

Considering all these points, the present study examines loneliness and depression among latchkey or non-latchkey male and female students in Mashhad, Iran.

The study aimed to provide answers to the following questions: 1, Is there any difference in feeling lonely and depressed between latchkey and non-latchkey students; 2, Is there any significant difference between depression and loneliness among non-latchkey pupils; and 3, Is gender a moderating factor in a relationship between depression and loneliness.

3. Patients and Methods

3.1. Participants

The implemented research method was causal-comparative. The statistical population consisted of 270 latchkey and non-latchkey students, aged from 7 to 13 years, liv-

ing in Mashhad, Iran in 2013. Using the cluster sampling method, out of 13 school districts, district 1 was selected. From 3 regions in this district, region 3 and out of 4 zones in region 3 zone 3 was selected, 4 schools (2 all-male and 2 all-female students) from 14 schools in this zone were selected. After considering the educational background and the family history of the student and identifying the students who were alone after school, the convenience and cluster random-assignment samplings were used to select latchkey and non-latchkey groups, respectively including 135 students in each group (41 boys and 94 girls). Out of 270 participants 243 aged between 7 to 12 (around 90%), and the rest were 13 years old, of which 82 (29%) were boys and 188 (71%) girls. Regarding educational background, 243 pupils were in the primary school, and 27 (13 years-old) in junior high school.

3.2. Research Tools

Depression self-rating scale (DSRS). This scale, designed by Birlson (43), consists of 18 statements that assess depression in children aged 7-13. It comprises questions regarding mood, physical complaints, and depression. The statements are simple and the classification of responses is not complicated. Primary statements were retrieved from articles regarding diagnosis of depression symptoms. Both positive and negative statements were included to avoid predictive responses

-Norms: The primary study was conducted on four groups of children (53 children) including depressed and non-depressed children of a psychiatric clinic, mal-adjusted children from a boarding school, and children of an ordinary school in Britain. The second study was carried out on 85 children who were hospitalized in a psychiatric center in the U.S.A. The participants in the first study were both boys and girls from different economic levels. The second study comprised 22 girls and 60 boys with different economic and social positions (63 white, 9 black and 10 Spanish).

The statements are graded based on a three-point scale. In statements 1, 2, 4, 7, 8, 9, 11, 12, 13 and 16, the scoring is: never = 2, sometimes = 1 and often = 0; whereas, for the statements 3, 5, 6, 10, 14, 15, 17, and 18 this scoring is: never = 0, sometimes = 1, and often = 2. The score 13 distinguishes between depressed and non-depressed children. The final score ranges from 0 to 36.

-Reliability: In the primary and the second studies, alpha was 0.86 and 0.73, respectively showing high internal consistency. The reliability coefficient of the repeated test was 0.80, suggesting high stability. The concurrent validity of this scale was high and correlated significantly (0.81) with the loneliness rating scale. Also there was high known-group validity in the DSRS with minor errors.

Iranian validity and reliability: The validity and reliability of the DSRS was reported by Taghavi (44). In 4-week interval, the test-retest reliability coefficient of the scale and the internal consistency of the DSRS was 0.75 and

0.81, respectively. The concurrent validity of the DSRS was 0.72 as measured by the abbreviated form of the children depression scale (CDS-A) (45).

-Loneliness self-rating scale: Asher et al.'s Loneliness rating scale consists of 24 statements, of which seven statements (4, 5, 11, 13, 15, 19, and 23) are not scored because they deal with interests and hobbies of the child. The remaining statements are scored 16 - 80. Grading is based on Likert rating scale as 1 = always true, 2 = most of the time true, 3 = sometimes true, 4 = hardly ever true, and 5 = not true at all. For items 3, 6, 9, 12, 14, 17, 18, 20, and 21 response order is reversed in scoring. According to Asher, et al. (41), the reliability coefficient of this test was 0.83 applying the split-half method, 91% using Spearman-Brown formula and 91% with the Guttman's Lambda. In this study, the reliability coefficient was 0.49 using test-retest methods in a 25 day interval among 41 students in a junior high school. Therefore, this scale is an appropriate measurement and assesses children's loneliness, isolation and dissatisfaction with social situations.

-Iranian reliability: The calculations regarding reliability (46) revealed this scale enjoys high internal consistency. The Cronbach alpha is 0.81. The 0.66 correlation between the two halves of the test using split-half method showed that the internal consistency was at an acceptable level. This correlation is further modified using the Spearman-Brown method, which scores the reliability of the whole scale as 0.79.

To achieve the validity of this research tools, 30 students were randomly chosen for each of latchkey and non-latchkey groups who were then asked to complete

the depression self-rating scale and loneliness self-rating scale. The Cronbach alpha was 0.78 and 0.82 respectively. Therefore these research tools are appropriate for the measurements used in this study.

4. Results

An independent-samples t-test was conducted to compare loneliness and depression among latchkey and non-latchkey students. Table 1 shows a statistical significance of difference in the t-value for loneliness (-4.32) and depression (-3.02) with 268 degrees of freedom and $P \leq 0.05$. Hence, latchkey children experience more loneliness and depression.

Table 2 shows a significant relationship between loneliness and depression in latchkey students with correlation coefficient 0.59 ($P = 0.01$), this means latchkey children were more lonely and depressed than non-latchkey students in this study. But in contrast, $P = 0.79$ for non-latchkey students shows no significant difference in depression and loneliness between them.

As Table 3 shows, loneliness has been used as the predictive factor and gender as the moderating factor in the hierarchical regression. The Beta is 0.34 for loneliness and since it is above 0.05, it can be concluded that 34% of the depression variance can be determined by loneliness. With regard to gender, the beta is 0.22 that indicates 22% of the depression variance can be determined by gender. Hence, gender is accepted as a moderating factor in the relationship between depression and loneliness. In other words, gender affects the amount of depression experienced.

Table 1. Independent t-test of Loneliness and Depression Variables Among Latchkey and Non-Latchkey Students^a

Variables	Mean ± SD	T Value	Degrees of Freedom	P Value
Loneliness				
Non-latchkey	32.68 ± 3.16	-4.32	268	0.0001
Latchkey	34.77 ± 4.65			
Depression				
Non-latchkey	87.88 ± 10.21	-3.02	268	0.0001
Latchkey	92.65 ± 15.21			

^aSignificance is at 0.01.

Table 2. Correlation Between Loneliness and Depression based on Latchkey and Non-latchkey Categories^a

Variables	Correlation Coefficient	P Value
Loneliness and depression		
Latchkey	0.59	0.01
Non-latchkey	0.02	0.79

^aSignificance Level is 0.05.

Table 3. Multiple Regression Results With Depression as the Predictive Factor of Loneliness and Gender

Predictive Variable	B	SE	Beta	T	F	R ²	P
Loneliness	1.08	0.19	0.34	5.67	41.39	0.23	0.0001
Gender	6.49	1.70	0.22	3.80			

5. Discussion

The present study was aimed at examining loneliness and depression among latchkey and non-latchkey pupils in Mashhad, Iran. As stated earlier in the literature, there are significant differences between latchkey and non-latchkey students regarding personality traits and traumatic experiences. To paint a more comprehensive picture, it can be stated that since children are emotionally attached to their parents, specifically their mothers, they cannot conceive of being far from them during the day. In contrast, mothers who spend less time working outside of the home and more time with their children can prevent their mental distress.

The finding of this study, showing a difference in the level of loneliness and depression among latchkey and non-latchkey children, is in accordance with other studies conducted on the same domain. For instance, Baker et al. (33) showed that mothers' long working hours can bring about harmful consequences, including loneliness and depression, for children. de Minzi (34) found that parents' availability, particularly mothers, and children's attachment to them are the most crucial factors in alleviating depression. This was consistent with the study of Belsky and Rounin (47), and Chatterji et al. (32). The results of current study we also showed that there is a significant relationship between loneliness and depression in latchkey students. It can be inferred that since these pupils suffer from lack of affection and do not very often see their parents; their feeling of loneliness can be a predictive factor of their depression, a conclusion reached by several researches. Qualter et al. (25) showed that loneliness can be a predictive factor of depression in adolescents. Another study found that loneliness can be a moderating factor in the relationship between depression and social isolation (26). Moreover, it was shown that isolation and loneliness can be a determining factor in aggravating depression in the early adolescence (27). Hann and Richardson (28) have also found that there is a significant relationship between depression and loneliness.

The moderating role of gender in the relationship between loneliness and depression was another finding of this study, which showed gender differences can affect the amount of loneliness and depression in individuals. These differences are due to several factors including physiological differences between men and women, cognitive differences which greatly affect how the world is perceived and distinct degrees of attachment of boys and girls to their parents (30). Our findings are consistent with those of other studies showing that girls are generally more attached to their parents, the fact that plays an important role in experiencing different feelings (21-23, 44). Huo and Kong (39) found that gender affects the extent of loneliness. Similarly, a study conducted by Zeiders et al. (40) showed that gender makes a significant difference in the development of depressive symptoms. In addition, Asher et al. (41) stated that gender plays a significant role in the relationship between loneliness and

depression. Wiseman et al. (42) and Lempers et al. (48) have also come up with similar results. Therefore, it can be concluded that mothers who spend most of their time outdoors working and deprive their children of their presence may cause some form of mental distress like loneliness and depression in their children.

Further studies can determine the impact of other important variables such as attachment styles, and coping strategies on self-care children. The population can extend to include abandoned children and those living in correctional and rehabilitation centers and younger children. The findings of this study carries clear implications for parents, specifically in regard to a significant difference in feelings of loneliness and depression between latchkey and non-latchkey children.

A limitation of this study was using a single questionnaire as measuring instrument. Furthermore, since the subjects studied included children aged between 7 to 13 years, it would be incautious to extrapolate the data to other populations.

Acknowledgments

We wish to thank the students and the schools' authorities for their valuable cooperation in this research.

Footnote

Authors' Contribution: Samaneh Sadat Fattahi Massoom developed the original idea and the protocol, abstracted and analyzed data, wrote the manuscript, and is guarantor; Hossein Salimi Bajestani contributed to the development of the protocol and abstracted data.

References

1. Benne M. *Principles of children's services in public libraries*: Chicago: American Library Association; 1991.
2. Berk L. *Development through the lifespan*: Pearson Education India; 2001.
3. Bender J, Flatter CH, Sorrentino JM. *Half a childhood: Quality programs for out-of-school hours*: School Age Notes; 2000.
4. Vandivere S, Tout K, Capizzano J, Zaslow M. *Left Unsupervised: A Look at the Most Vulnerable Children*. *Child Trends Research Brief*: ERIC; 2003.
5. Casper LM, Smith KE. Self-care: why do parents leave their children unsupervised? *Demography*. 2004;41(2):285-301.
6. Ruiz-Casares M, Heymann J. Children home alone unsupervised: modeling parental decisions and associated factors in Botswana, Mexico, and Vietnam. *Child Abuse Negl*. 2009;33(5):312-23. doi: 10.1016/j.chiabu.2008.09.010. [PubMed: 19477517]
7. Venter E, Rambau E. The effect of a latchkey situation on a child's educational success. *South African Journal of Education*. 2011;31(3):345-56.
8. Belle D. *The after-school lives of children: Alone and with others while parents work*: Psychology Press; 1999.
9. Brendgen M, Wanner B, Morin AJ, Vitaro F. Relations with parents and with peers, temperament, and trajectories of depressed mood during early adolescence. *J Abnorm Child Psychol*. 2005;33(5):579-94. doi: 10.1007/s10802-005-6739-2. [PubMed: 16195952]
10. Elhageen AAM. *Effect of interaction between parental treatment styles and peer relations in classroom on the feelings of loneliness among deaf children in Egyptian schools*: Universität Tübingen; 2004.
11. Weeks DJ. A review of loneliness concepts, with particular ref

- erence to old age. *Int J Geriatr Psychiatry*. 1994;**9**(5):345-55. doi: 10.1002/gps.930090502.
12. Pinquart M, Sorensen S. Influences on Loneliness in Older Adults: A Meta-Analysis. *BASP*. 2001;**23**(4):245-66. doi: 10.1207/s15324834basp2304_2.
 13. Peplau LA, Perlman D, Peplau LA, Perlman D. Perspectives on loneliness. *Loneliness: A sourcebook of current theory, research and therapy*.: Wiley New York; 1982. pp. 1-18.
 14. Krause-Parello CA. Loneliness in the school setting. *J Of Sch Nurs*. 2008;**24**(2):66-70. [PubMed: 18363440]
 15. Ven TMV, Cullen FT, Carrozza MA, Wright JP. Home Alone: The Impact of Maternal Employment on Delinquency. *Social Problems*. 2001;**48**(2):236-57. doi: 10.1525/sp.2001.48.2.236.
 16. Cawley J, Liu F. Maternal employment and childhood obesity: a search for mechanisms in time use data. *Econ Hum Biol*. 2012;**10**(4):352-64. doi: 10.1016/j.ehb.2012.04.009. [PubMed: 22790446]
 17. Ruhm CJ. Maternal Employment and Adolescent Development. *Labour Econ*. 2008;**15**(5):958-83. doi: 10.1016/j.labeco.2007.07.008. [PubMed: 19830269]
 18. Riggio HR. Introduction: The Adaptive Response of Families to Maternal Employment: Part II--Family Perspectives. *Am Behav Sci*. 2006;**49**(10):1303-9. doi: 10.1177/0002764206286556.
 19. Bianchi SM. Maternal employment and time with children: dramatic change or surprising continuity? *Demography*. 2000;**37**(4):401-14. [PubMed: 11086567]
 20. Jia Z, Tian W. Loneliness of left-behind children: a cross-sectional survey in a sample of rural China. *Child Care Health Dev*. 2010;**36**(6):812-7. doi: 10.1111/j.1365-2214.2010.01110.x. [PubMed: 20533912]
 21. Berlin LJ, Cassidy J, Belsky J. Loneliness in young children and infant-mother attachment: A longitudinal study. *Merrill-Palmer Quarterly (1982-)*. 1995;91-103.
 22. Hecht DT, Baum SK. Loneliness and attachment patterns in young adults. *J Clin Psychol*. 1984;**40**(1):193-7. doi: 10.1002/1097-4679(198401)40:1<193::aid-jclp2270400136>3.0.co;2-2.
 23. Newcomb AF, Bukowski WM, Pattee L. Children's peer relations: a meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychol Bull*. 1993;**113**(1):99-128. [PubMed: 8426876]
 24. Galambos NL, Barker ET, Almeida DM. Parents do matter: trajectories of change in externalizing and internalizing problems in early adolescence. *Child Dev*. 2003;**74**(2):578-94. [PubMed: 12705574]
 25. Qualter P, Brown SL, Munn P, Rotenberg KJ. Childhood loneliness as a predictor of adolescent depressive symptoms: an 8-year longitudinal study. *Eur Child Adolesc Psychiatry*. 2010;**19**(6):493-501. doi: 10.1007/s00787-009-0059-y. [PubMed: 19777287]
 26. Witvliet M, Brendgen M, van Lier PA, Koot HM, Vitaro F. Early adolescent depressive symptoms: prediction from clique isolation, loneliness, and perceived social acceptance. *J Abnorm Child Psychol*. 2010;**38**(8):1045-56. doi: 10.1007/s10802-010-9426-x. [PubMed: 20499155]
 27. Kerr DC, Preuss LJ, King CA. Suicidal adolescents' social support from family and peers: gender-specific associations with psychopathology. *J Abnorm Child Psychol*. 2006;**34**(1):103-14. doi: 10.1007/s10802-005-9005-8. [PubMed: 16502141]
 28. Han J, Richardson VE. The Relationship Between Depression and Loneliness Among Homebound Older Persons: Does Spirituality Moderate This Relationship? *J Relig Spiritual Soc Work*. 2010;**29**(3):218-36. doi: 10.1080/15426432.2010.495610.
 29. Abramson LY, Seligman ME, Teasdale JD. Learned helplessness in humans: critique and reformulation. *J Abnorm Psychol*. 1978;**87**(1):49-74. [PubMed: 649856]
 30. Crouter AC, Booth A. *Work-family challenges for low-income parents and their children*. Routledge; 2014.
 31. Eberhart NK, Hammen CL. Interpersonal Style, Stress, and Depression: An Examination of Transactional and Diathesis-Stress Models. *J Soc Clin Psychol*. 2010;**29**(1):23-38. doi: 10.1521/jscp.2010.29.1.23. [PubMed: 21052552]
 32. Chatterji P, Markowitz S, Brooks-Gunn J. Effects of early maternal employment on maternal health and well-being. *J Popul Econ*. 2013;**26**(1):285-301. doi: 10.1007/s00148-012-0437-5. [PubMed: 23645972]
 33. Baker M, Gruber J, Milligan K. Universal Child Care, Maternal Labor Supply, and Family Well - Being. *J Polit Econ*. 2008;**116**(4):709-45. doi: 10.1086/591908.
 34. de Minzi MCR. Gender and cultural patterns of mothers' and fathers' attachment and links with children's self - competence, depression and loneliness in middle and late childhood. *ECEJ*. 2010;**180**(1-2):193-209. doi: 10.1080/03004430903415056.
 35. Conger RD, Conger KJ, Elder GH, Lorenz FO, Simons RL, Whitbeck LB. A Family Process Model of Economic Hardship and Adjustment of Early Adolescent Boys. *Child Development*. 1992;**63**(3):526. doi: 10.2307/1131344. [PubMed: 1600820]
 36. Kalantarkousheh SM. Gender as a moderator in the association of self-acceptance and autonomy of Iranian university students. *J Of Teach Education*. 2012;**1**(6):39-46.
 37. Parlee MB. Menstrual rhythms in sensory processes: a review of fluctuations in vision, olfaction, audition, taste, and touch. *Psychol Bull*. 1983;**93**(3):539-48. [PubMed: 6346371]
 38. Royster LH. Representative hearing levels by race and sex in North Carolina industry. *J Acoust Soc Am*. 1980;**68**(2):551. doi: 10.1121/1.384769. [PubMed: 7419811]
 39. Huo Y, Kong F. Moderating effects of gender and loneliness on the relationship between self-esteem and life satisfaction in Chinese university students. *SOCI*. 2014;**118**(1):305-14.
 40. Zeiders KH, Umana-Taylor AJ, Derlan CL. Trajectories of depressive symptoms and self-esteem in Latino youths: examining the role of gender and perceived discrimination. *Dev Psychol*. 2013;**49**(5):951-63. doi: 10.1037/a0028866. [PubMed: 22686175]
 41. Asher SR, Hymel S, Renshaw PD. Loneliness in Children. *Child Development*. 1984;**55**(4):1456. doi: 10.2307/1130015.
 42. Wiseman H, Gutfreund DG, Lurie I. Gender differences in loneliness and depression of university students seeking counselling. *BRIT J GUID COUNS*. 1995;**23**(2):231-43. doi: 10.1080/03069889508253008.
 43. Birlleson P. The validity of depressive disorder in childhood and the development of a self-rating scale: a research report. *J Child Psychol Psychiatry*. 1981;**22**(1):73-88. [PubMed: 7451588]
 44. Taghavi SMR. Iranian Translation, editor. Reliability and validity of the birleson's depression self-rating scale (dhrs) for adolescents. *The 6th European Conference of Psychological Assessment*. 2001
 45. Najarian B. The construction and validation of the short form of children depression scale (CDS-A) by factor analysis. *Psychological Research*. 1994;**2**(3-4):24-44.
 46. Hosseinchari M. Examining the efficacy of loneliness rating scale among junior high school students. *Int j soc sci humanit*. 2002;**19**(1)
 47. Belsky J, Rovine MJ. Nonmaternal Care in the First Year of Life and the Security of Infant-Parent Attachment. *Child Dev*. 1988;**59**(1):157. doi: 10.2307/1130397. [PubMed: 3342709]
 48. Lempers JD, Clark-Lempers D, Simons RL. Economic hardship, parenting, and distress in adolescence. *Child Dev*. 1989;**60**(1):25-39. [PubMed: 2702872]