# Care Arrangements and Adolescent Delinquency: An Analysis Based on China Education Panel Survey (CEPS) from 2014 to 2015 <br> Shuangfeng Long ${ }^{1, a}$ <br> ${ }^{1}$ GXNU School of Politics and Public Administration, Guangxi Normal University, Guilin, Guangxi 541006, China <br> a2685094634@qq.com 


#### Abstract

With the development of industrialization and urbanization, the family structure of our country has changed greatly. The mode of care for the youth is becoming more and more diversified, including single-parent care, inter-generational cooperation care, intergenerational care and other care modes. The negative effects of different care modes on adolescents need to be systematically studied. Using data from the CEPS 2014-2015 parent questionnaire, this study regression analysis the relationship between different modes of care and adolescent delinquency. The main findings are as follows: (1) having both father and mother to care for adolescents can reduce the frequency of adolescents delinquency; (2) inter-generational care has a significant impact on adolescents delinquency; (3) in the single-parent care model, the adolescent who is cared for by the father is more likely to behave badly than the adolescent who is cared for by both parents, while the mother is not significant. Under the background of great changes of family structure in our country, it is necessary to adjust the mode of care for the intergenerational care and the father care. The carers should pay attention to the construction of family atmosphere and give the children care and warmth, and appropriate supervision and behavior guidance, attention to children inner and emotional needs, to help the healthy growth of young people.


## Keywords

## Care arrangements, Adolescent, School delinquency.

## 1. Introduction

With the development of industrialization and urbanization, the family structure of our country has changed a lot, such as single-parent support, inter-generation support and children selfcare. First, the proportion of children in single-parent families is increasing during the period of economic reform. The divorce rate rose from 0.55 per thousand in 1987 to 3.20 per thousand in 2018, leading to an increase in single-parent support. Second, over the past 40 years, the urban-rural income gap has widened as China has rapidly urbanized and developed a market economy and privatized, one million agricultural workers have to find better jobs in urban areas. Because of strict immigration policies, financial restrictions, the Hukou system, regional education policies and limited access to public goods in cities, many parents have left their children in the care of grandparents or other relatives in their hometowns. As a result, families consisting of grandparents, grandchildren or left-behind wives, the elderly and children have become the most common type of family unit in rural areas. In addition, it is only when the grandparents are unable or unable to take care of the child that the child will live with other relatives, such as uncles or aunts, during the parents migration.

Different family rearing patterns have different effects on adolescents behaviors. Studies have shown that mothers are the sole caregivers and support providers in families without a father. In this case, the mother's negative parenting style psychological control may lead to children's insecurity, children tend to show bullying behavior. Families raised only by grandparents tend to give children greater decision-making autonomy than before, despite the best efforts of parents who are away to maintain communication and remain informed, however, the loss of their direct contact with the child and the status of their parents can lead to a lack of discipline and bad behaviour.
A growing body of evidence shows that family functioning, parenting patterns, and parent-child relationships influence adolescent behavior. Although some studies have explored the relationship between family functioning, peer group and adolescent delinquency, few studies have explored the relationship between different care patterns and adolescent delinquency. Some scholars have divided the situation of the residents and caregivers of left-behind children into five categories: grandparents, left-behind mothers, left-behind fathers, relatives and selfcare, drawing on the classification of the study and the type of respondents in the questionnaire design, this article divides the mode of care for teenagers into six types: "Two-parent care", "Single-father care", "Single-mother care", "Inter-generational cooperation care", "Intergenerational care" and "Other relatives care". To study the relationship between these six types of care patterns and juvenile delinquency.

## 2. Literature Review

The family has a direct and important impact on an individual's psychology and behaviour. First, Nuclear family is the family structure and care arrangement that is most conducive to the development of all aspects of young people. Family Resource Theory holds that Nuclear family can provide better educational resources and human capital for adolescents than other family types. Therefore, this paper takes the influence of parental care on adolescents delinquency as a control group, and compares it with other types of care models. Secondly, family socioeconomic theory believes that compared with two-parent care, single-parent care of adolescents have to face the pressure of family economic stress, and will lack social resources, at a disadvantage. Third, numerous studies have shown that generational care-giving affects the well-being of adolescents, such as lack of social support, slow socialization, lack of privacy and leisure time, and greater risk of isolation and depression.
The theory of social bonding holds that parental supervision of adolescents is an important part of social bonding and that adolescents under parental supervision will have less access to peers who have committed crimes or problem behaviours, this in turn reduces the likelihood of such delinquency. Secondly, the improper parental rearing pattern makes the teenagers; self-control low and easy to appear the criminal behavior. Finally, the warmth given by the mother had a moderating effect on adolescents; interactions with undesirable peers, while the warmth given by the father was not significant.
Previous studies have shown that family rearing pattern, parent-child relationship, parental supervision, parental care and warmth have an impact on adolescents delinquency. However, this kind of research is mostly used to compare single-parent families and two-parent families or only to study the effect of the family of alternate generation care on adolescents, and there is a certain lack of family type coverage. Based on this, this article will use the family structure theory to analyze the relationship between the family care pattern and the Adolescents delinquency, it can provide reference for school social workers and serve the practice of school social workers.

## 3. Research Method

### 3.1. Data and samples

This study used data from the China Education Panel Survey (CEPS)2014-2015 school year, which surveyed the parents of eighth graders. A total of 10750 valid questionnaires were collected, including 5900 non-shanghai mobile samples, 1170 Shanghai mobile samples and 3680 non-shanghai mobile samples. Only 7290 samples of students in six care modes were included in the questionnaire. Among them, there were 3042 samples of sole parental care, 276 samples of single paternal care, 2556 samples of single maternal care, 552 samples of intergenerational care and 770 samples of inter-generational care, other relatives; care accounted for 94 samples.

### 3.2. Variables

### 3.2.1. Dependent variable

The frequency of adolescents delinquency was used as dependent variable in this study. Perceived adolescent misbehavior was measured on a 10 -item scale that contained only one dimension, using a 5-point Likert scale that ranged from $1=$ "Never" to $5=$ "Always". A total score of 10 may range from 10 to 50 , with higher scores indicating a higher frequency of delinquency among teens.

### 3.2.2. The core independent variable

The core independent variable is the care pattern. According to the questionnaire"Who is the family member who is directly responsible for taking care of the children's daily life?", this paper divided the care mode into six types, (1)"Parental care" as the reference group, (2) single father care, (3) single mother care, (4) inter-generational cooperation care, (5) intergenerational care, (6) other relatives care.

### 3.2.3. Control variables

According to the theory of social control, the degree of family supervision will affect the delinquency of adolescents. A 6 -item scale was used in the questionnaire to measure the degree of parental supervision of children, including homework, exams, school performance, who to make friends with, dress, internet time, watching TV time supervision, (coded as no control = 1 , not strict control $=2$, strict control $=3$ ), the total score of the six items ranged from 6 to 18 , and the factor analysis showed that the scale only contained one dimension, so the higher the total score, the stronger the parental supervision. Family socio-economic theory found that the economic status of the family also has an impact on young people;s delinquency, therefore, the control of family economic status (coded as very difficult $=1$, relatively difficult $=2$, moderate $=3$, relatively rich $=4$, very rich $=5$ ) , educational status of fathers (coded as primary school and below $=1$, junior high school $=2$, senior high school $=3$, university and above $=4$ ). Ecosystem theory states that individuals who are unable to form good friendships with their peers are more likely to behave badly, therefore, controlling the number of friends of adolescents (coded as no friends $=1,1-5$ friends $=2,6-10$ friends $=3$, more than 10 friends $=4$ ), family atmosphere also had an effect on the occurrence of adolescents; delinquency, such as the care and warmth given by parents, the questionnaire"The frequency of parents eating meals with their children, visiting museums, zoos, science museums, going out with their children, playing sports, movies, etc." can reflect the family atmosphere (coded as never = 1, once a year $=2$, once every six months $=3$, once a month $=4$, once a week $=5$, once a week or more $=6$ ), the total score of the three questions ranged from 3 to 18 , so the higher the total score, the better the family atmosphere.

### 3.3. Analysis strategy

This study adopts a Regression analysis approach. First, descriptive statistics were used to present the mean and bias of all variables used in the study. Then a six-step ordinary least squares model (OLS) was developed to assess the association between care patterns and adolescent delinquency. In the first stage, only the care model is entered into the basic model, in the second stage, parental supervision is added, and in the third stage, the family economic situation is added to the model of the second stage, the fourth stage was based on the above variables plus the parents\&; education level, the fifth stage plus the number of friends, the sixth stage plus the family atmosphere, and all the variables were included in the complete model, to examine the effect of care model on dependent variables.

## 4. Model Results and Analysis

### 4.1. Descriptive statistics

Table 1. Variable description statistics ( $\mathrm{n}=7290$ )

|  | Mean/Frequency | Standard deviation/Percentage |
| :---: | :---: | :---: |
| the score of delinquency | 0.12 |  |
| care arrangements(two-parent care for the | 14.32 |  |
| reference group) |  | $41.73 \%$ |
| two-parent care | 3042 | $3.79 \%$ |
| single-father care | 276 | $35.06 \%$ |
| single-mother care | 2556 | $7.57 \%$ |
| inter-generational cooperative care | 552 | $10.56 \%$ |
| inter-generational care | 770 | $1.29 \%$ |
| other relatives care | 94 | 0.07 |
| supervision | 13.71 |  |
| family economic status(very difficult for |  | $3.27 \%$ |
| the reference group) | 238 | $16.30 \%$ |
| very difficult | 1188 | $73.74 \%$ |
| relatively difficult | 5376 | $6.36 \%$ |
| moderate | 464 | $0.33 \%$ |
| relatively rich | 24 | $16.80 \%$ |
| very rich |  | $50.47 \%$ |
| educational status | 1225 | $15.85 \%$ |
| primary school and below | 3679 | $16.88 \%$ |
| junior high school | 1155 |  |
| senior high school | 1231 | $1.06 \%$ |
| university and above |  | $39.93 \%$ |
| number of friends of adolescents(no | 77 | $23.50 \%$ |
| friends for the reference group) | 2911 | 0.09 |
| no friends | 1713 | 2589 |
| 1-5 friends | 9.16 |  |
| 6-10 friends |  |  |
| more than 10 friends |  |  |
| family atmosphere |  |  |

Note: For categorical variables, this paper presents the frequency and frequency of each term; for range variables, this paper presents the mean and standard deviation.

Table 1 shows that the mean score for adolescent delinquency was 14.32 , with parental care accounting for the highest proportion of care patterns, at $41.73 \%$, and only maternal care accounting for $35.06 \%$, then there are the inter-generational care, the inter-generational care, only the father care and other care, they account for $10.56 \%, 7.57 \%, 3.79 \%$ and $1.29 \%$,
respectively, and it is more common for mothers to take care of their children than for fathers to do so in our country. The average score of family supervision was 13.71. In general, parents' supervision of their children was at the level of"Supervision, but not strict supervision". The proportion of families with moderate economic status reached $73.74 \%$, while only $0.33 \%$ were very rich. The proportion of parents with the highest level of education was in junior high school, at $50.47 \%$, while the other three categories had little difference, indicating that more than half of the parents had a low level of education. The percentage of $1-5$ friends was $39.93 \%$, and the lowest was $1.06 \%$. The mean value of family atmosphere was 9.16 , which was in the general atmosphere between 3 and 18.

### 4.2. Analysis of model results

Table 2. OLS model results ( $\mathrm{n}=7290$ ) on the relationship between care patterns and adolescent delinquency.

|  | $\begin{gathered} \text { Model } 1.1 \\ \text { b/S.E. } \end{gathered}$ | Model 1.2 b/S.E. | Model 1.3 b/S.E. | $\begin{gathered} \text { Model } 1.4 \\ \text { b/S.E. } \end{gathered}$ | $\begin{gathered} \text { Model } 1.5 \\ \text { b/S.E. } \end{gathered}$ | $\begin{gathered} \text { Model1.6 } \\ \text { b/S.E. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| care arrangements(two-parent care for the reference group) |  |  |  |  |  |  |
| single-father care | $\begin{gathered} 0.83 * * * \\ (0.22) \end{gathered}$ | $\begin{gathered} 0.76 * * * \\ (0.23) \end{gathered}$ | $\begin{gathered} 0.77^{* * *} \\ (0.23) \end{gathered}$ | $\begin{gathered} 0.75^{* * *} \\ (0.23) \end{gathered}$ | $\begin{aligned} & 0.69^{* *} \\ & (0.25) \end{aligned}$ | $\begin{gathered} 0.58^{*} \\ (0.25) \end{gathered}$ |
| single-mother care | $\begin{gathered} 0.34^{* * *} \\ (0.10) \end{gathered}$ | $\begin{aligned} & 0.26^{* *} \\ & (0.10) \end{aligned}$ | $\begin{aligned} & 0.27^{* *} \\ & (0.10) \end{aligned}$ | $\begin{gathered} 0.23 \\ (0.97) \end{gathered}$ | $\begin{aligned} & 0.23^{*} \\ & (0.10) \end{aligned}$ | $\begin{gathered} 0.17 \\ (0.11) \end{gathered}$ |
| inter-generational cooperative care | $\begin{gathered} 0.36 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.08 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.14 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.13 \\ (0.17) \end{gathered}$ | $\begin{gathered} 0.17 \\ (0.17) \end{gathered}$ |
| inter-generational care | $\begin{gathered} 0.68^{* * *} \\ (0.15) \end{gathered}$ | $\begin{gathered} 0.51^{* * *} \\ (0.15) \end{gathered}$ | $\begin{aligned} & 0.44^{* *} \\ & (0.15) \end{aligned}$ | $\begin{aligned} & 0.34^{*} \\ & (0.15) \end{aligned}$ | $\begin{aligned} & 0.42^{*} \\ & (0.16) \end{aligned}$ | $\begin{gathered} 0.07 \\ (0.17) \end{gathered}$ |
| other relatives care | $\begin{aligned} & 0.89 * * \\ & (0.37) \end{aligned}$ | $\begin{aligned} & 0.75^{*} \\ & (0.37) \end{aligned}$ | $\begin{gathered} 0.71 \\ (0.37) \end{gathered}$ | $\begin{gathered} 0.73 \\ (0.38) \end{gathered}$ | $\begin{gathered} 1.17 \\ (0.45) \end{gathered}$ | $0.82(0.4$ <br> 6) |
| family supervision |  | $\begin{gathered} -0.21^{* * *} \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.20^{* * *} \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.19^{* * *} \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.13^{* * *} \\ (0.02) \end{gathered}$ | $\begin{gathered} -0.11^{* * *} \\ (0.02) \end{gathered}$ |
| family economic status |  |  | $\begin{gathered} -0.44 \\ (0.07) \end{gathered}$ | $\begin{gathered} -0.31 \\ (0.08) \end{gathered}$ | $\begin{gathered} -0.37 * * * \\ (0.08) \end{gathered}$ | $\begin{gathered} -0.20^{* *} \\ (0.09) \end{gathered}$ |
| educational of father status |  |  |  | $\begin{gathered} -0.33^{* * *} \\ (0.05) \end{gathered}$ | $\begin{gathered} -0.25^{* * *} \\ (0.06) \end{gathered}$ | $\begin{gathered} -0.12^{* *} \\ (0.05) \end{gathered}$ |
| number of friend |  |  |  |  | $\begin{gathered} -0.04^{* * *} \\ (0.05) \end{gathered}$ | $\begin{gathered} -0.01 \\ (0.05) \end{gathered}$ |
| family atmosphere |  |  |  |  |  | $\begin{gathered} -0.20^{* * *} \\ (0.02) \end{gathered}$ |
| constant | $\begin{gathered} 13.77^{* * *} \\ (0.07) \end{gathered}$ | $\begin{gathered} 16.71^{* * *} \\ (0.26) \end{gathered}$ | $\begin{gathered} 17.92^{* * *} \\ (0.34) \end{gathered}$ | $\begin{gathered} 18.16^{* * *} \\ (0.34) \end{gathered}$ | $\begin{gathered} 17.18^{* * *} \\ (0.71) \end{gathered}$ | $\begin{gathered} 18.10^{* * *} \\ (0.42) \end{gathered}$ |
| Adjusted R ${ }^{2}$ | 0.01 | 0.02 | 0.03 | 0.04 | 0.02 | 0.04 |

Note: ${ }^{* * *} \mathrm{p}<0.001,{ }^{* *} \mathrm{p}<0.01,{ }^{*} \mathrm{p}<0.05$.

As shown in the OLS model results for the relationship between care patterns and adolescent delinquency (see Table 2) , the model as a whole passed the significance test and did not present a collinearity problem. In Model 1.1, only the multiple core independent variable care model was put in, and two-parent care was taken as the reference group. The results showed that inter-generational cooperative care was not significant at the level of 0.05 , single-father care, single-mother care, and inter-generational care were positively and statistically significant for dependent variables. Model 1.2 was similar to Model 1.1 after adding parental supervision. In Model 1.3, family economic status was added to the above variables, and other care models lost statistical significance in the model, the effect of inter-generational cooperative care on
dependent variables was still not significant at the level of 0.05 . Model 1.4 increased the education level of parents on the basis of Model 1.3, and the statistical significance of independent variables to dependent variables was similar. Model 1.5 was based on model 1.4 with the addition of the number of friends. Only the effect of single-father care on the dependent variable was significant at 0.01 level and positive in direction ( $b=0.62$ ) , single-mother care ( $b$ $=0.20, \mathrm{P}<0.05$ ) and inter-generational care ( $\mathrm{b}=0.42, \mathrm{P}<0.05$ ) had a positive and statistically significant effect on the dependent variables.
Model 1.6 is a full-effect model after adding family atmosphere on the basis of model 1.5, compared with two-parent care, similar to model 1.5 , the effects of inter-generational cooperative care and other relatives care modes on the dependent variables were not significant, but single-mother care and other relatives care modes lost statistical significance on the dependent variables.Single-father care ( $b=0.58$ ) had a statistically significant positive effect on the dependent variable at the 0.05 level, the results showed that only the adolescents whose fathers took care of them scored 0.58 units higher than the adolescents whose parents took care of them.
To sum up, only the effect of inter-generational cooperative care on dependent variables did not pass the significance test at the 0.05 level after the above six models. Inter-generational cooperative care included grandparents as well as fathers and mothers, using two-parent care as a control group, the results showed that the two-parent care model that included both father and mother was not statistically significant for adolescents' delinquency, and that parental care reduced the frequency of adolescents' delinquency. Second, inter-generational care in Model 1.1,1.2,1.3,1.4 has significant statistical significance to dependent variables, which will increase the probability of delinquency. Thirdly, only the effect of single-father care on the dependent variables was statistically significant in all the six models, which supported the hypotheses of social control theory, family socioeconomic theory and social connection theory. It is worth noting that in the single-parent care model, the father care than parental care of adolescents are more likely to have delinquency, while the mother is not significant.

## 5. Conclusion and Discussion

First, this study found that having a father and mother together can reduce the frequency of adolescents' delinquency, which is consistent with the findings of Yuxiao WU et al. (2018) and Shanshan MA (2014). There are several reasons for this. First, both parents can provide a better living environment, teaching resources and human capital for teenagers, second, parents have more time and resources for their children's education and have the ability to supervise their children effectively, and can give children double warmth, thereby reducing the frequency of delinquency in adolescents.
Second, this study found that inter-generational care-giving had a significant effect on adolescents' delinquency, increasing their probability of developing delinquency, which is consistent with the findings of Jingzhong et al. (2011) . First, the economic situation of the families in which children are taken care of by their parents is average, and most of them are in rural areas, where grandparents take the place of parents in raising and supervising young people, lacking parental care and concern, and lacking other types of social support, without proper guidance, adolescents are at higher risk of interacting with undesirable peers and even participating in undesirable actions. Secondly, many grandparents only take care of the young people in terms of food, clothing, housing and transportation. It is difficult to perceive the needs of the young people in terms of their inner belonging and love. The awareness of guiding the young people in the right values is weak, and there will be compassion, may allow the child to do some delinquency, but do not know how to correct.

Finally, the study found that in the single-father care model, the father care than two- parent care of adolescents more likely to have delinquency, while the single-mother care model is not significant. First, most children are closer to and more willing to listen to their mothers, and most women are more patient than men in their children's education, and the warmth given by the mother can reduce the influence of unhealthy peers on the problem behavior of adolescents, while the warmth of the father has no moderating effect. Second, the influence of male authority, some fathers in the case of delinquency of their children will be psychological attacks, corporal punishment and physical abuse, which may make teenagers afraid to repeat for fear of being punished, it can also cause Reverse psychology.
This article has some deficiencies and needs to be improved. First of all, adolescents are developing people, their behavior has been affected by various factors, but this paper discusses the impact of family care model on adolescents' delinquency, focusing on family factors, factors such as school level and community level lack of control. Secondly, this paper uses the data from the Chinese Education Panel Survey (CEPS)2014-2015, which belongs to the cross-sectional data and can not make causal inference.

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