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

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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, $P \le 0.05$) and depression (-3.02, $P \le 0.05$) 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, $P \le 0.05$). However, no significant difference between loneliness and depression was observed (r = 0.02, $P \ge 0.05$) 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-

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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 nonlatchkey 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, living 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 to12 (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 Birleson (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, maladjusted 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 to36.

-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 Guttmann'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 nonlatchkey 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 nonlatchkey 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.

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

Table 2. Correlation Between Lo	oneliness and Depression based	on Latchkey and Non-la	tchkey Categories ^a

Variables	Correlation Coefficient	P Value	
Loneliness and depression			
Latchkey	0.59	0.01	
Non-latchkey	0.02	0.79	
a _{Significance} Lovel is 0.05			

^aSignificance Level is 0.05.

Predictive Variable	В	SE	Beta	Т	F	R ²	Р
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 nonlatchkey 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 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 came 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 to13 years, it would be incautious to extrapolate the data to other populations.

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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.

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