The Research on Left-Behind Adolescents’ Time Management Disposition

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Objective: To explore the time management tendency of left-behind adolescents, compare the differences of time management of left-behind. Methods: The questionnaire studies the adolescents students of major labor. Results: Left-behind adolescents are tend to form bad time management tendency (t < 2.55, p < 0.01) and among these left-behind adolescents there are great individual differences (F > 4.24, p > 0.05); 16-year-old time is a critical period of forming social value of time management (F > 4.24, p > 0.05), the grade (F(2,331) = 3.74, p = 0.03), and whether the only child (t = 2.26, p = 0.03) has priority to the impact of time management; the children’s age when their parents left, The left period of their parents, the parents who go out, and the visit interval all these factors affect the adolescents’ time management tendency (R^2 > 0.21, p < 0.001).

Keywords: left-behind, adolescents, Time Management Disposition (TMD), left-behind situation remain

Introduction

A large number of children and adolescents between the ages of 0 and 18 are left behind in rural areas because one or both parents have left home to work, and the number of children left behind has reached 61 million (Li, 2014). The problems of survival and physical and mental development caused by left-behind and intergenerational parenting have aroused widespread concern in society. Although economic development has entered a new era, the problem of survival and development caused by the problem of left-behind has not changed fundamentally.

The concept of Time Management Disposition (TMD) was proposed by Huang and Zhang (2001) from the perspective of personality traits of individuals in understanding and utilizing time. Time Management Disposition is a cognitive characteristic of individuals’ perception, understanding, utilization, and control of time, a multi-dimensional and multi-level psychological structure with temporal characteristics, and an important part of personality. Individuals’ characteristics in dominating time are not only expressed in their behaviors, but also in their attitudes toward time and their personalities. Attitudes toward time and time values can motivate people to act toward certain goals and increase the success of individual actions. Studies showed that time management tendencies are highly positively correlated with academic performance (Fang, Zhao, Tian, & Ma, 2021) and homogeneity (Yu et al., 2021), and negatively correlated with self-control (Li et al., 2020), and that the development of good time management tendencies in adolescents helps to improve and develop the self.
From a developmental perspective, time management tendencies are not static (Janeslatt, Granlund, & Kottorp, 2009). Left-behind adolescents are often prone to problems in time management tendencies due to living alone or intergenerational parenting and lack of parental monitoring. Therefore, this study takes the time management tendency of left-behind children as an entry point to first explore the current situation of time management tendency of left-behind children, and to answer: Whether there is a significant difference in time management tendency among left-behind? What is the impact of the status of left-behind (Zuo, Zhang, & Bao, 2011) on children’s time management tendency? The study will focus on the following questions.

**Objectives and Methods**

**Subject Selection**

The location of the subject is Xiaogan City, Hubei Province, China. A large number of adults go out to work, so there are a large number of left-behind children in the area, which is representative. A total of 600 students participated in this questionnaire survey, of which 583 were valid questionnaires. Three middle schools in Xiaogan City, Hubei were randomly selected, including 331 male students, 252 female students, 206 7th grade students, 205 8th grade students, and 172 9th grade students. Among them, 333 were left-behind children, accounting for 57.1% of the total.

**Tools**

The Adolescent Time Management Tendency Scale was a questionnaire designed to investigate the characteristics of adolescents’ time management tendencies. The questionnaire was designed based on Chinese adolescents (Huang & Zhang, 2001) and was divided into three subscales: the sense of time value subscale, the time monitoring view subscale, and the sense of time efficacy subscale. The Adolescent Time Management Tendency Scale has high content validity: The internal consistency reliability coefficient of each dimension ranges from 0.62-0.81, the retest reliability coefficient ranges from 0.71-0.85, and the internal consistency of the total scale is 0.782.

The left-behind factor is an important external indicator of the missing parental support system by investigating the basic situation of left-behind adolescents and the left-behind factor. The basic situation of the physical field system of the families of left-behind adolescents is classified as both parents away, father only away, and mother only away, reflecting the missing roles in parent-child relationships. The important indicators for the classification of left-behind time and interval: age of left-behind onset, length of left-behind years, and visitation interval, reflect the degree of parent-child relationship and growth support from the time dimension.

**Procedures**

The whole process of administration was done by the main examiner and the relevant teachers of the school. The test was administered in a group, with the class as the unit. The teachers were trained on the measurement issues before the administration, and the standardization of the measurement was pursued. The data collected were analyzed and processed using SPSS 19.0 statistical software.

**Results**

**Differences in Time Management Tendencies Between Left-Behind and Non-left-behind Adolescents**

On the scores of the 10 dimensions of the three subscales of time management: sense of time value, view of time monitoring, and sense of time efficacy, the scores of the left-behind adolescents were significantly
lower than those of the non-left-behind adolescents (see Table 1), and the left-behind adolescents formed poor time management tendencies more. Meanwhile, a chi-square test of the standard deviation of adolescents’ time management tendencies in Table 1 revealed that the dispersion of adolescents’ scores was significantly different in both subscales of sense of time value and sense of time efficacy. The degree of dispersion of the scores of the left-behind adolescents in these two subscales was greater and the extreme scores were more, which indicated that some of the left-behind adolescents performed extremely well in time management and some of them performed extremely poorly.

Table 1

|                          | Whether to stay | M ± SD  | Variance chi-square | Mean difference t-test |
|--------------------------|-----------------|---------|---------------------|------------------------|
| **Personal orientation** |                 |         |                     |                        |
| Yes                      | 3.71 ± 0.71     | 2.40    |                     | -3.39***               |
| No                       | 3.91 ± 0.64     |         |                     |                        |
| **Social orientation**   |                 |         |                     |                        |
| Yes                      | 3.89 ± 0.77     | 14.77***|                     | -6.32***               |
| No                       | 4.27 ± 0.60     |         |                     |                        |
| **Sense of value**       |                 |         |                     |                        |
| Yes                      | 3.80 ± 0.64     | 9.52*** |                     | -5.70***               |
| No                       | 4.08 ± 0.53     |         |                     |                        |
| **Set objectives**       |                 |         |                     |                        |
| Yes                      | 3.29 ± 0.67     | 1.23    |                     | -4.87***               |
| No                       | 3.56 ± 0.64     |         |                     |                        |
| **Program**              |                 |         |                     |                        |
| Yes                      | 3.08 ± 0.80     | 4.24*   |                     | -4.73***               |
| No                       | 3.39 ± 0.71     |         |                     |                        |
| **Priority**             |                 |         |                     |                        |
| Yes                      | 3.37 ± 0.66     | 2.22    |                     | -9.11***               |
| No                       | 3.85 ± 0.59     |         |                     |                        |
| **Feedback**             |                 |         |                     |                        |
| Yes                      | 3.36 ± 0.80     | 1.50    |                     | -2.55**                |
| No                       | 3.53 ± 0.76     |         |                     |                        |
| **Time allocation**      |                 |         |                     |                        |
| Yes                      | 3.47 ± 0.79     | 8.82*** |                     | -5.30***               |
| No                       | 3.80 ± 0.65     |         |                     |                        |
| **Monitor view**         |                 |         |                     |                        |
| Yes                      | 3.30 ± 0.54     | 0.80    |                     | -6.88***               |
| No                       | 3.60 ± 0.50     |         |                     |                        |
| **Time management behavioral effectiveness** | Yes | 3.43 ± 0.68 | 0.01 | -6.29***       |
| No                       | 3.79 ± 0.68     |         |                     |                        |
| **Time management effectiveness** | Yes | 3.60 ± 0.76 | 16.61*** | -8.11***     |
| No                       | 4.07 ± 0.57     |         |                     |                        |
| **Sense of efficacy**    |                 |         |                     |                        |
| Yes                      | 3.49 ± 0.65     | 6.40**  |                     | -8.62***               |
| No                       | 3.93 ± 0.56     |         |                     |                        |
| **Total score**          |                 |         |                     |                        |
| Yes                      | 3.53 ± 0.53     | 3.69    |                     | -6.50***               |
| No                       | 3.80 ± 0.45     |         |                     |                        |

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. Same below.

Differences in Adolescents’ Time Management Tendencies on Demographic Variables

Differences in time management tendencies of left-behind adolescents were studied in terms of grade level, age, gender, and whether they were only children, and compared with the non-left-behind adolescent group.

There was a significant difference in the scores of time management social orientation values among the left-behind adolescents in different age groups ($F_{(6,328)} = 2.24$, $p = 0.04$), while there was no significant age
difference among the non-left-behind adolescents. Further post hoc tests revealed higher scores for adolescents aged 12-15 years and lower scores for 16 and 17 years. A difference test was conducted between left-behind adolescents whose parents were away before and after the age of 16 and all non-left-behind adolescents, respectively, and found that the mean score of all non-left-behind adolescents was significantly higher (t = 3.35, p < 0.01) compared to left-behind adolescents who were away before the age of 16, and did not differ from the mean score of left-behind adolescents after the age of 16 (t = 0.91, p = 0.37).

There was a significant difference between the time priority monitoring perception scores of left-behind and non-left-behind adolescents in different grade groups (F(2,331) = 3.74, p = 0.03), and post hoc tests revealed that the scores were higher in Grades 8 and 9 and did not differ between the two grades, and worse in Grade 7.

The gender factor did not have an effect on time management tendencies of left-behind and non-left-behind adolescents (t < 0.89, p > 0.38 for each group).

There was a significant difference between being an only child and not having an only child on the perception of time priority monitoring (t = 2.26, p = 0.03), and the perception of time priority monitoring was lower among only adolescents (3.36 ± 0.80) than among non-only adolescents (3.53 ± 0.76), while being an only child or not having no significant effect on the time management tendencies of non-remaining adolescents (t < 1.44, p > 0.24 for all groups).

The Effect of Left-Behind Situation on Time Management Tendencies of Left-Behind Adolescents

This study focused on the effects of left-behind factors on the time management tendencies of left-behind adolescents from four perspectives: children’s age when their parents were away, the number of years their parents had been away, the number of parents who were away, and the interval between visits. Since parental absence can objectively reflect the missing role in the parent-child relationship and was an important indicator of traditional left-behind classification, this study classified adolescents according to the indicator of left-behind parental absence and examined adolescents’ time management tendency in three left-behind states: Both parents were away, only father was away, and only mother was away.

Comparison of differences among those whose parents were away from home. Parental absence influenced left-behind adolescents’ sense of time value (F(2,332) = 3.52, p = 0.02), view of time monitoring (F(2,332) = 2.34, p = 0.04), sense of time efficacy (F(2,332) = 3.24, p = 0.02), and overall level of time management tendencies (F(2,332) = 3.29, p = 0.02). Further post hoc tests revealed that the scores of the three groups were worst for both parents going out, second worst for mothers only going out, and relatively high for fathers only going out, and were significantly different among all three groups (t < 2.55, p < 0.04).

Regression analysis with left-behind situation as the independent variable. Multiple linear regression analysis (stepwise) was conducted with those whose parents were away as the grouping variable, the age of the child when the parents were away, the number of years the parents were away, and the visitation interval left-behind factor as the independent variables, and the three subscales of time management tendency and the total score as the dependent variables, and the three left-behind factors explained 29%-52% of the variance in time management among the left-behind adolescents. The results were relatively consistent in reflecting the effects of the left-behind factors on the overall levels of time value, time monitoring perception, time efficacy, and time management tendency, with all three left-behind factors entering the equation except for the number of years the father was away, which did not enter the value and efficacy perceptions, and the left-behind factors significantly influenced the time management tendency (Tables 2-5).
### Table 2
**Hierarchical Regression Analysis of Time Value of Left-Behind Adolescents**

| Parents who are away | Independent variable                          | $\Delta R^2$ | Standardized beta | t-value |
|----------------------|-----------------------------------------------|--------------|-------------------|---------|
| Both parents are away| Age of the child when going out               | 0.23***      | 1.73              | -4.89** |
|                      | Number of years parents have been away        | 0.13**       | -1.73             | -4.88** |
|                      | Visiting interval                             | 0.08**       | -1.34             | 3.99*   |
| Only mother out      | Visiting interval                             | 0.24**       | -1.22             | 2.48*   |
|                      | Age of the child when going out               | 0.11**       | 1.13              | -2.62*  |
|                      | Number of years parents have been away        | 0.05*        | -0.82             | -2.23*  |
| Only the father is out| Age of the child when going out               | 0.21**       | -1.94             | -4.36** |
|                      | Visiting interval                             | 0.08*        | -1.21             | 2.10*   |

### Table 3
**Hierarchical Regression Analysis of Time Monitoring View of Left-Behind Adolescents**

| Parents who are away | Independent variable                          | $\Delta R^2$ | Standardized beta | t-value |
|----------------------|-----------------------------------------------|--------------|-------------------|---------|
| Both parents are away| Age of the child when going out               | 0.21***      | 1.83              | 5.34*** |
|                      | Number of years parents have been away        | 0.14**       | -1.68             | -4.14** |
|                      | Visiting interval                             | 0.09**       | -1.24             | -2.92*  |
| Only mother out      | Visiting interval                             | 0.18**       | -1.41             | -2.48*  |
|                      | Age of the child when going out               | 0.12**       | 1.15              | 2.62*   |
|                      | Number of years parents have been away        | 0.07*        | -0.77             | -2.23*  |
| Only the father is out| Visiting interval                             | 0.31**       | -1.82             | -2.36*  |
|                      | Age of the child when going out               | 0.12*        | 1.63              | 2.10*   |
|                      | Number of years parents have been away        | 0.04*        | -1.14             | -2.23*  |

### Table 4
**Hierarchical Regression Analysis of Time Efficacy of Left-Behind Adolescents**

| Parents who are away | Independent variable                          | $\Delta R^2$ | Standardized beta | t-value |
|----------------------|-----------------------------------------------|--------------|-------------------|---------|
| Both parents are away| Age of the child when going out               | 0.22***      | 1.50              | 5.21*** |
|                      | Number of years parents have been away        | 0.15**       | -1.27             | -4.34** |
|                      | Visiting interval                             | 0.10**       | -0.95             | -3.31*  |
| Only mother out      | Visiting interval                             | 0.19**       | -2.04             | -4.99** |
|                      | Age of the child when going out               | 0.11**       | 1.24              | 4.26**  |
|                      | Number of years parents have been away        | 0.09*        | -1.08             | -3.76** |
| Only the father is out| Age of the child when going out               | 0.32**       | -2.94             | -4.36** |
|                      | Visiting interval                             | 0.16**       | -2.21             | -2.10*  |
Table 5
Hierarchical Regression Analysis of Time Management Tendencies of Left-Behind Adolescents

| Parents who are away | Independent variable                        | \( \Delta R^2 \) | Standardized beta | t-value |
|----------------------|---------------------------------------------|-------------------|-------------------|---------|
| Both parents are away| Age of the child when going out             | 0.32***          | -0.73            | -4.98** |
|                      | Number of years parents have been away     | 0.17**           | -0.73            | -4.89** |
|                      | Visiting interval                           | 0.13**           | -0.34            | 3.99**  |
| Only mother out      | Visiting interval                           | 0.28***          | -1.76            | -2.62*  |
|                      | Age of the child when going out             | 0.17**           | -1.45            | -2.48*  |
|                      | Number of years parents have been away     | 0.12*            | -0.62            | 2.23*   |
| Only the father is out| Age of the child when going out             | 0.29**           | -2.33            | -4.12** |
|                      | Visiting interval                           | 0.19*            | -1.28            | 3.33*   |
|                      | Number of years parents have been away     | 0.05*            | -0.92            | -2.15*  |

Discussion
Current Situation of Time Management Tendencies of Left-Behind Adolescents

Compared with general adolescents, left-behind adolescents have poorer time management tendency, and their sense of time value, time monitoring, and time efficacy are all poorer, indicating that being left behind has an impact on time management tendency personality, and leaving behind makes adolescents develop poor time management personality, which is similar to the findings of previous studies (Liang, 2018). Most of the “left-behind children” lack the basic aspects of family education, and they are separated from their parents for a long time, lacking affectionate ties, so that they cannot receive parental education and care. Due to the lack of parental care and nurturing, these children have little or no opportunity to learn effective ways and means to cope with various growth problems, and may suffer from various character defects such as capriciousness, lack of motivation, and different degrees of time management personality disorders. Due to the lack of family discipline, they do not know enough about the value of time and cannot use and manage their time effectively, and their parents are too far away to do anything about it.

This study also found that the discrete degree of scores of the left-behind adolescents differed significantly in both the subscales of time value and time efficacy. Some of the left-behind adolescents performed very well in time management, while others performed very poorly. This also indicates that there is a greater variation in the development of time management among the left-behind adolescents, with some left-behind adolescents being able to develop a better time-management disposition personality, being better at managing their time and developing themselves, while others perform more poorly. While previous studies have suggested that staying behind is detrimental to adolescents (Zhang, He, & Jia, 2007), this study found that staying behind had no effect on some adolescents’ time management and even promoted the formation of their time-managed sense of time value and time-effective personality. This may be due to the fact that previous studies seldom considered the differences within the left-behind adolescents and treated all left-behind adolescents as a vulnerable group. Some of the left-behind adolescents received better communication and exchange despite parent-child separation because their family environment was more democratic and they had a stronger sense of self-identification with their classroom group, and these individuals had stronger initiative and formed stronger
self-reliance, which in turn helped to promote the formation of their time-management tendencies of time-value and time-efficacy personality.

**Analysis of Factors Affecting Time Management of Left-Behind Adolescents**

**Effect of demographic variables.** The results of the study showed that the age factor had an effect on the social orientation of time management, and at the age of 16 and 17, the social value of time management scores of left-behind adolescents were significantly lower. After comparison, it was found that the time management social value orientation scores of left-behind adolescents whose parents were away before the age of 16 were significantly lower than those of non-left-behind adolescents and those who were away after the age of 16. Adolescents whose parents had been with their children until the age of 16 and who had been well educated at home had a relatively smooth development of time management social value; otherwise their development was hindered. 16 is a more critical age for developing time management social value. At the age of 16, the development of time management social value is more critical, and adolescents in this period begin to focus on the development of time management social value. The formation of a sense of social value of time management in adolescents left behind requires family support and guidance. If adolescents left behind lack the necessary family guidance at and before the age of 16, the formation of their sense of social value of time management will be affected. This is because, in the middle and late adolescence, adolescents’ consciousness development shifts from self to society, and they begin to pay attention to and develop socially oriented sense of values and personality traits, and the sense of time management social values is a reflection of socially oriented personality traits.

The grade level factor of the adolescents left behind and whether or not they are only children have an impact on time management priorities. Time monitoring perspective (Huang & Zhang, 2001) is the concept and ability of individuals to use and manage time, which is reflected by a series of outwardly visible activities, such as planning and scheduling, goal setting, time allocation, result checking, and other series of monitoring activities. Prioritization refers to the monitoring of the prioritization of events. As they grow in grade, the left-behind adolescents learn the monitoring view of time management priorities. Only children have lower time management priorities than non-only adolescents and are less likely to learn to organize their time. Only children generally have bad temper and bad habits, such as “self-centeredness”, arbitrariness, and obstinacy, while only children left behind are usually intergenerational foster children, and without parental supervision and management, they are more likely to develop these bad temper and habits. At the same time, only children do not have older siblings and do not have good role models who can easily learn to arrange their time rationally, thus also affecting the formation of a monitoring view of time management priorities among left-behind adolescents.

**Analysis of left-behind situation.** The results of this study’s ANOVA and regression analysis of the left-behind situation indicated that four left-behind factors, including children’s age when parents were away, years of parental absence, parental absence, and visitation interval, explained 29%-52% of the variance in time management tendencies of left-behind adolescents.

The development of time management tendency of left-behind adolescents became worse when only the father was away, only the mother was away, and both parents were away, which also indicated that mothers and fathers have a significant influence on the development of time management tendency, and the influence of mothers is greater than that of fathers. Previous studies have also shown (Miao, 1999) greater influence on
children’s personality and mental health, and are more attached to their mothers, which may be related to the thousands of years of tradition that “men hold the outside and women hold the inside”.

The older the children were when their parents were away, the better the development of time management tendencies of the left-behind adolescents. The older the left-behind children are, the less they rely on their families for their personality formation and the more they turn to society, the less they need parental role models, the less negative impact their parents’ absence has on their personality development, and the better they develop their time management personality.

The longer the parents are away, the poorer the development of time management tendency of left-behind adolescents. The longer the parent-child separation time, the weaker the parent-child communication and parent-child education, and the weaker the parental care and education, which affects the adolescents’ inability to make good use of family factors to promote the formation of good personality, and inevitably affects the development of time management tendency of left-behind adolescents.

The greater the interval between parent-child visitation, the poorer the development of time management tendencies among left-behind adolescents. The reason is similar to the effect of the number of years parents have been away. After all, even the most advanced means of human-computer communication cannot reach the effect of face-to-face communication, and visitation brings not only verbal communication, but also more physical communication and physical contact, which are missing in modern parent-child relationships.

Conclusion

The following conclusions can be drawn from this study: (1) Left-behind adolescents are prone to form poor time management tendencies, and there are large individual differences within left-behind adolescents; (2) 16 years old is a more critical age for forming a sense of social value in time management, and the grade factor of left-behind adolescents and whether they are only children have an impact on time management priorities; (3) Four factors of left-behind factors interactional affects the development of time management tendency of left-behind adolescents, such as the age of the child when the parents are away, the number of years the parents have been away, the interval between visits.

This study is the first of its kind to address the time management tendencies of a special group of adolescents, the left-behind adolescents. However, this study is not a longitudinal study, and does not explore the development trend of time management tendency of left-behind adolescents in depth, nor does it investigate the family environment and social environment of left-behind adolescents in detail, and lacks in-depth research on the external environment and individual subjective initiative.

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