The Relationship between Resilience and Anxiety among Left-Behind Children in Rural China

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Abstract. There are 61 million left-behind children in rural China, which is 21.88% of all children in China, and 2 million of these children live by themselves without the guidance or supervision of an adult. This study investigated the influence of resilience on the anxiety of left-behind children (N = 206) living in Longguang Village of Anlong County in Guizhou Province, China, using the Ego-Resiliency Scale and the Social Anxiety Scale for Children. The resilience of the left-behind children was below the standard level, and their ability to cope with trauma, adversity, and threats was weak. Differences in the children’s resiliency varied in accordance with the circumstances of their parents’ absence. The anxiety score of the 206 left-behind children in the sample was high. Resilience was negatively correlated with anxiety. In other words, the anxiety of the left-behind children was lower when their level of resilience was higher.

Introduction

“Left-behind children” refers to minors in China whose parents have moved to another location in order to pursue jobs or conduct business or other activities; older adults, relatives, and other people care for them (Hu & Gan, 2008). An increasing number of parents have been moving from rural to urban areas to earn money since the 1980s. They cannot take their children with them because of higher costs of living, bureaucratic education policies, and restrictions due to work conditions, among other reasons. Hence, these children must remain in their hometowns with grandparents or other relatives, which increases their vulnerability to multiple problems.

There are a considerable number of research studies on the mental-health problems of left-behind children. Huang (2004) found that the rate of mental-health problems was 27.3%, and most of them were mild. These problems include obsessive-compulsive disorder (55.6%), anxiety (26.3%), depression (24.2%), paranoia (23.5%), and hostility (22.2%). Wang and Lin (2003) reported that 30.3% of left-behind children have mental-health problems, including obsessive-compulsive disorder (6.3%), anxiety (16.2%), depression (12.3%), and paranoia (8.5%). These rates are significantly higher than those of other children are. Zhang, Wang, Sun and Zhang (2006) reported that the incidence of social anxiety disorder of left-behind children was 17.1% higher than that of other children (11.7%). This difference was statistically significant; therefore, the anxiety of left-behind children in rural China is an issue that deserves closer examination.

Although significant progress has been made in the recognition of anxiety among left-behind children in rural China, implementation of specific interventions to address their specific needs are inadequate. A doctoral dissertation by Fan (2008) titled, “Psychopathology of Anxiety and Depression of Left-behind Children and Empirical Study of Resilience Development Program” has addressed this problem. In this dissertation, a resilience development program consisting of group interventions, designed by Fan, contributed to the development of resilience in left-behind children and eased their anxiety and depression.
Bonanno (2004) defined resilience as the ability of individuals in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as to maintain relatively stable, healthy levels of psychological and physical functioning as well as the capacity for generative experiences and positive emotion. One of the many definitions of resilience refers to it as the ability to recover from difficulties, sufferings, and misfortune quickly (Masten, 1994). Resilience is the ability to overcome adverse circumstances. Even people in complex environments with daily challenges or a series of challenges can make constructive life choices (Noam, Pucci & Foster, 1999). Resilience is a personal characteristic that enhances the ability to adapt to pressure, so that when confronted with unfortunate life experiences, the individual can overcome problems and move on (Markstrom, Marshall & Tryon, 2000). In this paper, we define resilience as an effective coping mechanism and an individual’s adaptation when loss, difficulty, or adversity is encountered. When environmental change becomes a threat to the individual, the instinct of self-protection is exhibited in the person’s psychological processes while they overcome the difficulties posed by the adverse situation and adapt positively to it. All individuals have this potential when they face difficulties, sadness, threats, or other major stressors. Resilience helps individuals to engage effectively in the adaptation processes; it can be viewed, as well as the ability to rebound from difficult experiences.

Many studies have explored the negative influence of the anxiety experienced by left-behind children (Wang & Lin, 2003; Zhang, Wang, Sun & Zhang, 2006). However, there are few studies on the resilience issues of left-behind children and their emotional adaptive ability. In this study, the relationship between the resilience and anxiety of left-behind children was examined from the perspective of positive psychology. The aim of this study was to understand the emotional adaptation of left-behind children and to provide information about left-behind children pertaining to the effective development of physical and mental health.

Methods

Participants

Participants were recruited through the random selection of children enrolled in grades 4 to 6 in primary and junior high schools in Longguang Village of Anlong County in Guizhou Province, China. Because this area is a typical village and more convenience based on traffic and accommodation reasons. An undergraduate and me visited the leaders of the schools and conducted this study. The study went well due to their enthusiastic cooperation. The sample consisted of 206 students (99 boys and 107 girls; Table 1).

| Background | Types | N   | %   |
|------------|-------|-----|-----|
| 1 Gender   | Boys  | 99  | 48.1|
|            | Girls | 107 | 51.9|
| 2 Developmental stage of children | Childhood | 82 | 39.8|
|            | Adolescence | 124 | 60.2|
| 3 Circumstances of parents’ absence | Mother at home | 58 | 28.2|
|            | Father at home | 35 | 17.0|
|            | Both parents absent | 113 | 54.9|
| 4 How long ago parents left home | 2 years | 150 | 72.8|
|            | 2–5 years | 35 | 17.0|
|            | 6–10 years | 11 | 5.3|
|            | Over 10 years | 10 | 4.9|
| 5 Frequency of reunions with parents | Every couple of months | 45 | 21.8|
|            | Every six months | 30 | 14.6|
|            | Once per year | 107 | 51.9|
|            | Less than every 2 years | 24 | 11.7|
Supervisor | Mother | 57 | 27.7 |
|-------------|--------|----|-----|
| Father      |        | 32 | 15.5|
| Grandparents or relatives | 111 | 53.9 |
| Others      |        | 6  | 2.9 |

**Instruments**

**Ego-Resiliency Scale (ER89).** The ER89 (Block & Kremen, 1996) is based on the construct of ego-resiliency. Block’s conceptualization of ego-resiliency includes the ability to adapt one’s level of emotional control so that it is appropriate to the circumstances presented. The ER89 consists of 14 items rated on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). Examples of items are “Able to adapt to change” and “Pride in your achievements.” The items’ ratings are summed, with higher scores reflecting greater resilience. The ER89 has sound psychometric properties and distinguishes between those with greater and lesser resilience. The scale has demonstrated that resilience is modifiable and can improve with treatment, with greater improvement corresponding to higher levels of global improvement. The reliability coefficient of the ER89 was 0.84 based on a prior study conducted by Luo (2007).

**Social Anxiety Scale for Children (SASC).** The SASC consists of 10 items, rated on a 3-point scale (0 = none, 1 = sometimes, 2 = always). Examples of items are “I'm afraid of being laughed at” and “I'm afraid that other kids will not like me.” Items’ ratings are summed, with higher scores reflecting greater anxiety. This scale measures 2 factors, namely, fear of negative evaluation, and social avoidance and distress. A previous study to establish a Chinese norm for the SASC found that the scale had good validity and reliability, and can be used to measure children’s social anxiety symptoms in China (Li, Su & Jin, 2006). Cronbach’s alpha coefficient was 0.79.

**Data Analysis**

The children’s resilience was low, based on their total scores on the ER89, which ranged from 14 to 70. Their ability to cope was not effective when they encountered great adversity, threats, and trauma (Table 2).

Table 2. Resiliency of the Left-Behind Children, as Measured by the Ego-Resiliency Scale.

| Item | N  | Mean | SD  |
|------|----|------|-----|
| Total score for resiliency | 206 | 47.35 | 6.91 |

An independent-samples t-test showed no significant gender difference in resilience among the left-behind children, but the boys’ total resilience score was slightly higher than that of the girls (Table 3).

Table 3. Gender Differences in Resiliency among the Left-Behind Children.

| Gender | N  | Resiliency (M±SD) | t   | p   |
|--------|----|-------------------|-----|-----|
| Boys   | 99 | 47.83±6.71        | 0.966 | 0.335 |
| Girls  | 107| 46.90±7.10        |     |     |

*Note.* *p < 0.05; **p < 0.01

Table 4. Differences in Participants’ Resilience by Circumstances of Parents’ Absence, How Long Ago Parents Left Home, Reunion Frequency, and Supervision.

| Gender | N  | Resiliency (M±SD) | Anxiety (M±SD) | t   | p1  | F   | p2  |
|--------|----|-------------------|----------------|-----|-----|-----|-----|
| Boys   | 99 | 47.83±6.71        | 8.87±2.71      | 0.96 | 0.335 | -0.08 | 0.93 |
| Girls  | 107| 46.90±7.10        | 8.91±3.30      |     |     |     |     |
Table 4 summarizes participants’ differences in resilience based on challenges they faced as left-behind children. First, there was a significant difference in resilience of the left-behind children based on the circumstances of their parents’ absence from the home ($p_1 = 0.042 < 0.05$). After another comparative analysis, we found that the resilience scores of the participants were highest when the father remained at home, followed by the mother, and then the absence of both parents. However, there was no significant gender difference in anxiety among the left-behind children ($p_2 = 0.710 > 0.05$), although the girls’ total anxiety score was slightly higher than that of the boys.

Second, there was a significance difference in the resilience of the left-behind children based on the length of time their parents had been gone from the home ($p_1 = 0.024 < 0.05$). Given the results, when parents had been absent from the home for a longer period, the children’s resilience was lower. However, there was no significant differences in the anxiety of the left-behind children based on the circumstances of their parents’ absence from the home ($p_2 = 0.789 > 0.05$). Third, there was a significant difference in the resilience of the left-behind children based on the frequency of reunions with their parents ($p_1 = 0.036 < 0.05$). Given the results, we can see that when reunion intervals were shorter, the children’s resilience was higher. However, there was no significant difference in the anxiety of the left-behind children, no matter how long their parents had been absent from the home ($p_2 = 0.631 > 0.05$). Fourth, no significant difference was found in the children’s resilience, regardless of who supervised them ($p_1 = 0.036 < 0.05$), and no significant difference was found in the children’s anxiety, no matter who supervised them ($p_2 = 0.631 > 0.05$).

The participants were divided into two groups (non-anxiety and anxiety groups) using the cut-off score of 8 points on the SASC, which indicating the presence of anxiety. The results of $t$-test in Table 5, showed a significant difference in resilience between the anxiety and non-anxiety groups ($p = 0.030 < 0.05$), with the resilience of the anxiety group being lower than that of the non-anxiety group. The anxiety level of the participants was generally high, based on the SASC’s standard score of 8 points, which indicates the presence of anxiety (Table 6).
Table 5. Difference in Resiliency between the Anxiety and Non-Anxiety Groups of Left-Behind Children.

| Group          | N   | Resilience (M±SD) | t    | p    |
|----------------|-----|-------------------|------|------|
| Anxiety        | 113 | 46.9±7.39         | 1.033| 0.030*|
| Non-anxiety    | 93  | 47.9±6.29         |      |      |

Note.* p < 0.05; **p < 0.01

Table 6. Anxiety of the Left-behind Children, as Measured by the Social Anxiety Scale for Children.

| Item                       | N   | Mean | SD |
|----------------------------|-----|------|----|
| Total score for anxiety    | 206 | 8.89 | 3.03 |

The results of the correlation analysis indicated that resilience was significantly and negatively correlated with anxiety; when the children’s level of resilience was lower, the level of anxiety was higher (Table 7).

Table 7. Correlation between the Resilience and Anxiety Scores of the Left-behind Children.

|                      | Resilience          |
|----------------------|---------------------|
| Pearson’s correlation coefficient | -0.915 (*) |
| Anxiety              |                      |
| Test of Significance (Two-tailed) | 0.032 *
| N                    | 206                 |

Note.* p < 0.05; **p < 0.01

Discussion

This study found no significant gender differences in resilience or anxiety among the left-behind children. Obviously, gender was not a main factor in the children’s resilience or anxiety, which was probably because of the respective roles and responsibilities of both genders in the Guizhou countryside. The economic development of Guizhou Province has been slowed, mostly by its mountain ranges, especially in the more mountainous areas and deep forests, which is the major reason for its high rate of left-behind children. Farmers who live in impoverished areas tend to migrate more often to the cities to improve their incomes (Fan, Su, Gill & Birmaher, 2010).

The total resilience score of the boys in this study was slightly higher than that of the girls, and the total anxiety score of the girls was slightly higher than that of the boys, which is consistent with a previous study (Fan, 2008). As a result, the girls felt slightly more pressure than the boys did. Perhaps this finding might be true of all of the rural China, which has the traditional “preference for sons over daughters.” According to “evolutionary psychology,” humans create economic conditions to promote the survival of individuals and to produce offspring. A man becomes head of the family and a woman becomes a subsidiary. Thus, the female participants in this study were more likely to experience constraints and threats from the surrounding environment, and to lack security since they were very young. The girls were easy targets for bullying and were used to provide services without the protection of their parents due to the negligent or abusive care of their supervisors; these experiences led to the development of mental-health problems. Two types of mental-health problems among the girls were identified: (1) resignation to her fate, feeling like a tool, and an inability to feel any anxiety and (2) sustaining a glimmer of hope in her life and behaving in a relatively conservative manner with increasing anxiety and a tendency to be indecisive, cautious, and thus, less resilient.

The left-behind children in this study were more likely to have negative emotions and mental-health problems, such as anxiety, loneliness, low self-esteem, and resentment towards their parents because of their absence and failure to provide parental care. The resilience of the left-behind children was below the standard level, which indicated that it was relatively weak when they encountered overwhelming adversity, threats, or trauma. Differences in resilience among the
left-behind children varied according to the circumstances of the parents’ absence from the home. Our results showed that the resilience score of the left-behind children was higher when the father stayed at home than when the mother did. This result is inconsistent with previous studies (Li, Luo, & Tan, 2008). As fathers tend to be the main source of family income, they probably were better at meeting the children’s needs when they stayed at home, than the mothers were. Children lived with a father who symbolizes the material aspects of life, can give a left-behind child a greater sense of security, accomplishment, and satisfaction, and reduce their anxiety, so that they have more courage to engage in certain behaviors, and have more resilience.

The resiliency score was the lowest when both the father and mother were not living at home. When parents had been absent from the home for a longer time, their left-behind children’s resilience scores were lower. As the frequency of reunions with their parents increased, the children’s resiliency scores increased. The mean anxiety score of the left-behind children was high. The anxiety scores of the children varied by the frequency of reunions with their parents, i.e., children who had frequent family reunions, had lower anxiety scores. A significant difference in resilience scores was found between the anxiety group and non-anxiety group, with the score of the anxiety group being lower than that of the non-anxiety group. Resilience had a significant negative correlation with anxiety. When the level of resilience among the left-behind children was lower, their level of anxiety was higher. Thus, human beings are still capable of effective regulation and adaptation when they encounter different situations. They know how to survive in adverse situations while maintaining compassion for others and hope in life. Unhealthy attitudes disappear automatically. This positive psychological view of resilience can be taught in educational programs designed to develop it in an appropriate environment.

The results of this study provided justification for the prevention of anxiety through early training to strengthen resilience. This study not only can help the Chinese government develop related policies and precautions, but promote effective intervention and prevention programs to address the mental-health problems of this vulnerable group. It should also help educators better understand the developmental trajectories of left-behind children, and to have reasonable expectations of them and make judgments about different developmental outcomes. A resilience-development program should contribute to the development of resilience in left-behind children and ease their anxiety and depression (Fan, 2008).

**Conclusion**

There is justification for the prevention of anxiety through early training to improve resilience. No significant gender differences were found in the resilience or anxiety of the children in this study. Left-behind children were more likely to have negative emotions and mental-health problems, such as anxiety, loneliness, low self-esteem, and resentment towards their parents. The mean anxiety score of the left-behind children in this study was generally high.

This study has limitations. First, the study just focused on the left-behind children, thus future researchers should conduct comparison studies to examine differences in resilience between left-behind children and children in the general population (i.e., non-left-behind children). Second, the study just used only questionnaires. Therefore, future studies should combine methodological approaches to enrich the research results. Finally, the sample size of this study is less, and there is only one county selected. Hence future studies should be conducted with larger samples in order to be able to improve the credibility of the findings.

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