

THE RELATIONSHIP BETWEEN PARENTING STYLES AND SOCIAL ADAPTABILITY OF PRESCHOOL CHILDREN IN CHINA

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Abstract: Background: The importance of family education has risen, yet issues persist. China's "Law on Family Education" clarifies its responsibilities. Parents' parenting styles deeply influence children's social adaptability and growth. This study in Xinxiang explores the relationship between parenting styles and preschoolers' social adaptability, aiming to provide guidance for optimal parenting and children's healthy development. Methods: This cross-sectional study was conducted from March to April 2023 in Xinxiang City, China. Using multi-stage random sampling, a total of 1,058 parents and teachers of preschool children from eight kindergartens in Xinxiang were surveyed through questionnaires, with 995 valid responses collected. The research tools included a general demographic questionnaire, a social adaptability questionnaire, and a parenting style questionnaire. Statistical analysis was performed using SPSS 26.0, including independent sample t-tests, one-way analysis of variance (ANOVA), and multiple regression analysis. Results: The study found significant differences in social adaptability of preschool children based on gender, age, only child, household monthly income, and Paternal education level ($t=-4.50, P=0.000$; $F=5.32, P=0.002$; $F=2.10, P=0.036$; $F=5.88, P=0.01$; $F=6.05, P=0.002$). Among parenting styles, "rejection" and "preference" were negatively correlated with children's social adaptability ($r=-0.098, P<0.0$; $r=-0.065, P<0.05$), while "emotional warmth" and "overprotection" were positively correlated with children's social adaptability ($r=0.108, P<0.01$; $r=0.126, P<0.01$). Factors including gender, age, Paternal education level, household monthly income, only child, rejection, and overprotection had statistically significant effects on the social adaptability of preschool children ($B=4.098, P=0.000$; $B=2.932, P=0.003$; $B=3.063, P=0.002$; $B=-2.522, P=0.012$; $B=-3.878, P=0.000$; $B=3.485, P=0.001$). Conclusion: Parenting styles significantly affect preschool children's social adaptability. Parents should be mindful of gender differences, actively encouraging boys and fostering their social and self-management skills. Only-child families need to strengthen training in self-care and social interaction, providing more social opportunities. Rejection-style parenting should be avoided, while emotional support should be given more frequently. Low-income and low-education families should seek external resources to optimize the environment for children's growth.

Keywords: Preschool children; Parenting styles; Social adaptability; Emotional warmth; Overprotection

1 INTRODUCTION

With the development of society, the importance of family education has become increasingly prominent, but issues such as the absence and irregularity of family education remain in reality, adversely affecting the growth of minors. The "Law on the Promotion of Family Education of the People's Republic of China," which was officially implemented in 2022, clarifies the responsibilities, content, and methods of family education, emphasizing its importance and necessity. As key participants in their children's education, parents not only directly influence their children's psychological development but also have a profound impact on their personal growth and social adaptability.

Social adaptation refers to the extent to which an individual adjusts their physiological and psychological states to achieve the developmental goals expected by society [1]. Social adaptability is the ability of an individual, based on their age and social-cultural conditions, to independently handle daily life and assume social responsibilities [2]. It includes aspects such as self-care, labor skills, language development, and social responsibility, serving as a critical indicator for evaluating an individual's social integration and functional performance. In early childhood, social adaptation refers to a child's ability to adapt to both the natural and social environments in which they live, specifically including the ability to solve everyday problems independently [3]. At the preschool stage, this adaptive capacity manifests in skills and strategies for independently handling daily issues, which is an essential part of their growth and development. When preschool children transition from the family environment to kindergarten—a micro-society—they face many new challenges, such as learning to interact effectively with others, adapting to a new group setting, and reducing problematic behaviors, all of which directly reflect their social adaptability.

Parenting style refers to the attitudes and approaches parents adopt in interactions with their children. These attitudes and approaches create an emotional atmosphere that affects a child's development and are characterized by cross-situational consistency and relative stability [4]. Baumrind proposed two typical parenting styles—authoritative and authoritarian—based on the emotional support and control levels provided by parents [6]. Authoritative parents generally show positive responsiveness and moderate control, often exhibiting much care and support. Authoritarian

parents often impose demands that are nearly harsh or unreasonable, considering children's developmental characteristics, characterized by high levels of control and demanding absolute obedience. Harmonious and democratic parenting helps develop children's abilities and enhances their social adaptability [5]. Authoritarian parenting tends to result in anxiety, depression, selfishness, and a lack of self-control and responsibility in children, posing potential threats to their psychological development and social adaptation [7-9]. In contrast, parenting styles characterized by trust, encouragement, and emotional warmth not only strengthen parent-child interactions but also foster children's prosocial emotions and self-confidence, laying a solid foundation for their future development [8-12]. Conversely, parents' undesirable habits and emotional problems hinder children's development and may increase the risk of abuse, posing serious threats to their physical and mental health [13-14]. Furthermore, a good parent-child relationship serves as a catalyst for the comprehensive development of children, promoting the development of language, cognition, Exercise. and psychosocial skills, and providing more learning opportunities and quality responsive care [15]. This study aims to explore the relationship between parenting styles and the social adaptability of preschool children, revealing the impact of different parenting styles on children's social adaptability. We hope that through this research, we can provide scientific family education guidance and practical suggestions for parents and educators to help them optimize parenting styles, improve children's social adaptability, and thus provide strong support for their healthy growth and holistic development.

2 SUBJECTS AND METHODS

2.1 Study Subjects

The study adopted a multi-stage random sampling method to select the subjects, dividing Xinxiang City, China, into urban and suburban areas. In March-April 2023, four kindergartens were selected from each of these areas, resulting in a survey involving 1,058 parents and teachers of preschool children from eight kindergartens. All children were required to be between the ages of 3-6, with exclusions made for those not meeting the age requirements or those with serious diseases and mental disorders. The parents of the children were informed and agreed to participate in the survey.

2.2 Research Tools

2.2.1 General demographic questionnaire

A self-compiled survey was used to collect data on preschool children's age, gender, only-child status, parents' educational level, household monthly income, and parental occupation.

2.2.2 Social adaptability scale

The "Social Adaptability Behavior Rating Scale for Children Aged 3-7" [16] was jointly developed by the Children's Growth and Development Research Center of Hangzhou University and the Psychology Department of Hangzhou University, with verified good reliability and validity [5]. The scale consists of 104 items divided into six subscales: Self-Care (SH) (items 1-26), Motor (L) (items 27-40), Work (O) (items 41-45), Interaction (C) (items 56-72), Socialization (S) (items 73-88), and Self-Management (SD) (items 89-104). The scale is completed by preschool teachers, with higher scores indicating stronger social adaptability in preschool children. Validity tests showed a KMO value of 0.879 > 0.5, a Bartlett's test of sphericity value of 2574.505, and $P < 0.01$, with a Cronbach's alpha coefficient of 0.853.

2.2.3 Parenting style questionnaire

The Parenting Style Scale (Egna Minnen Beträffande Uppfostran - Parents, EMBU-P) was developed by C. Perris and colleagues at the Department of Psychiatry, Umea University, Sweden, in 1980, mainly to evaluate parental attitudes and behaviors. Its reliability and validity have been verified by scholars domestically and internationally [17-18]. The scale consists of 52 questions covering four dimensions: Rejection (items 1-13), Emotional Warmth (items 14-30), Overprotection (items 31-49), and Preference (items 50-52). The scoring is based on a four-point scale: 1 (Never), 2 (Occasionally), 3 (Often), and 4 (Always). The Overall score for each dimension is the sum of its item scores, with higher scores indicating a stronger corresponding parenting style. Validity tests showed a KMO value of 0.836 > 0.5, a Bartlett's test of sphericity value of 2358.444, and $P < 0.01$, with a Cronbach's alpha coefficient of 0.731.

2.3 Statistical Methods

Statistical analysis was performed using SPSS software (version 26.0). Quantitative data following a normal distribution were expressed as mean \pm standard deviation (SD). Categorical data were reported as frequencies or percentages. Independent sample t-tests were used to assess differences in social adaptability scores between children of different genders and only-child status; one-way analysis of variance (ANOVA) was used to compare social adaptability scores among preschool children under different conditions of age, parental occupation, education level, and household monthly income; multiple regression analysis was conducted to explore the relationship between parenting styles and children's social adaptability. All statistical analyses were two-tailed, with a significance level of $\alpha = 0.05$.

3 RESULTS

3.1 Basic Information of Study Subjects

A total of 1,058 questionnaires were distributed in this study, with 63 invalid questionnaires excluded, resulting in 995 valid questionnaires and an effective response rate of 94.05%. Among them, there were 562 boys (56.5%) and 433 girls (43.5%). Only children accounted for 584 (58.7%), while non-only children accounted for 411 (41.3%). In terms of age, 65 children (6.5%) were aged 3-4 years, 901 (90.6%) were aged 4-5 years, and 29 (2.9%) were aged 5-6 years.

3.2 Overall Status of Social Adaptability in Preschool Children

3.2.1 Descriptive statistics of social adaptability in preschool children

As shown in Table 1, the overall level of social adaptability in preschool children was not prominent ($M = 0.69$, $SD = 0.13$). Among the six dimensions of social adaptability, the average scores of Self-Care and Motor dimensions ($M = 0.76$, $SD = 0.15$; $M = 0.76$, $SD = 0.12$) were the highest, indicating relatively high levels of self-care and motor skills. These were followed by the Interaction dimension ($M = 0.72$, $SD = 0.18$) and Socialization dimension ($M = 0.69$, $SD = 0.13$), indicating a moderate level of peer interaction skills and ability to grasp social norms. The average scores for Work and Self-Management dimensions ($M = 0.56$, $SD = 0.19$; $M = 0.58$, $SD = 0.19$) were the lowest, indicating slower development in task completion and self-management skills in preschool children (Table 1).

Table 1 Descriptive Statistics for Social Adaptation of Preschool Children

Variable	M	SD
Self-care	0.76	0.15
Exercise	0.76	0.12
Homework	0.56	0.19
Socialization	0.69	0.13
Interaction	0.72	0.18
Self-management	0.58	0.19
Overall score	0.69	0.13

3.2.2 Analysis of differences in social adaptability among preschool children with different demographic characteristics

As shown in Table 2, significant differences were found between boys and girls in self-care, social skills, interaction skills, self-management, and Overall score with statistical significance ($t = -6.93$, $P = 0.000$; $t = -3.76$, $P = 0.000$; $t = -4.45$, $P = 0.000$; $t = -2.53$, $P = 0.012$; $F = -4.50$, $P = 0.000$). This suggests that, within the same age group, girls may exhibit more advanced or mature abilities in these aspects.

As preschool children grow older, their scores in self-care, academic performance, interaction skills, self-management, and Overall score show an upward trend, with these differences being statistically significant ($F = 4.07$, $P = 0.017$; $F = 3.41$, $P = 0.033$; $F = 3.06$, $P = 0.047$; $F = 7.00$, $P = 0.001$; $F = 5.32$, $P = 0.005$). This reflects the continuous development of children's abilities and skills as they age.

In terms of Overall scores for life self-care ability, self-management ability, and social adaptability, only children exhibit weaker performance compared to non-only children, with statistically significant differences ($t=2.95$, $P=0.003$; $t=3.47$, $P=0.000$; $t=2.10$, $P=0.036$). This indicates that the social adaptability of only children is relatively poorer.

Table 2 Analysis of Differences in Social Adaptability Among Preschool Children with Various Demographic Characteristics

Variable	N (%)	Self-care	Exercise	Homework	Socialization	Interaction	Self-management	Overall score
Gender								
Male	562 (56.5)	0.73 ± 0.16	0.76 ± 0.12	0.56 ± 0.19	0.67 ± 0.13	0.70 ± 0.19	0.57 ± 0.19	0.67 ± 0.13
Female	433 (43.5)	0.80 ± 0.14	0.77 ± 0.12	0.56 ± 0.20	0.70 ± 0.12	0.75 ± 0.16	0.60 ± 0.18	0.71 ± 0.12
t		-6.93	-1.21	-0.45	-3.76	-4.45	-2.53	-4.50
P		0.000	0.226	0.655	0.000	0.000	0.012	0.000
Age (years)								
3-	65(6.5)	0.75 ± 0.17	0.76 ± 0.12	0.55 ± 0.21	0.67 ± 0.17	0.71 ± 0.19	0.51 ± 0.21	0.67 ± 0.14
4-	901(90.6)	0.76 ± 0.15	0.76 ± 0.12	0.56 ± 0.19	0.69 ± 0.12	0.72 ± 0.18	0.58 ± 0.19	0.69 ± 0.12
5-6	29(2.9)	0.84 ± 0.11	0.81 ± 0.11	0.65 ± 0.17	0.72 ± 0.15	0.80 ± 0.18	0.67 ± 0.16	0.76 ± 0.11
F		4.07	2.01	3.41	1.61	3.06	7.00	5.32
P		0.017	0.134	0.033	0.201	0.047	0.001	0.005

Only Child								
NO	411 (41.3)	0.78 ± 0.16	0.77 ± 0.13	0.57 ± 0.21	0.69 ± 0.14	0.72 ± 0.20	0.60 ± 0.20	0.70 ± 0.14
YES	584 (58.7)	0.75 ± 0.15	0.75 ± 0.11	0.56 ± 0.18	0.68 ± 0.11	0.72 ± 0.17	0.56 ± 0.18	0.68 ± 0.11
t		2.95	1.91	0.62	0.59	-0.11	3.47	2.10
P		0.003	0.057	0.535	0.556	0.914	0.000	0.036

3.3 Analysis of Differences in Social Adaptability Among Preschool Children with Different Family Backgrounds

As shown in Table 3, household monthly income is an important factor affecting children's ability development. As household monthly income increases, children's scores in motor skills, academic performance, social skills, and interaction skills also show an upward trend, with these differences being statistically significant ($F = 3.73$, $P = 0.011$; $F = 3.63$, $P = 0.013$; $F = 7.82$, $P = 0.000$; $F = 7.75$, $P = 0.000$). This may imply that children from high-income families have access to more resources and opportunities, thereby contributing to their development in these aspects.

Parental educational level also has a significant impact on children's ability development. As parental educational level increases, children's scores in social skills and interaction skills also increase, with the differences being statistically significant (Mother: $F = 8.50$, $P = 0.000$; $F = 7.64$, $P = 0.000$; Father: $F = 16.45$, $P = 0.000$; $F = 12.51$, $P = 0.000$). In particular, fathers' educational level has a significant effect on children's motor skills and academic performance ($F = 3.47$, $P = 0.031$; $F = 3.92$, $P = 0.020$). This suggests that parental educational level, especially fathers' educational level, plays an important role in the development of children's motor skills and academic performance.

However, it is noteworthy that parental occupation does not have a significant impact on children's social skills ($P > 0.05$). This may be because children's social skills are influenced by multiple factors, including family environment, parent-child relationships, school education, etc., and parental occupation is just one of these factors.

In summary, differences exist between boys and girls in multiple aspects, and children's ability development is influenced by factors such as age, household income, and parental educational level. Parental occupation has a relatively minor impact on children's social skills. This information helps us better understand the patterns and influencing factors of children's ability development, thereby providing them with better education and support.

Table 3 Analysis of Differences in Social Adaptability Among Preschool Children from Various Family Backgrounds

Variable	N (%)	Self-care	Exercise	Homework	Socialization	Interaction	Self-management	Overall score
Monthly Family Income (RMB)								
<5000	94 (9.5)	0.76 ± 0.17	0.75 ± 0.13	0.53 ± 0.211	0.65 ± 0.15	0.68 ± 0.22	0.58 ± 0.22	0.67 ± 0.14
5000-	443 (44.5)	0.75 ± 0.16	0.75 ± 0.12	0.55 ± 0.19	0.67 ± 0.12	0.70 ± 0.18	0.56 ± 0.20	0.67 ± 0.13
15000-	271 (27.2)	0.77 ± 0.15	0.77 ± 0.12	0.58 ± 0.18	0.70 ± 0.12	0.74 ± 0.17	0.59 ± 0.18	0.70 ± 0.12
≥25000	187 (18.8)	0.78 ± 0.15	0.78 ± 0.12	0.58 ± 0.20	0.71 ± 0.13	0.76 ± 0.16	0.60 ± 0.17	0.71 ± 0.12
F		1.53	3.73	3.63	7.82	7.75	2.53	5.88
P		0.205	0.011	0.013	0.000	0.000	0.056	0.001
Maternal Education Level								
High School or Below	315 (31.7)	0.76 ± 0.16	0.75 ± 0.13	0.54 ± 0.19	0.66 ± 0.14	0.69 ± 0.20	0.59 ± 0.19	0.67 ± 0.13
Diploma	458 (46.0)	0.76 ± 0.15	0.77 ± 0.12	0.57 ± 0.20	0.70 ± 0.13	0.73 ± 0.17	0.58 ± 0.19	0.69 ± 0.13
Bachelor's Degree or Above	222 (22.3)	0.77 ± 0.14	0.77 ± 0.12	0.57 ± 0.17	0.70 ± 0.11	0.75 ± 0.16	0.57 ± 0.18	0.69 ± 0.11
F		0.23	2.69	2.17	8.50	7.64	0.66	2.56
P		0.796	0.068	0.115	0.000	0.000	0.515	0.078
Paternal Education Level								
High School or Below	236 (23.7)	0.76 ± 0.16	0.74 ± 0.13	0.53 ± 0.20	0.65 ± 0.14	0.67 ± 0.20	0.56 ± 0.20	0.66 ± 0.13
Diploma	329 (33.1)	0.77 ± 0.15	0.76 ± 0.12	0.57 ± 0.19	0.69 ± 0.13	0.72 ± 0.18	0.59 ± 0.20	0.69 ± 0.13
Bachelor's Degree or Above	430 (43.2)	0.76 ± 0.16	0.77 ± 0.12	0.57 ± 0.19	0.71 ± 0.11	0.75 ± 0.16	0.58 ± 0.18	0.70 ± 0.12
F		0.88	3.47	3.92	16.45	12.51	1.86	6.05
P		0.415	0.031	0.020	0.000	0.000	0.156	0.002
Maternal Occupation								

Worker or Farmer	112 (11.3)	0.76 ± 0.16	0.76 ± 0.12	0.56 ± 0.19	0.70 ± 0.12	0.71 ± 0.18	0.60 ± 0.19	0.69 ± 0.13
Science, Medical, Education	76 (7.6)	0.77 ± 0.15	0.77 ± 0.12	0.58 ± 0.19	0.69 ± 0.12	0.74 ± 0.16	0.60 ± 0.17	0.70 ± 0.12
Self-employed, Business, Enterprise, Government	456 (45.8)	0.76 ± 0.16	0.77 ± 0.12	0.57 ± 0.20	0.69 ± 0.13	0.73 ± 0.18	0.58 ± 0.19	0.69 ± 0.13
Others	351 (35.3)	0.76 ± 0.15	0.75 ± 0.12	0.55 ± 0.18	0.67 ± 0.12	0.71 ± 0.18	0.57 ± 0.19	0.68 ± 0.12
F		0.07	2.05	0.75	1.72	1.25	0.94	1.12
P		0.978	0.105	0.520	0.161	0.292	0.420	0.340
Paternal Occupation								
Worker or Farmer	151 (15.2)	0.76 ± 0.16	0.76 ± 0.12	0.55 ± 0.19	0.68 ± 0.12	0.69 ± 0.19	0.57 ± 0.19	0.68 ± 0.13
Science, Medical, Education	122 (12.3)	0.77 ± 0.14	0.77 ± 0.11	0.60 ± 0.16	0.69 ± 0.11	0.73 ± 0.16	0.60 ± 0.18	0.70 ± 0.13
Self-employed, Business, Enterprise, Government	553 (55.5)	0.76 ± 0.16	0.77 ± 0.12	0.56 ± 0.20	0.69 ± 0.13	0.73 ± 0.18	0.59 ± 0.19	0.69 ± 0.13
Others	169 (17.0)	0.75 ± 0.14	0.75 ± 0.12	0.54 ± 0.18	0.68 ± 0.11	0.72 ± 0.18	0.55 ± 0.19	0.67 ± 0.12
F		0.47	1.33	2.50	0.82	1.96	1.72	1.70
P		0.704	0.264	0.058	0.481	0.118	0.161	0.165

3.4 Correlation Analysis of Parenting Styles and Social Adaptability in Preschool Children

Spearman correlation analysis showed that "Rejection" was negatively correlated with several dimensions of preschool children's social adaptability, including self-care, social skills, communication skills, self-management skills, and overall score ($r = -0.076, -0.109, -0.067, -0.128, -0.098, P < 0.05$). In contrast, "Emotional Warmth" was positively correlated with self-care, social skills, communication skills, self-management skills, and overall score ($r = 0.065, 0.092, 0.132, 0.111, 0.108, P < 0.05$). Similarly, "overprotection" shows positive correlations with self-care ability, motor skills, social skills, communication skills, self-management ability, and the overall score ($r = 0.074, 0.135, 0.090, 0.127, 0.095, 0.126, P < 0.05$). However, "preference" (or "favoritism") exhibits negative correlations with task competence and the overall score of preschool children's social adaptability ($r = 0.074, 0.065, P < 0.05$). (Table 4).

Table 4 Correlation Analysis Between Family Parenting Styles and Social Adaptability of Preschool Children

Parenting Style	Self-care	Exercise	Homework	Socialization	Interaction	Self-management	Overall score
Rejection	-0.076*	-0.050	-0.026	-0.109**	-0.067*	-0.128**	-0.098**
Emotional Warmth	0.065*	0.059	0.048	0.092**	0.132**	0.111**	0.108**
Overprotection	0.074*	0.135**	0.095	0.090**	0.127**	0.095**	0.126**
Favoritism	-0.042	-0.092	-0.074*	-0.069	-0.041	0.015	-0.065*

Note: * $P < 0.05$, ** $P < 0.01$

3.5 Multiple Linear Regression Analysis of Parenting Styles and Social Adaptability in Preschool Children

Multiple linear regression was employed to determine the factors influencing preschool children's social adaptability and to predict the social adaptability of preschool children with genders, ages, only-child, parental occupation, household monthly income, and parental educational levels.

The results showed that the independent variables included in the regression model, such as gender, age, only-child, rejection, and overprotection, were statistically significant ($B=4.085, P=0.000; B=2.932, P=0.003; B=3.063, P=0.002; B=-2.522, P=0.012; B=-3.878, P=0.000; B=3.485, P=0.001$). Rejection and only-child status were found to reduce preschool children's social adaptability, while female gender, higher household monthly income, older age, and overprotection were found to improve preschool children's social adaptability (Table 5).

Table 5 Multiple Linear Regression Analysis Between Total Parenting Style Scores and Different Dimensions of Preschool Children's Social Adaptability

Variable	B	S. E	Beta	t	P
Constant	0.420	0.067		6.268	0.000
Gender	0.032	0.008	0.125	4.085	0.000
Age	0.037	0.013	0.090	2.932	0.003
Maternal Education Level	0.000	0.006	0.001	0.021	0.983
Maternal Occupation	-0.002	0.005	-0.014	-0.393	0.694
Paternal Education Level	0.010	0.006	0.065	1.774	0.076
Paternal Occupation	-0.004	0.005	-0.029	-0.810	0.418
Monthly Family Income	.014	0.005	0.103	3.063	0.002
Only Child	-0.021	0.008	-0.081	-2.522	0.012
Rejection	-0.005	0.001	-0.136	-3.878	0.000
Emotional Warmth	0.000	0.001	0.021	.547	0.585
Overprotection	0.003	0.001	0.137	3.485	0.001
Favoritism	0.005	0.003	0.059	1.723	0.085

4 DISCUSSION

The study found significant differences in social adaptability among children of different genders and ages, and parenting styles were significantly correlated with the social adaptability of preschool children. Rejection and overprotection could be used to predict the social adaptability of preschool children. This section analyzes the reasons behind these differences in social adaptability among children of different genders and ages, as well as the reasons why rejection and overprotection predict social adaptability.

4.1 Analysis of Basic Characteristics of Preschool Children's Social Adaptability

This study investigated the social adaptability of 995 preschool children aged 3 to 6, focusing on three potential factors affecting their social adaptability: child-specific factors, parental factors, and parenting styles.

The results showed that children's social adaptability was associated with their gender, only-child status, age, family economic status, Paternal education and occupation, Maternal education, and parenting style. At the preschool stage, girls performed better than boys in socialization, communication, self-management, and overall performance. This finding is consistent with related domestic and international research [19-20]. This may be due to inherent physiological differences between boys and girls, their different perceptions of society, or differences in how parents treat boys and girls, with parents often showing more patience and understanding towards girls. Kwak H et al.'s study indicated that [21], although girls scored higher in learning adaptability during college, boys scored higher in future adaptability, environmental adaptability, and interpersonal adaptability. This suggests that more attention should be paid to girls' communication with the outside world during their growth. In terms of self-care and self-management, non-only children scored higher than only children, possibly because parents tend to intervene more in the lives of only children. This further emphasizes that parents in only-child families need to focus on fostering self-care skills in their children.

Moreover, as preschool children grow older, their scores in self-care, academic performance, interaction skills, and self-management show an upward trend; the higher the parents' educational level, the stronger the children's social and interaction skills. This may be because highly educated parents place greater emphasis on communication and interaction with their children, providing them with more social opportunities and resources, thus contributing to the development of their social skills. The higher the family income, the better the preschool children's motor skills, academic performance, social skills, and interaction skills, possibly because high-income families can provide better educational resources and growth environments, such as quality kindergartens, diverse extracurricular activities, and social venues, which contribute to their overall development. These findings are consistent with the studies of He Hongling and Kimangale A et al. [22-23].

4.2 Analysis of the Relationship Between Parenting Styles and Social Adaptability of Preschool Children

The study results indicate that when parents tend to adopt a rejection-oriented parenting style, their preschool children exhibit lower scores in self-care, social skills, interaction, self-management, and overall development. Conversely, if parents show more emotional warmth towards preschool children, these children show improved scores in these areas. This conclusion is consistent with the findings of Dong Yan et al. in 2019, who discovered that positive parenting styles promote infants' adaptive behaviors [10]. Hasan S found that the social adaptability of primary school students is positively correlated with perceived emotional warmth, and negatively correlated with rejection or punishment [24]; Xie

Qingbin and colleagues pointed out that authoritative maternal parenting styles contribute to the social adaptation of 4-year-old children [25].

These findings emphasize the importance of support, praise, understanding, and respect from parents during their children's growth. Even when children make mistakes, parents should use patient guidance rather than scolding or corporal punishment, as the traditional belief of "spare the rod, spoil the child" is not conducive to healthy growth. Jiali S et al. emphasized the significant role of parenting style in developing students' socio-emotional abilities [26], highlighting that the effects of paternal and maternal parenting styles on students' socio-emotional abilities and related outcomes are independent and cannot completely substitute for each other. Compared to the traditional "strict father, kind mother" parenting style, the combined effect of the "kind father, kind mother" style is more beneficial for the development of students' socio-emotional skills.

According to the regression results, rejection and only-child status reduce the social adaptability of preschool children, while being female, having a higher household income, and being older improve social adaptability. This is consistent with the findings of Gao Jie et al. [27]. Unexpectedly, this study found that higher overprotection scores were associated with better scores in self-care, motor skills, social skills, interaction, self-management, and overall development. This finding contradicts the results of previous studies by Tinghu K et al. [26-29]. The specific reasons behind this need further in-depth investigation. This finding suggests that overprotection may have certain positive effects on some aspects of children's development, but its potential mechanisms and long-term effects on children's development need cautious evaluation.

4.3 Suggestions

Based on the above findings, the following countermeasures and suggestions are proposed:

First, parents should pay attention to the impact of gender differences on children's social adaptability. Particularly for boys, a more positive and encouraging parenting style should be adopted to improve their social skills and self-management abilities. For only children, parents should focus on cultivating their self-care abilities and providing more opportunities for independent living to enhance their social adaptability.

Second, parents should avoid using a rejection-based parenting style and instead demonstrate more emotional warmth and support to promote children's social adaptation. In daily life, parents should give children enough attention and encouragement and avoid severe methods such as corporal punishment to build a positive parent-child relationship. In addition, family income and educational levels are also important factors affecting children's social adaptability. Low-income and less-educated families should actively seek external resources and support, such as participating in parenting education courses and utilizing community resources, to provide a better educational environment and growth conditions for their children.

Lastly, all sectors of society should strengthen guidance and support for family education. The government and educational departments can conduct family education campaigns to promote scientific parenting concepts and methods, helping parents establish correct educational views. At the same time, kindergartens and schools should strengthen communication and cooperation with families, jointly focusing on the development of children's social adaptability and providing strong support for their healthy growth.

5 CONCLUSION

Based on 995 valid samples, this study explored the relationship between parenting styles and social adaptability in Chinese preschool children. The findings indicate that gender, age, household monthly income, and parental education level all significantly influence children's social adaptability. In terms of parenting styles, rejection-based parenting had a negative impact on children's social adaptability, while emotionally warm parenting had a positive effect. Although overprotective parenting also showed a certain positive impact, its underlying mechanisms and long-term effects on children's development require further investigation.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

FUNDING

The author(s) declare financial support was received for the research, authorship, and/or publication of this article. This work was supported by the Key Scientific Research Project Plan for Colleges and Universities in Henan Province, China (Grant No. : 24A190002) and Henan Province Soft Science Project (Grant No.: 252400410657).

AUTHOR CONTRIBUTIONS

YD, HL, YM and SW conceived the study. YW, YM, SH, YT and HL analyzed the data. YW, wrote the manuscript. SW revised and refined the manuscript. YD, YW, HL and SW contributed to the collection of data. YD and SW was responsible for the integrity of the work as a whole. All authors critically reviewed various drafts of the manuscript and approved the final version.

ETHICS STATEMENT

Our study did not involve animal or human clinical trials and was not unethical. In accordance with the ethical principles outlined in the Declaration of Helsinki, all participants provided informed consent before participating in the study. The anonymity and confidentiality of the participant guaranteed, and participation was completely voluntary. Participants volunteered to take part in the interview. Prior to participating in the interview, they were informed of the purpose of the study and were told that “submission of records” was considered informed consent. Participants could withdraw at any time during the participation process. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

ACKNOWLEDGMENTS

Gratitude is extended to all participants whose contributions enriched this study.

PUBLISHER’S NOTE

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