



ISSN: 2329-6119 (Print)
ISSN: 2329-6100 (Online)

International Journal of Life Science Study (IJLSS)

DOI: <http://doi.org/10.7508/ijlss.01.2024.34.38>



ARTICLE

INVESTIGATION AND ANALYSIS OF THE PSYCHOLOGICAL STATUS OF ELDEST CHILDREN IN THE PROCESS OF ADJUSTMENT OF FERTILITY POLICY IN LINPING DISTRICT, HANGZHOU

Hailian Wang*, Qimei Ran, Chen Cai, Luning Wang

Linping District Maternal and Child Health hospital, Hangzhou 311100, China

*Corresponding Author E-mails: 782346767@qq.com

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ARTICLE DETAILS

ABSTRACT

Article History:

Received 29 May 2024
Accepted 17 July 2024
Available online 05 August 2024

To analyze the causes of the psychological predicament of the eldest children and the degree of their impact on the family by observing the psychological condition and possible psychological dilemma of the eldest child after the adjustment of the birth policy in the region. Parents of kindergartens and primary schools in Linping District, Hangzhou were selected as the research objects, and the data were statistically analyzed by collecting questionnaires. Among the 517 subjects in this survey, 80.7% of the children had normal scores, 7.9% had suspicious scores, 11.4% had abnormal scores, the incidence of non-local children was higher than that of local children, the psychological problems of boys were more serious than those of girls, and the scores of only children were higher than those of non-only children ($P < 0.05$). There were significant differences in the detection rates of the total score of psychological problems, emotional factors and prosocial factors among the eldest children. Families with neglect of the eldest child have a higher detection rate of psychological problems, and children are prone to problems with prosocial and emotional factors. There are significant differences in the detection rate of psychological problems among children with different streets, genders, and local household registration, and the incidence of psychological and behavioral problems among children increases when family members neglect the eldest child and ask the eldest child to be humble to other children.

KEYWORDS

Eldest children, Fertility policy, Psychological condition

In China, the adjustment of fertility policies has complicated the issue of sibling competition. Sibling competition is a pervasive issue that can have either positive or negative effects on children's psychological development (Zhang, 2015; Li et al., 2017; Chen et al., 2017). This study aims to observe the psychological status and potential psychological difficulties of first-born children in families following the adjustment of fertility policies in our region. We will analyze the causes of these psychological difficulties and their impact on families. Additionally, the study seeks to identify methods to address the psychological challenges of first-born children through family and school education, providing effective strategic recommendations for relevant departments.

1. RESEARCH CONTENT AND METHODS

1.1 Research content

This study adopts a questionnaire survey approach, with the

questionnaire consisting of three parts and a total of 38 items:

Basic Information: The first part gathers basic information about the survey subjects, including school, grade, age, birthplace, birth order, family structure, and the number of children in the original family.

Strengths and Difficulties Questionnaire (SDQ): The second part comprises 25 items with good reliability and validity. It assesses children's mental health status through five factors: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior, along with a total difficulties score. Each of the 25 items is rated on a 3-point scale (0: not true, 1: somewhat true, 2: certainly true). Items 7, 11, 14, 21, and 25 are reverse-scored. Parents rate their child's behavior and emotions over the past six months based on their observations.

Open-ended Questions: The third part consists of open-ended

questions, including parenting challenges and suggestions for parenting.

1.2 Research methods

This study uses stratified sampling to select parents of kindergarten and primary school children in Linping District, Hangzhou, as the research subjects. Data collection is conducted via an online survey platform, Questionnaire Star. The data results are statistically analyzed using SPSS 22.0 software, with $P < 0.05$ considered statistically significant.

2. ANALYSIS OF RESEARCH RESULTS

2.1 Basic information of research subjects

(1) Questionnaire validity rate

A total of 542 questionnaires were collected in this survey. Among them, 25 questionnaires were invalid, resulting in 517 valid questionnaires.

The validity rate of the questionnaire was 95.38%.

(2) Survey results:

The survey included the parents of 517 children from five streets. The average age of the children was 4.5 years (± 1.35). Out of these children, 237 were only children, accounting for 45.8% of the sample. The basic information of the survey subjects is detailed in Table 1.

2.2 Analysis of psychological problems in research subjects

(1) Overall detection rate

Among the 517 children surveyed, 80.7% had normal total difficulty scores, 7.9% had borderline scores, and 11.4% had abnormal scores. Detailed results are presented in Table 2.

(2) Comparative analysis of detection rates in different regions

Table 1: Basic Demographic Information of Survey Subjects

survey items	classification	number	percentage (%)
street	Liping	112	21.7
	East L	175	33.8
	Nanyuan	70	13.5
	xingqiao	130	25.1
	others	30	5.8
place of household registration	local	302	58.4
	out-of-town	215	41.6
sex	male	274	53.0
	female	243	47.0
birth order	only child	237	45.8
	eldes	83	16.1
	middle	20	3.9
	lao Xiao	177	34.2

Table 2: Detection Rate of Psychological Problems in Survey Subjects

item	normal (n, %)	suspicious (n, %)	abnormal (n, %)
total score	417, 80.7	41, 7.9	59, 11.4
emotional factor	409, 79.1	55, 10.6	53, 10.3
hyperactivity and attention deficit factor	435, 84.1	30, 5.8	52, 10.1
conduct factor	398, 77.0	58, 11.2	61, 11.8
peer relationship factor prosocial factor	481, 93.0	29, 5.6	7, 1.4
	374, 72.3	97, 18.8	46, 8.9

A comparative analysis was conducted between local and non-local survey subjects in terms of overall difficulty scores and detection rates for the five factors. Significant differences were found in the Hyperactivity and Attention Deficit factor, with a higher incidence in non-local children compared to local children ($\chi^2=79.23, P=0.019$). No significant differences were observed for the other factors. Additionally, significant differences were found when comparing different streets ($\chi^2=16.564, P=0.035$). Detailed results are presented in Table 3.

(3) Comparison by gender

A comparison of scores between different genders revealed no statistically significant differences in the Emotional Symptoms factor. However, boys scored higher than girls in the Total Difficulty Score, Hyperactivity and Attention Deficit factor, Conduct Problems factor, and Peer Relationship Problems factor. Conversely, boys scored lower than girls in the Prosocial Behavior factor. Overall, psychological problems

were more prevalent and severe among boys compared to girls. Detailed results are presented in Table 4.

(4) Comparison between only children and non-only children

A comparison of the total scores and the five factor scores between only children and non-only children revealed significant differences in all factors except the Emotional Symptoms factor. Only children scored higher than non-only children across the board. Detailed results are presented in Table 5.

2.3 Analysis of non-only child families

In total, 280 non-only child families were analyzed. Among these, 66 families (23.57%) frequently had caregivers who required the older child to yield to the younger child; 37 families (13.2%) often faced difficulties in handling competition or conflict among children; and 61 families (21.8%) experienced neglect of the older child following the

Table 3: Comparison of Psychological Problem Detection Rates in Different Streets

street	normal (n, %)	suspicious (n, %)	abnormal (n, %)
Linping	79, 70.5	17, 15.2	16, 14.3
East L	144 82.3	11, 6.3	20, 11.4
Nanyuan	59, 84.3	3, 4.3	8, 11.4
Xingqiao	110, 84.6	10, 7.7	10, 7.7
Others	25, 83.3	0, 0	5, 16.7

Table 4: Comparative Analysis of Mean Scores for Different Factors by Gender

item	male ($\bar{x}\pm s$)	female ($\bar{x}\pm s$)	t	p
total score	11.15±4.880	10.15±4.530	2.417	0.016*
emotional factor	2.09±1.705	2.15±1.845	-0.367	0.713
hyperactivity and attention deficit factor	4.52±2.305	4.13±2.164	1.979	0.048*
conduct factor	2.03±1.454	1.74±1.220	2.362	0.019*
peer relationship factor	2.51±1.498	2.12±1.296	3.156	0.002**
prosocial factor	6.62±1.943	7.07±1.807	-2.713	0.007**

* $p<0.05$, ** $p<0.01$

Table 5: Comparison of Total Scores and Factor Scores Between Only Children and Non-Only Children

item	only child ($\bar{x}\pm s$)	not only child ($\bar{x}\pm s$)	t	p
total score	11.15±4.880	10.15±4.530	2.417	0.016*
emotional factor	2.09±1.705	2.15±1.845	-0.367	0.713
hyperactivity and attention deficit factor	4.52±2.305	4.13±2.164	1.979	0.048*
conduct factor	2.03±1.454	1.74±1.220	2.362	0.019*
peer relationship factor	2.51±1.498	2.12±1.296	3.156	0.002**
prosocial factor	6.62±1.943	7.07±1.807	-2.713	0.007**

* $p<0.05$, ** $p<0.01$

birth of a younger sibling.

(1) Comparative analysis of families where caregivers require the older child to yield to the younger child

An analysis of the 280 non-only child families revealed that the 66 families where the older child was frequently required to yield to the younger sibling had higher total scores and Conduct Problems factor scores compared to the other 214 families.

(2) Analysis of caregivers neglecting the eldest child due to the birth of younger siblings

A comparative analysis of data on whether caregivers neglect the eldest child due to the birth of younger siblings revealed significant differences in the total psychological problem scores, Emotional Symptoms factor,

and Prosocial Behavior factor detection rates. Families where the eldest child was neglected had higher detection rates of psychological problems. The eldest children in these families were more prone to issues in prosocial behavior and emotional symptoms. Detailed results are presented in Table 7.

3. DISCUSSION

The results of this study show that among the surveyed population of 517 children, 7.9% had borderline total difficulty scores for psychological problems, and 11.4% had abnormal total difficulty scores. These findings are similar to domestic reports, which range from 11.21% to 18.16% (Wanget al., 2012; Lu et al., 2015), but are higher than the results reported by Luan et al. (2018) The survey results revealed that the factor of hyperactivity and attention deficit had a significantly higher incidence among non-local children compared to local children, possibly

Table 6: Comparative Analysis of Total Scores and Factor Scores in Families Where the Older Child is Required to Yield to the Younger Child

item	Yes ($\bar{x}\pm s$)	No ($\bar{x}\pm s$)	t	p
total score	11.80±5.396	10.33±4.786	2.117	0.035*
emotional factor	2.44±2.016	2.04±1.718	1.575	0.116
hyperactivity and attention deficit factor	4.42±2.431	4.12±2.203	0.967	0.335
conduct factor	2.41±1.467	1.84±1.287	3.031	0.003**
peer relationship factor	2.53±1.531	2.33±1.446	0.961	0.337
prosocial factor	6.45±2.009	6.84±1.903	-1.407	0.161

* $p<0.05$, ** $p<0.01$

Table 7: Comparative Analysis of Psychological Problem Detection Rates in Families Neglecting the Eldest Child

item	normal (n, %)	suspicious (n, %)	abnormal (n, %)	X ²	P
total score classification	41 (67.2), 183 (83.6)	5 (8.2), 14 (6.4)	15 (24.6), 22 (10.0)	9.461	0.009**
Emotional factor classification	41 (67.2%), 181 (82.6)	10 (16.4) 18 (8.2)	10 (16.4) 20 (9.1)	6.969	0.031*
hyperactivity and attention deficit factor classification	49 (80.3), 189 (86.3)	4 (6.6) 11 (5.0)	8 (13.1) 19 (8.7)	1.385	0.500
conduct factor classification	37 (60.7) 166 (75.8)	11 (18.0) 28 (12.8)	13 (21.3) 25 (11.4)	5.895	0.052
peer relationship factor classification	53 (86.9) 205 (93.6)	6 (9.8) 12 (5.5)	2 (3.3) 2 (0.9)	3.511	0.173
prosocial factor classification	38 (62.3%) 158 (72.1)	11 (18.0) 46 (21.0)	12 (19.7) 15 (6.8)	9.004	0.011*

* $p<0.05$, ** $p<0.01$

due to local parents placing greater emphasis on cultivating children's attention.

Significant differences were also observed in the detection rates of psychological problems among children from different neighborhoods and of different genders. Boys generally exhibited more severe psychological problems than girls, and only children scored higher than non-only children. This is consistent with the findings of Wu Wenyi et al. (2021). The results suggest that boys are naturally more active and have poorer emotional self-control, and that the educational approach of parents towards only children tends to be more indulgent.

Furthermore, the survey results indicate that in families where the eldest child is neglected due to the birth of younger siblings, the detection rate of psychological problems is higher. The eldest children in these families are more prone to issues in prosocial behavior and emotional symptoms. Significant differences were found in the total psychological problem scores, emotional symptoms, and prosocial behavior factors between families where the eldest child is neglected and those where this neglect is absent. This indicates that neglect and the expectation for the eldest child to yield to younger siblings can lead to a sense of disparity, which may contribute to psychological and behavioral problems, particularly an increased incidence of emotional disorders. This is consistent with the views of Xi Xuan et al. (2021).

Researchers both domestically and internationally generally believe that sibling relationships are multidimensional, and sibling rivalry is an important factor affecting children's psychological development (Dong et al. 2018; Volling, 2012; Volling et al., 2014). The primary reason most only children struggle to accept the presence of a second child is the fear of losing family attention. Therefore, a democratic family upbringing approach should be adopted in non-only child families. Parental support, encouragement, and close interaction with children positively influence their emotional, psychological, behavioral, and social development. Effective communication can alleviate children's inner concerns, helping them overcome psychological difficulties. Many studies also show (Lu 2014; Huo 2015; Sha 2015; Ding et al., 2018; Shen et al., 2021) that harmonious interactions between parents and children in non-only child families can reduce the incidence of psychological and behavioral problems in the eldest child.

In summary, fertility policies are an effective solution to the problem of population aging, benefiting both the country and its citizens. However, during the implementation process, more attention is needed to address the psychological changes in the eldest child due to the arrival of new family members. It is crucial to correctly address these changes and help the eldest child quickly adapt to their new role through cooperation from all parties. A positive and harmonious family atmosphere contributes to the healthy growth of the eldest child and reduces the occurrence of emotional and behavioral problems. Parents should increase their attention to the psychological and behavioral issues of the eldest child, helping them resolve psychological problems promptly so that they can grow up in a healthier and happier environment.

FUNDING

Medical and Health Science and Technology Project of Linping District, Hangzhou, Zhejiang Province (LPWJ2022-02-13).

REFERENCES

Chen, B.B., Zhao, Y., Han, W., Wang, Y.C., et al. 2017. Sibling Relationships: Types, Influencing Factors, and Mechanisms of Their Effects on Children's Development. *Advances in Psychological Science*, (12),

Pp. 162-172.

Ding, C.C., Li, H.X., Chen, X.P., et al. 2018. The Psychological Impact of the Birth of a Second Child on Young Firstborns. *Chongqing Medicine*, 47 (31), Pp. 106-108.

Dong, Y.H., Chen, D., Fu, M. Y., et al. 2018. The Impact of Sibling Relationships on the Psychological Development of Children and Adolescents. *Chinese School Health*, 39 (7), Pp. 1110-1114.

Huo, C.J. 2015. How to Love Both Children in the Era of Two Children. *Chinese Family Education: Preschool Edition* (11).

Li H.L., Han, W., Zhang, H.M. 2017. A psychological analysis of the eldest children under the comprehensive two-child policy—New analysis of the psychological problems of the eldest children. *Journal of Guangxi Education College* (4).

Lu, A.J., Wang, Y.Q., Wang, Y.F., et al. 2015. Survey of Emotional and Behavioral Problems in Primary and Secondary School Students Aged 7-16 in Songjiang District, Shanghai. *Journal of Psychiatry*, 128 (2), Pp. 99-101.

Lu, Y. 2014. Focus on the Mental Health of the "Eldest" in Two-Child Families. *Early Education: Family Education Edition* (6), Pp. 26.

Luan, F.H., Du, Y. S., Jiang, W.Q., et al. 2018. Study on Emotional and Behavioral Problems and Influencing Factors of School-age Children in Urban Areas of Shanghai. *Chinese Journal of Child Health*, 26 (2), Pp. 137-140.

Sha, S. 2015. An Analysis of the Psychological Dilemma and Solutions for Eldest Children in Two-Child Families. *Educational Guide: Second Half of the Month* (6), Pp. 84-86.

Sheng, L.L., Liu, Q., Li, Y.Y., et al. 2021. The Impact of Parental Accompaniment on Emotional and Behavioral Problems of Preschool Firstborn Children Before and After the Birth of the Second Child. *Chinese School Health*, 42 (10), Pp. 1475-1479.

Volling, B. L. 2012. Family Transitions Following the Birth of a Sibling: An Empirical Review of Changes in the Firstborn's Adjustment. *Psychological Bulletin*, 138 (3), Pp. 497-528.

Volling, B. L., Yu, T., Gonzalez, R., et al. 2014. Children's Responses to Mother-Infant and Father-Infant Interaction with a Baby Sibling: Jealousy or Joy? *Journal of Family Psychology*, 28 (5), Pp. 634-644.

Wang, X.L., Li, P.F., Peng, Y., et al. 2012. Survey of Emotional and Behavioral Problems in Children and Adolescents Aged 4-18 in Changsha City. *Chinese Journal of Mental Health*, 26 (10), Pp. 775-779.

Wu, W.Y., Liu, Q., Li, Y.Y., et al. 2021. Comparison of Emotional and Behavioral Problems between Firstborn and Only Children during the Transition to Preschool. *Chinese School Health*, 42 (10), Pp. 1465-1468.

Xi, X., Liu, Q., Li, Y.Y., et al. 2021. Emotional and Behavioral Problems of Firstborn Children during the Transition Period in a District of Chongqing City and Family Relationships. *Chinese School Health*, 42 (10), Pp. 1460-1464.

Zhang, X.L. 2015. Research on Sibling Relationships and Related Factors under the "Selective Two-Child" New Family Planning Policy. (Doctoral dissertation).

