

Current situation and impact factors on children's "psychological resilience" and "subjective sense of well-being" amidst COVID-19

——Data analysis on 5-year-old children survey in mainland China

COVID-19 caught the whole world off guard. Amidst the challenges caused by this unexpected pandemic, will the existing child-parent relationship and child rearing pattern be affected? In particular, what new characteristics will children's psychological resilience and subjective well-being take on during the pandemic? To explore the answers to these questions, CRNA organized a cross-cultural study in Asian countries whereby the mainland China has the honor to become a research member. According to the research requirements, we organized a questionnaire survey with Wonderland Education Group in Taiyuan , in Shanxi Province, engaging 264 mothers of children aged 5 and conducted an online survey on the platform of "Questionnaire Star" in September 2021. Both the recovery and effectiveness rate have reached 100%. This report is the result of analysis for this survey.

1. Analysis on sample mix

This part introduces the demographic variables and their characteristics of 5-year-old children and their families in mainland China by means of descriptive statistics.

1.1 sample mix

Sample mix will be described in terms of children and their family background respectively.

1.1.1 Composition of children under survey

Table 1-1 Gender and age of mainland children under survey

		n	%
sex	1 Male	138	52.3
	2 Female	126	47.7
age Five years old	1 5 years 0 month to 2 months old	63	23.9
	2 5 years 3 months to 5 months old	84	31.8
	3 5 years 6 months to 8 months old	76	28.8
	4 5 years 9 months to 11 months old	41	15.5

1.1.2 Children's family background

The descriptive statistics of demographic variables of family background will be conducted in terms of living conditions (nuclear family or not), parents' employment situation, educational background, income, etc.

Table 1-2 Members living together with the respondents (mothers)

		n	%
Members living together	1 Subject child	218	82.6
	2 Siblings of subject child	96	36.4
	3 Spouse/partner	232	87.9
	4 Your father	29	11.0
	5 Your mother	53	20.1
	6 Your spouse's/partner's father	37	14.0
	7 Your spouse's/partner's mother	49	18.6
	8 Relative	5	1.9
	9 Domestic worker	10	3.8
	10 Others	5	1.9

Table 1-3 Employment of mothers and their spouses

	Mother		Father	
	n	%	n	%
1 Full-time position (full-time employee/regular worker) *Including work from home.	166	62.9	177	67.0
2 Part-time worker	8	3.0	4	1.5
3 Contracted/dispatched employee	18	6.8	13	4.9
4 Home pieceworker	14	5.3	5	1.9
5 Employer	1	0.4	0	0.0
6 Self-employed/family-run business	12	4.5	45	17.0
7 In agriculture, forestry, and fishery	0	0.0	0	0.0
8 Homemaker (engaged in housework)	32	12.1	0	0.0
9 Student	0	0.0	0	0.0
10 Unemployed	2	0.8	1	0.4
11 Others	11	4.2	16	6.1
12 I have no spouse/partner			3	1.1

Table 1-4 educational background of mothers and their spouses

	Mother		Father	
	n	%	n	%
1 Primary school	0	0.0	0	0.0
2 Junior middle school	4	1.5	6	2.3
3 Senior middle school	12	4.5	13	4.9
4 Higher vocational school	3	1.1	5	1.9
5 Three-year college	55	20.8	54	20.5
6 Undergraduate	145	54.9	139	52.7
7 Master	42	15.9	41	15.5
8 Ph.D.	2	0.8	2	0.8
9 Others	1	0.4	1	0.4
10 I have no spouse/partner			3	1.1

Table 1-5 Family income of children under survey

			n	%
household income China	1	No income	0	0.0
	2	Less than 75,000	17	6.4
	3	75,000 to less than 1500,000	83	31.4
	4	150,000 to less than 375,000	100	37.9
	5	375,000 to less than 600,000	16	6.1
	6	600,000 to less than 900,000	5	1.9
	7	900,000 or more	6	2.3
	8	Do not know/do not want to answer	37	14.0

Table 1-6 Changes of family income during COVID-19

		n	%
change of household income post COVID	1 No income	2	0.8
	2 Has decreased	107	40.5
	3 Has not changed	111	42.0
	4 Has increased	17	6.4
	5 Do not know/do not want to answer	27	10.2

1.2 Characteristics of samples

1.2.1 Characteristics of children sample

The proportion of boys and girls is balanced, and the age covers the whole range of 5 years old. As it can be seen from Table 1-1, there are slightly more boys than girls in the sample, and their ages are mostly concentrated at 5 years old and 3 months to 8 months. The proportion of male and female

children is fairly balanced, and the age distribution is relatively even.

1.2.2 Characteristics of children's family under survey

Most of them are nuclear families and children live with their parents. It can be seen from table 1-2 that most of the children's families are nuclear families. Children live with their parents, and a small part of them are large families, living with their grandparents.

More than half of the parents are full-time workers with 3-year college and undergraduate education background, and their annual income is mostly at the average level.

Table 1-3 shows that more than 60% of the children's mothers and fathers are full-time workers. 17% of the fathers are self-employed and 12% of the mothers are housewives. Table 1-4 shows that 70% of the parents' educational background is 3-year college and undergraduate, and 15% - 16% have a master's degree. The median value of China's average annual income is between 150000 yuan and 375000 yuan, Table 1-5 shows that 37.9% of the subject children's families' annual income is at this median value, and 31.4% of the children's families' annual income is slightly lower than average. During COVID-19, 40.5% of the families have experienced decrease in their income, indicating that the pandemic still has a certain negative impact on family income.

To sum up, the families of 5-year-old children in this survey are characterized as relatively high education background and middle-class level income from Chinese mainland cities.

2. Status quo and impact factors

This cross-cultural study focuses on the status quo and impact factors on children's "psychological resilience" and "sense of well-being" in the context of COVID-19. Therefore, the report in this part will also focus on the two main variables for data analysis.

2.1 Children's "psychological resilience" in mainland China

In this study, the Person Most Knowledgeable version of Child and Youth Resilience Measure (PMK-CYRM-R) scale has been used to collect the current data of 5-year-old children's "resilience" from the perspective of mothers' perception. Although mothers' perception tends to be subjective and biased, this analysis is based on the premise that mother's perception is as it is.

2.1.1 Simple statistics

According to the CYRM-R structure, Q6 can be divided into two sub concepts: Children's "psychological resilience" experienced both as individuals and as in parent/caregiver-child relationship. Therefore, table 2-1 also makes a descriptive statistical analysis from the general perspective and two specific perspectives.

Table 2-1 Average and standard deviation of "resilience" of 5-year-old children in mainland

China			
	M	SD	N
Q6 Overall resilience (resilience)	4.423	.630	264
Q6 Personal resilience	4.348	.642	264
Q6 Caregiver resilience	4.530	.666	264

According to the CYRM-R scoring rule, the score ranges from 1 to 5. The higher the score, the more resilient the children are. It can be seen from table 2-1 that in Chinese mothers' perception, their 5-year-old children have strong psychological resilience, especially in the parent/caregiver-child relationship.

2.1.2 Comparison between groups

Considering the limited length of this article, only the variables with significant differences among groups have been selected for analysis.

2.1.2.1 Comparison of age groups

Figure 2-1 shows the results of the difference of resilience among the four age groups by months among 5-year-olds .

* $p < .05$, ** $p < .01$, *** $p < .001$.

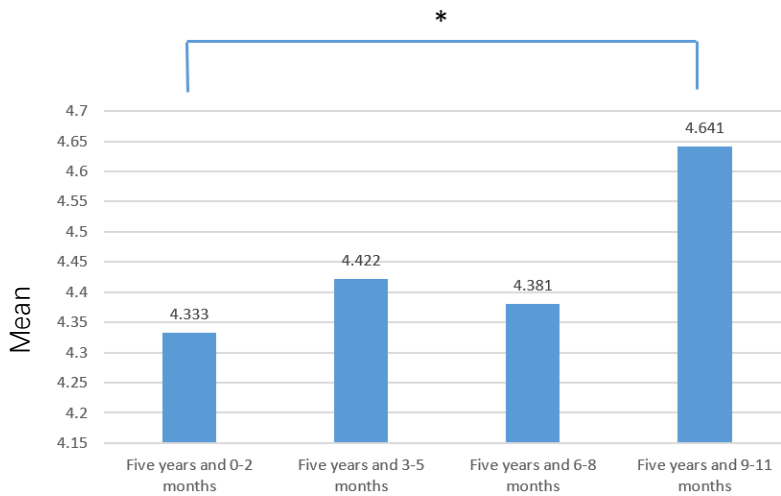


Figure 2-1 Comparison of "resilience" score of four month groups at 5 years old

It can be seen from Figure 2-1 that the score of "resilience" of 5 years old and 9-11 months is significantly higher than that of 5 years old and 0-2 months ($P < .05$), indicating that there is a certain age effect.

2.1.2.2 Group comparison on children's "resilience" in the variable of mother's participation in parenting

Figure 2-2 shows the result of group comparison with different scores of children's "resilience" in the variable of "mothers' participation in parenting".

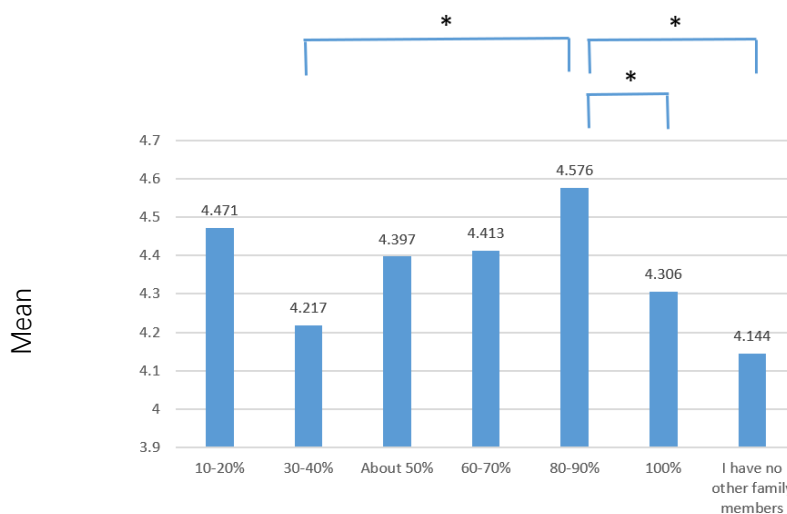


Figure 2-2 Comparison on children's "resilience" in the variable of "mothers' parenting participation"

Through the interpretation of figure 2-2, we can see that the group in which mothers' participation is 80-90% has the highest score of "resilience", and at the level of $P < .05$, it is significantly higher than the group in which mothers' participation is 30-40%, the group in which mothers' participation is 100% and the group of single mothers. Thus, it can be seen that hard working mothers may make their children experience hardship. However, mothers without any family support in parenting at all may have no time to take into account their children's psychological feelings, leading to low scores in "psychological resilience". The score of "resilience" of children in the group with low participation of mothers is also lower, which indicates that mothers should invest more time to participate in child rearing with the support of their families since it will contribute to the development of children's "psychological resilience".

2.1.2.3 Group comparison on children's "resilience" in the variable of mothers and their spouses' occupations

Figures 2-3 and 2-4 show the results of the comparison on the scores of "resilience" of young children due to the occupation of their mothers and their spouses.

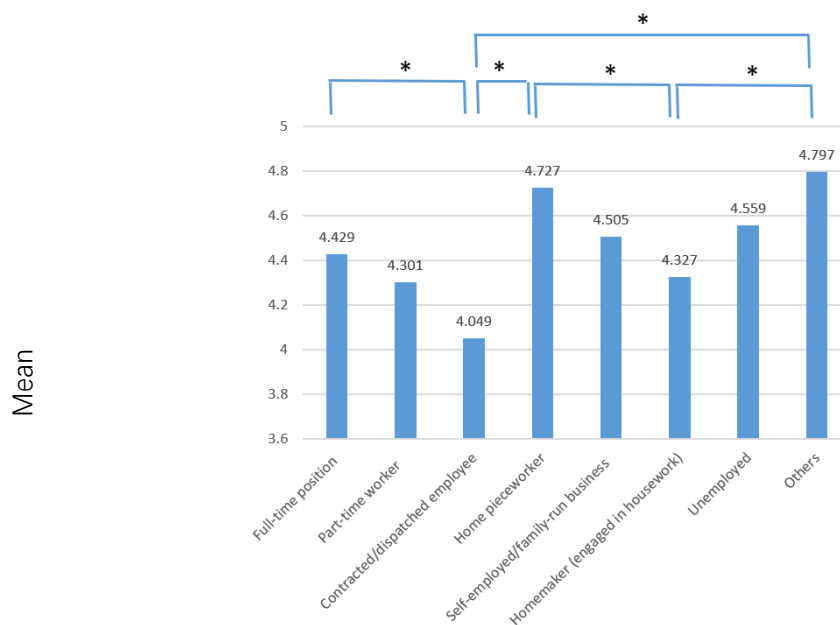


Figure 2-3 Comparison between groups of children's "resilience" in the variable of mothers' occupation

As can be seen from figure 2-3, the children whose mothers are home pieceworkers or "others"

have the highest score of "psychological resilience", while children whose mothers are full-time workers have fairly high scores. However, the children whose mothers are "contract workers" have the lowest score of "resilience". The children whose mothers are "part-time" workers have fairly low score of "resilience". There is significant difference between the high score group and the low score group ($P < .05$).

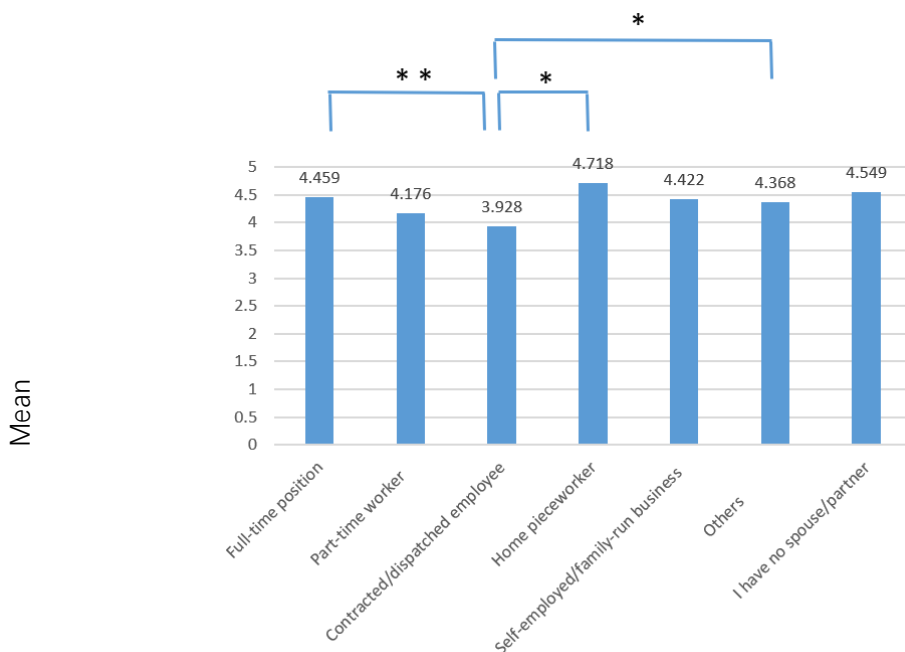


Figure 2-4 Comparison between groups of children's "resilience" in the variable of fathers' occupation

Figure 2-4 shows that although the variable of fathers' occupation for children's "psychological resilience" between groups doesn't have such significant difference as that of mothers', it can still be seen that the children whose fathers are "contract workers" have the lowest score of "psychological resilience".

It can be inferred that the quality of communication between mothers and their spouses and their children is affected by occupational instability, hence resulted in the relatively low score of children's "resilience".

2.1.2.4 Comparison on children's "resilience" in the variable of digital media usage approved by mothers

The four options of Q11 indicate the level of mothers' approval of the digital devices for

entertainment use. From the first group to the fourth group, what is shown is the negative attitude and its change, and the positive attitude and its change. Figure 2-5 shows the results of children's "resilience" scores compared between groups of different levels of mothers' approval of digital devices for entertainment use.

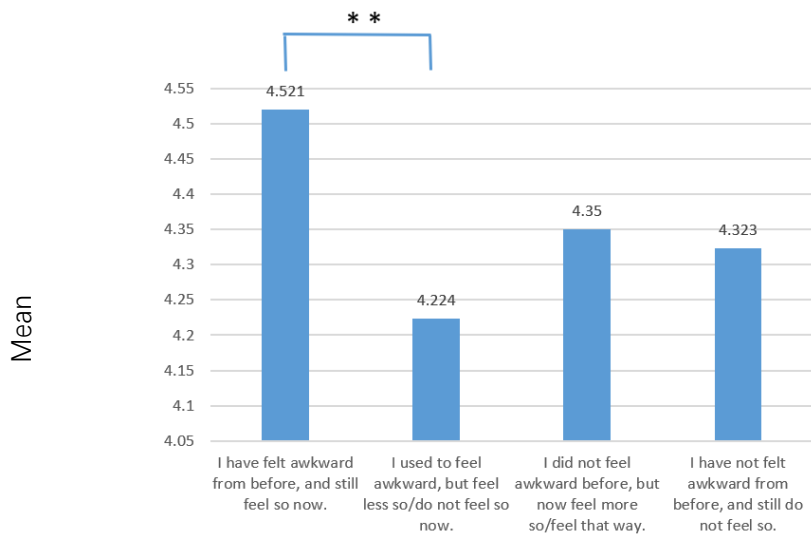


Figure 2-5 Comparison of children's "resilience" between groups in the variable of levels of mothers' approval of digital devices

As it can be seen from figure 2-5, the score of children's "resilience" in the group where mothers are firmly and consistently opposed to children's use of digital devices for entertainment is significantly higher at the level of $P < .01$ than that in the group where mothers, at the beginning opposed to children's entertainment use of digital devices changed their attitude because of COVID-19. It can be inferred from figure 2-5 that mothers' consistent opposition to children's use of digital products for entertainment contributes to the development of children's "psychological resilience".

2.1.2.5 Comparison between groups of children's "resilience" in the variable of parenting attitude

Q8 focuses on the mothers' parenting attitude. The lower the score is, the closer the parent-child relationship is, the more positive support the mother can provide. The score ranges from 10 to 40. In data processing, the group with score of 10-20 in Q8 is regarded as the high group of "positive parenting attitude", while the score of 30-40 is regarded as the low group of "positive parenting

attitude". With parenting attitude as a variable, the scores of resilience have been compared between the two groups. The results are shown in Figure 2-6.

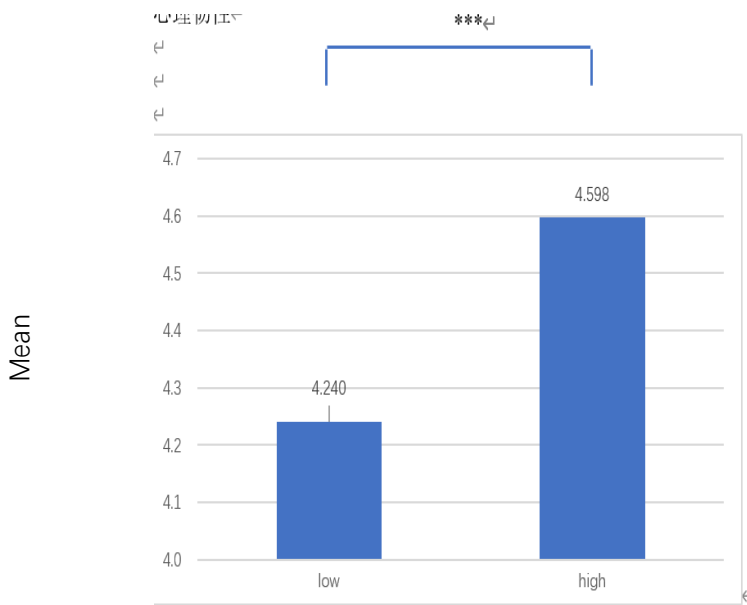


Figure 2-6 Comparison of children's "resilience" between groups in the variable of parenting attitude"

It can be seen from figure 2-6 that the mothers' parenting attitude has a great influence on children's "psychological resilience". The score of "psychological resilience" of the group of children whose mothers' parenting attitude gives children more positive support and deliver both loving care and authority is at $p < .001$ level significantly higher than that of the group whose mothers' parenting perception and behavior gives less positive support and follows no rules. The conclusion is that responsive and non-punitive parenting attitude can promote the development of children's "psychological resilience".

2.1.2.6 Comparison of children's "resilience" between groups in the variable of mother's emphasized aspects in childrearing

Q17 focuses on the respondents', ie, the mothers' emphasized aspects in childrearing. The lower the score is, the more positive the attitude of mothers is. The score ranges from 15 to 60. In data processing, the group with scores ranging between 15-30 in Q17 is regarded as the high group of mothers with "emphasized aspects in childrearing", while the group with scores ranging between

45-60 is regarded as the low group of mothers with "emphasized aspects in childrearing ". The scores of resilience have been compared between the two groups with emphasized aspects in childrearing as a variable. The results are shown in Figure 2-7.

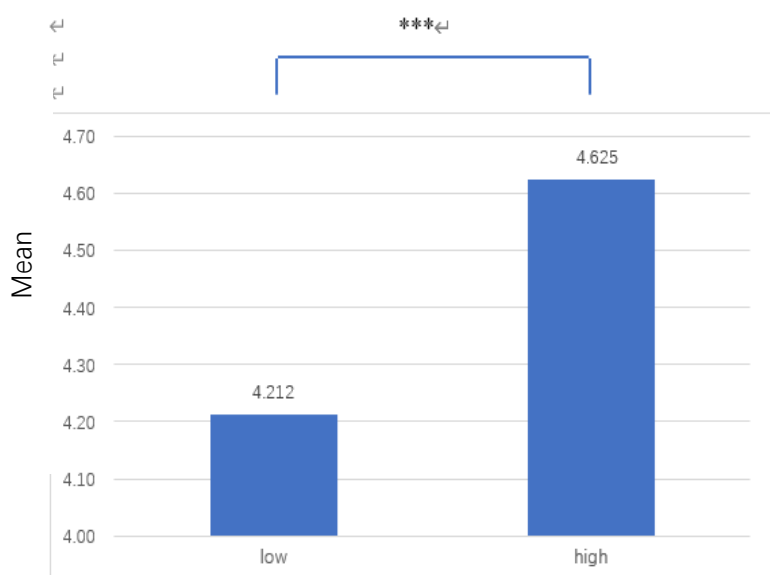


Figure 2-7 Comparison of children's "resilience" in the variable of "emphasized aspects in childrearing"

It can be seen from figure 2-7 that the mother's emphasized aspects in childrearing has a great impact on children's "psychological resilience". The score of "psychological resilience" of children in the high group of mothers with "emphasized aspects in childrearing " is significantly higher than that of the group whose mothers put less emphasis on the questioned aspects in childrearing at the level of $P < .001$. From this we can infer that the more the mothers place emphasis on childrearing aspects , the more it can promote the development of children's "psychological resilience".

2.1.2.7 Comparison of children's "resilience" between groups in the variable of mother's current life satisfaction

Q20 focuses on the mothers' current life satisfaction with parenting, work and family life. The lower the score, the higher the satisfaction of mothers. The score ranges from 5 to 25. In data processing, the group with a score of 5-10 in Q20 is regarded as the group with high "satisfaction

with parenting and life," while the group of 20-25 is regarded as the group with low "satisfaction with parenting and life." The scores of resilience are compared between the two groups with different levels of satisfaction with parenting and life as a variable. The results are shown in Figure 2-8.

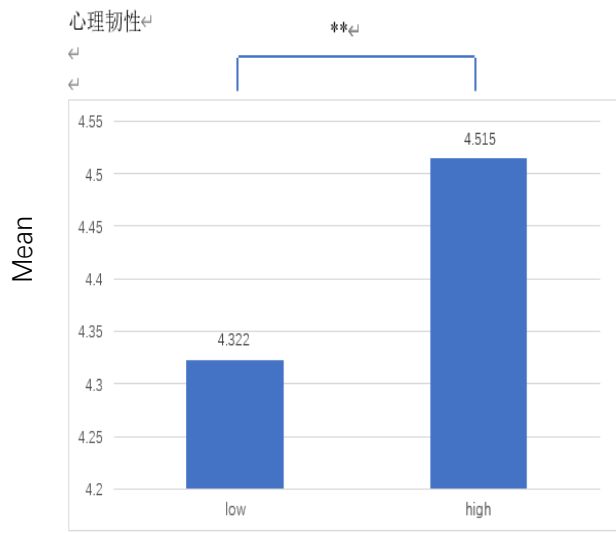


Figure 2-8 Comparison of children's "resilience" between groups in the variable of "mothers' satisfaction in parenting and life"

It can be seen from figure 2-8 that the mother's "satisfaction with parenting and life" has a great impact on children's "psychological resilience." The score of "psychological resilience" of children in the group whose mothers have a "high satisfaction with parenting and life" is significantly higher than that in the group of children whose mothers have a "low satisfaction with parenting and life" at the level of $P < .01$. It can be inferred that if the mother is satisfied with the present state of child rearing, work and life, it can promote the development of children's "psychological resilience."

To sum up, the overall score of children's "resilience" in mainland China is fairly high. The results of the inter-group test show that the following variables have great or significant impact.

If we look at the children themselves, the score of "resilience" of older children is significantly higher than that of younger children, indicating that the children's development stage is an important factor.

From the perspective of demographic variables, parents' occupation also has an impact on children's "resilience." The score of "resilience" of children whose parents have stable occupations is significantly higher than that of those whose parents' occupations are not stable, such as part-time

workers and contract workers.

In terms of mother's subjective feelings and parenting behavior, the children's "psychological resilience" of the group characterized with responsive and non-punitive parenting attitude, has more emphasized aspect in childrearing and satisfaction with their own parenting experience, controlled use of digital devices for entertainment is significantly higher than that of contrast group.

2.2 Status quo of children's subjective sense of well-being in mainland China

In this study, the questionnaire for measuring health related quality of life (QOL) scale(KINDL) has been used to collect the data of 5-year-old children's subjective well-being from the perspective of mother's perception. Although the mother's perception may be subjective and biased, this analysis is based on the premise that the mother's perception is as it is.

2.2.1 Simple statistics

According to the QOL structure, Q7 is divided into six sub concepts: Q7s1-s4 is "physical well-being", Q7s5-s8 is "emotional well-being", Q7s9-s12 is "self-esteem", Q7s13-s16 is "family", Q7s17-s20 is "friends ", and Q7s21-s24 is "everyday functioning (school or nursery school/kindergarten) ". Therefore, table 2-2 makes a descriptive statistical analysis from the perspectives of "total" and the six sub concepts.

Table 2-2 The average and standard deviation of "subjective well-being" of 5-year-old children in mainland China

	M	SD	N
Total	4.193	0.491	264
Physical well-being	4.424	0.597	264
Emotional well-being	4.152	0.632	264
Self esteem	4.169	0.745	264
Family	4.011	0.561	264
Friends	4.205	0.588	264
School	4.2	0.574	264

According to the QOL scoring rules, the score ranges from 1 to 5. The higher the score, the stronger the children's subjective well-being. From table 2-2, it can be seen that the five-year-old

children perceived by mothers in mainland China have a strong sense of well-being, especially "physical well-being," followed by "friends" and "school ", and the lowest is "family ".

2.2.2 Comparison between groups

Considering the limited length of this article, only variables with significant differences between groups have been selected for analysis.

2.2.2.1 Comparison of children's subjective sense of well-being in the variable of "mother's participation in child rearing"

In order to understand more clearly the relationship between mothers' participation in parenting and children's "subjective well-being", the respondents of the eight answer choices of Q18 (*Among the childrearing and house chores you split between you and your spouse/partner, what is the proportion of those you are in charge of?*) in the questionnaire were reorganized into 4 groups—i.e. group 1: participation in parenting is 50% or less; group 2 participation in parenting is 60-70%; group 3: participation in parenting is 80-90%; and group 4: participation in parenting is 100% or is a single parent. Figure 2-9 shows the comparison results of different scores of children's "subjective well-being" in the variable of "mother's participation in child rearing".

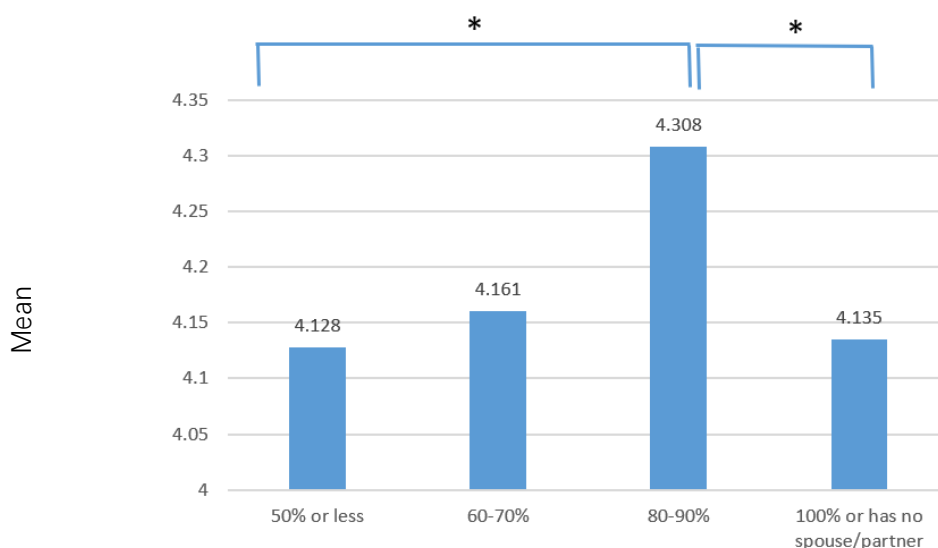


Figure 2-9 Comparison of children's "subjective sense of well-being" in the variable of "mother's housework / parenting participation"

Through the interpretation of figure 2-9, we can see that the group with 80-90% mothers'

participation in parenting has the highest score of "subjective well-being," and at the level of $P < 0.05$, significantly higher than those whose mothers participate in less than 50% , or 100% of childrearing and house chores, or are single parents. Thus it can be seen that the more hardworking mothers are in childrearing and house chores, the happier they make their children feel, because they spend more time with their children. However, mothers who have low participation in parenting or have no support from family members in rearing children may have limited communication time with their children, so their scores of "subjective well-being" are lower. This shows that mothers, with the support of their families, should have more time to participate in child rearing. This will be contributory to the enhancement of children's "subjective well-being".

2.2.2.2 Comparison of children's subjective sense of well-being in the variable of mothers and their spouses' occupations

Figure 2-10 and figure 2-11 show respectively the comparative results of children's scores in "subjective well-being" in relation to the occupation of their mothers and their spouses.

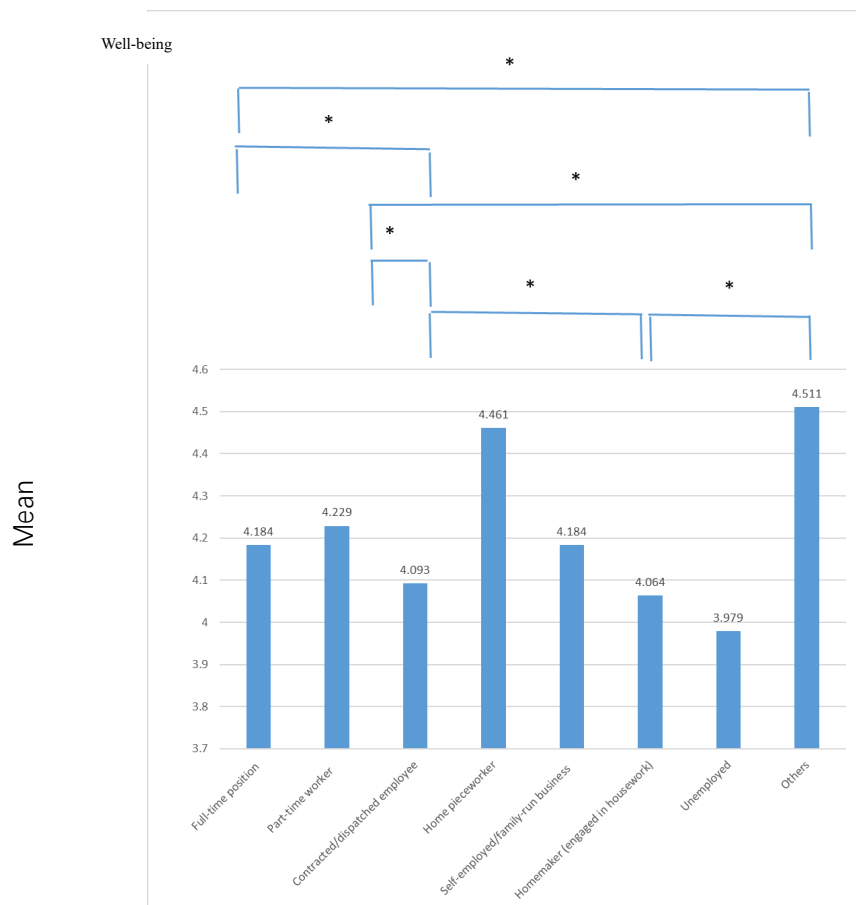


Figure 2-10 Comparison of children's "subjective well-being" in mothers occupational variable

As it can be seen from figure 2-10, children whose mothers are home pieceworkers or “others” have the highest score of subjective well-being, while children whose mothers are full-time workers have fairly high scores of subjective well-being. However, the children whose mothers are contract workers, especially those whose mothers are unemployed, have the lowest score of subjective well-being. There is significant difference between the high score group and the low score group ($P < 0.05$). The score of "subjective well-being" of children whose mothers are others is significantly higher than that of children whose mothers are unemployed at the level of $P < .01$, which shows that children's "subjective well-being" is affected by the mother's economic situation.

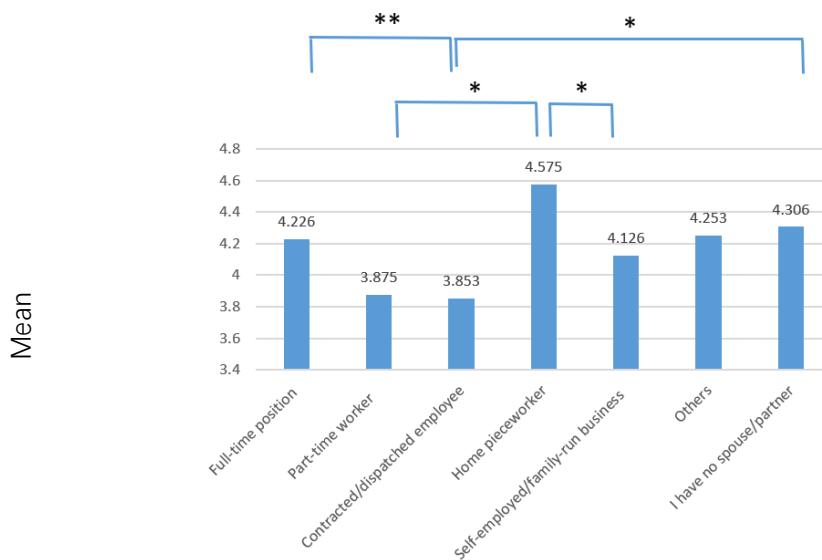


Figure 2-11 Comparison of children's subjective sense of well-being in fathers' occupational variable

Figure 2-11 shows that the difference in children's "subjective well-being" among the groups in the variable of the father's occupation is still significant. Children whose fathers are self-employed have the strongest subjective well-being, while those whose fathers are part-time workers and contract workers have the lowest score, lower than the groups whose fathers are full-time workers or self-employed ($P < .01$).

It can be inferred that the quality of communication between mothers and their spouses/partners and their children is affected by occupational instability, hence lowers the score of children's subjective well-being.

2.2.2.3 Comparison of children's subjective sense of well-being in the variable of digital device usage approved by mothers

The four options of Q11-s1 indicate change in the mothers' approval level of the entertainment use of digital devices from before the pandemic. From the first group (*I have felt awkward from before, and still feel so now.*) to the fourth group (*I have not felt awkward from before, and still do not feel so.*), it shows the degree of negative attitude and its change, or the positive attitude and its change. Figure 2-12 shows the results of children's "subjective well-being" scores compared among groups of different levels of mothers' approval of digital devices for entertainment use.

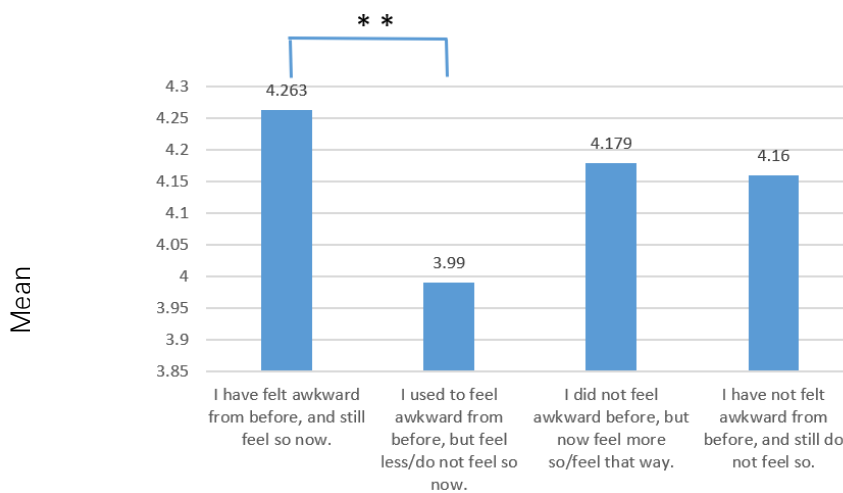


Figure 2-12 Comparison of children's subjective sense of well-being in the variable of mothers' approval of digital devices

As it can be seen from figure 2-12, the score of children's " subjective sense of well-being " in the group where mothers are firmly and consistently opposed to children's use of digital devices for entertainment use is significantly higher at the level of $P < .01$ than that in the group where mothers, at the beginning opposed to children's entertainment use of digital devices changed their attitude because of COVID-19. It can be inferred from figure 2-12 that mothers' consistent opposition to children's use of digital devices for entertainment use contributes to the enhancement of children's " subjective sense of well-being ".

2.2.2.4 Comparison of children's subjective sense of well-being in the parenting attitude variable

Q8 focuses on the mothers' parenting attitude. The lower the score is, the closer the parent-child relationship is, the more positive support the mother can provide. The score ranges from 10 to 40. In data processing, the group of respondents scoring 10-20 in Q8 is regarded as the high group of "positive parenting attitude", while the group with those scoring 30-40 is regarded as the low group of "positive parenting attitude". With parenting attitude as a variable, the scores of subjective sense of well-being have been compared between the two groups. The results are shown in Figure 2-13.

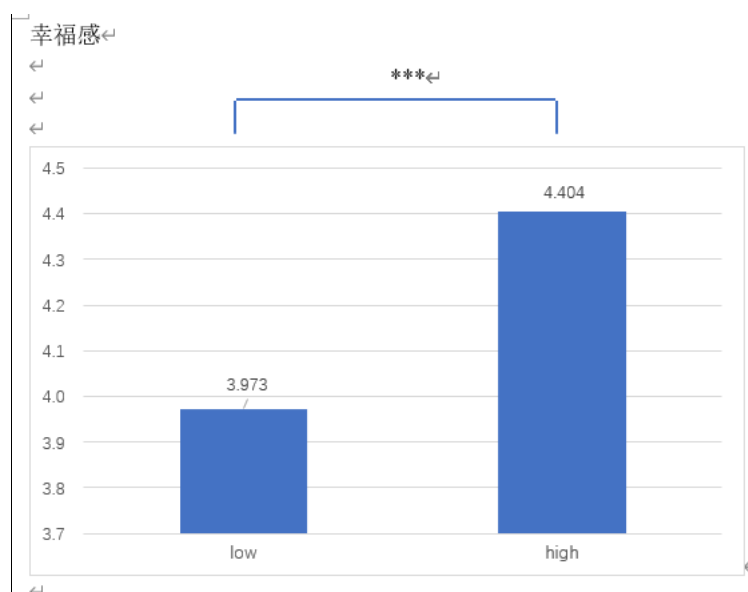


Figure 2-13 Comparison of children's subjective sense of well-being in the parenting attitude variable

It can be seen from figure 2-13 that the parenting attitude has a great influence on children's "subjective sense of well-being". The score of "subjective sense of well-being" of the group of children whose mothers' parenting attitude gives children more positive support and deliver both loving care and authority is at $p < .001$ level significantly higher than that of the group whose mothers' parenting attitude gives less positive support and follows no rules. The conclusion is that responsive and non-punitive parenting attitude can promote the enhancement of children's "subjective sense of well-being".

2.2.2.5 Comparison of children's subjective sense of well-being in the variable of mother's emphasized aspects in childrearing

Q17 focuses on the mothers' emphasized aspects in childrearing. The lower the score is, the more positive the attitude of mothers is. The score ranges from 15 to 60. In data processing, the group with score of 15-30 in Q17 is regarded as the high group of "emphasized aspects in childrearing", while the group of 45-60 is regarded as the low group of "emphasized aspects in childrearing". The scores of subjective sense of well-being have been compared between the two groups with emphasized aspects in childrearing as a variable. The results are shown in Figure 2-14.

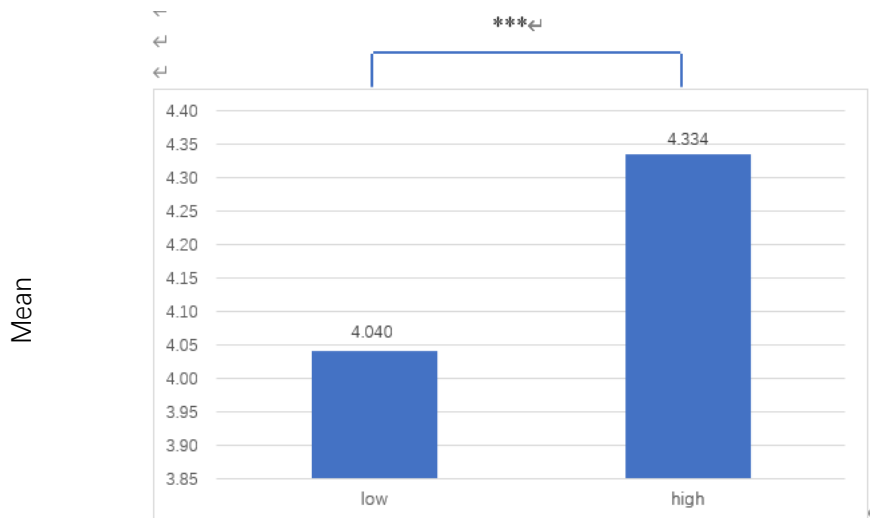


Figure 2-14 Comparison of children's subjective sense of well-being in the variable of "emphasized aspects in childrearing"

It can be seen from figure 2-14 that the mother's emphasized aspects in childrearing has a great impact on children's " subjective sense of well-being ". The score of "subjective sense of well-being " of children in the high group of mothers with "emphasized aspects in childrearing" is significantly higher than that of the group whose mothers hold less emphasized aspects in childrearing at the level of $P < .001$. From this we can infer that if mothers hold emphasized aspects in childrearing, it can promote the enhancement of children's " subjective sense of well-being ".

2.2.2.6 Comparison of children's subjective sense of well-being in the variable of mother's current life satisfaction

Q20 focuses on the mothers' satisfaction with parenting, work and family life. The lower the

score, the higher the level of mothers' satisfaction. The score ranges from 5 to 25. In data processing, the group with a score of 5-10 in Q20 is regarded as the high group of "satisfaction with parenting and life", while the group of 20-25 is regarded as the low group of "satisfaction with parenting and life". The scores of subjective sense of well-being are compared between the two groups with satisfaction with parenting and life as a variable.

The comparison indicates that the mother's "satisfaction with parenting and life" has a great impact on children's "subjective sense of well-being". The score of "subjective sense of well-being" of children in the group with mother's "high satisfaction with parenting and life" is significantly higher than that in the group of children with mothers "low satisfaction with parenting and life" at the level of $P < .01$. It can be inferred that if the mother is satisfied with the present state of child rearing, work and life, it can promote the enhancement of children's "subjective sense of well-being."

To sum up, the overall score of children's "subjective sense of well-being" in mainland China is fairly high. The results of the inter-group test show that the following variables have great or significant impact.

From the perspective of demographic variables, parents' occupation also has an influence on children's "subjective sense of well-being". The score of "subjective sense of well-being" of children whose parents have stable occupations is significantly higher than that of those whose parents' occupations are not stable, such as part-time workers and contract workers.

In terms of mother's subjective feelings and parenting behavior, the children's "subjective sense of well-being" of the group characterized with responsive and non-punitive parenting attitude, has more emphasized aspects in childrearing, controlled use of digital devices for entertainment is significantly higher than that of contrast group.

2.3 Analysis on factors influencing children's "resilience" and "subjective sense of well-being" in mainland China

By means of correlation analysis, multiple regression analysis and path analysis, this paper analyzes the factors influencing children's "psychological resilience" and "subjective sense of well-being" in mainland China.

2.3.1 Analysis on the factors contributing to children's "resilience" in mainland China

Figure 2-15 shows the analysis on variables that have significant impact on children's "psychological resilience" in mainland China with the multiple regression method.

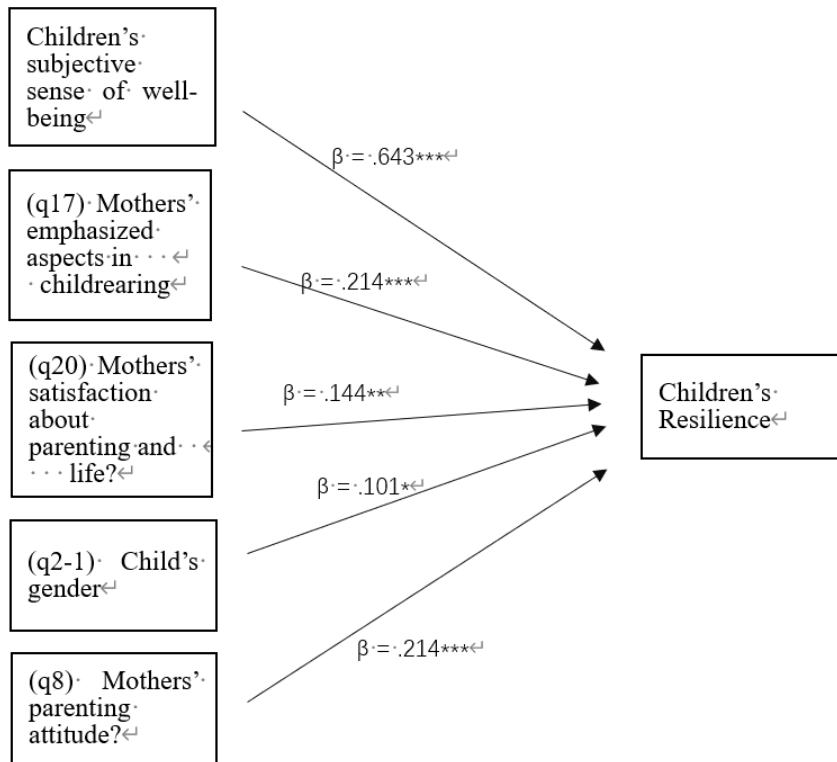


Figure 2-15 factors that have significant influence on children's "resilience"

Figure 2-15 shows that the most influential factor is children's "subjective sense of well-being" and mother's parenting attitude. Both variables are at the level of $P < .001$ indicating their powerful impact. The second is the mothers' satisfaction about parenting and life, which is $P < .01$, indicating its level of impact. In contrast, although gender and actual parent-child interaction are also relevant factors, their significance is $p < .05$.

"Screen exposure" has become a topic of concern at present. What impact will parents' attitude and behavior towards children's use of electronic products have on children's "resilience"? Figure 2-16 attempts to answer this question.

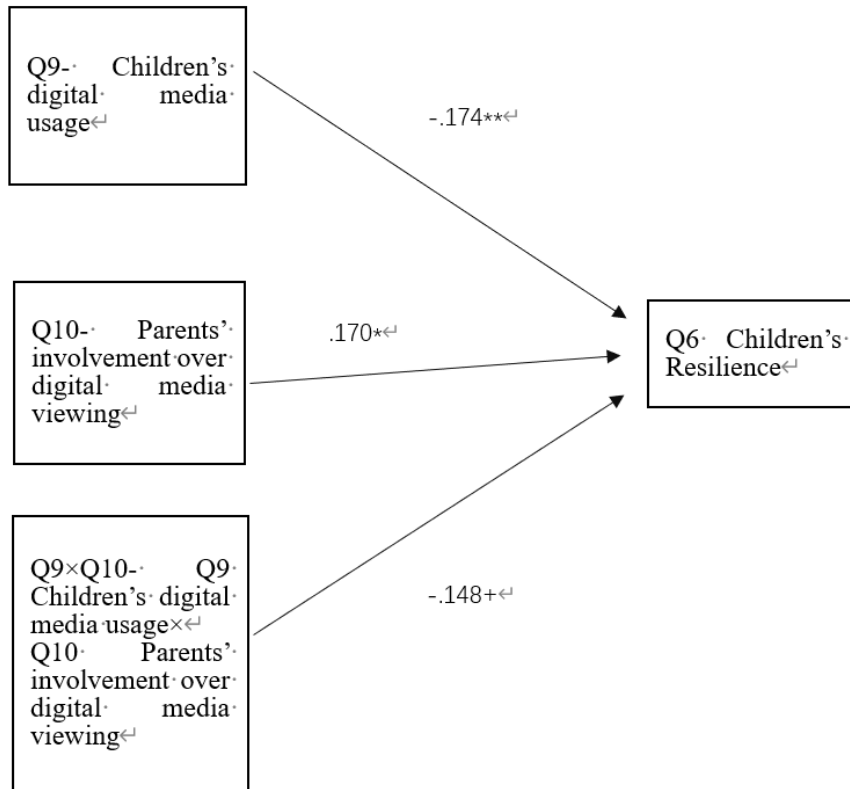


Figure 2-16 The effects of variables of free use of e-product and controlled use of digital devices on children's psychological resilience

Figure 2-16 shows that the higher the frequency of children using digital devices, the lower the level of "psychological resilience", hence a negative correlation coefficient. Although the correlation coefficient is only 0.174, it is still significant at the level of $P < .01$. However, it is very interesting that children's guided use of digital devices by parents is positively correlated with children's "psychological resilience", which is also significant at the level of $P < .01$. However, when the frequency of children's use of digital devices interacts with children's guided use of electronic products by parents, the frequency of children's use of digital devices still has a greater effect leading to still a negative correlation coefficient, ie, although parental guidance will reduce the adverse effect on children's "psychological resilience", the phenomenon that the higher the frequency of children's use of digital devices, the lower the level of "psychological resilience" cannot be changed.

2.3.2 Analysis on factors contributing to children's subjective sense of well-being in mainland China

Figure 2-17 shows the analysis on variables that have significant impact on children's "subjective sense of well-being" in mainland China with the multiple regression method.

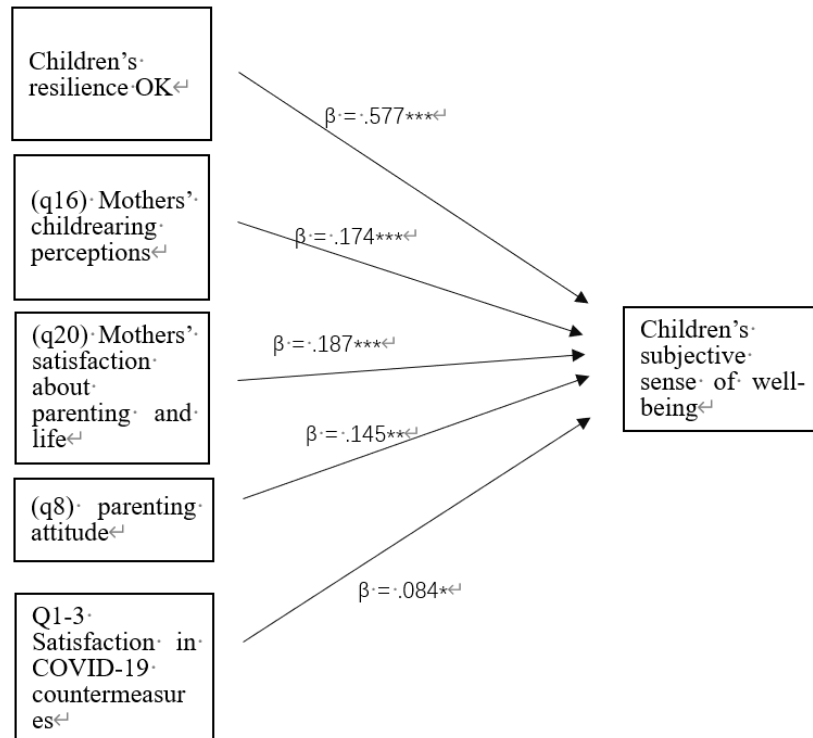


Figure 2-17 Factors influencing children's subjective sense of well-being

Figure 2-17 shows that the most influential factors are children's resilience, mothers' childrearing perceptions and satisfaction about parenting and life. These three variables are all at the level of $P < .001$, which shows their strong influence. The second is parenting attitude, which also shows its influence at the level of $P < .01$. In contrast, satisfaction in countermeasure of COVID-19 also has an impact, but its significance is at the level of $P < .05$.

2.3.3 Analysis on comprehensive factors contributing to children's "resilience" and "subjective sense of well-being" in mainland China

Figure 2-18 shows the path chart analysis on the comprehensive factors influencing children's "psychological resilience" and children's "subjective sense of well-being" in mainland China.

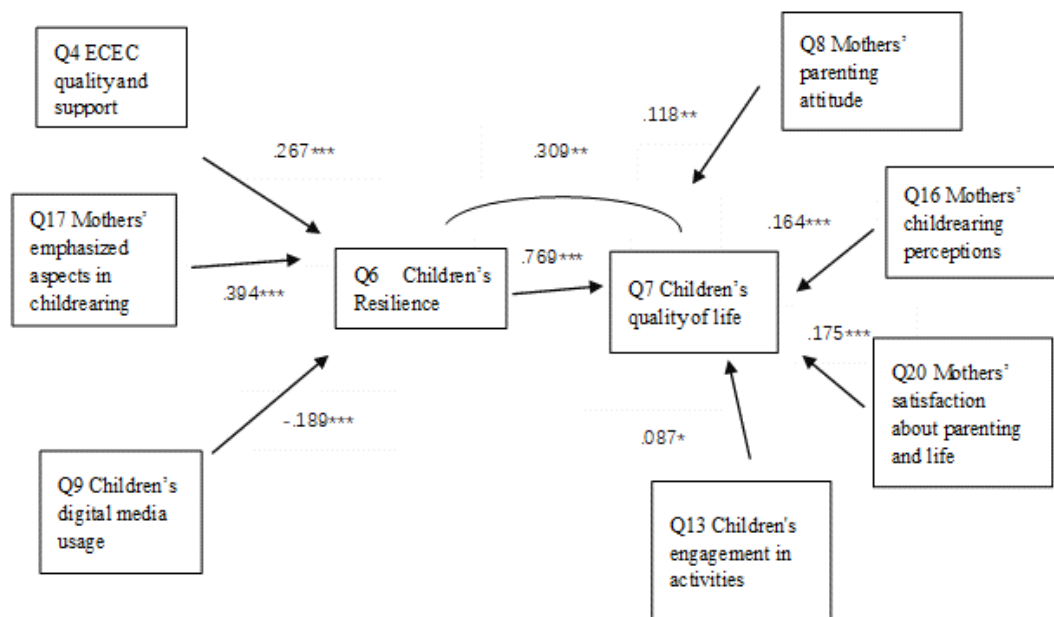


Figure 2-18 Path analysis on factors influencing children's "resilience" and "subjective well-being"

Note: Most correlation coefficients and all variances are omitted in the path map. The coefficient is standardized coefficient.

Figure 2-18 shows that caring teachers and mothers' positive parenting attitude will positively contribute to children's "psychological resilience", while the use of electronic products will negatively contribute to children's "psychological resilience". These three variables are all at the extremely significant level of $P < .001$ indicating the strong influence.

At the same time, the most influential factor on children's "subjective sense of well-being" is children's "psychological resilience", and the correlation coefficient of which is as high as 0.769, at the significant level of $P < .001$. The most important positive correlation variables for children's "subjective well-being" are mothers' "childrearing perceptions" and "level of satisfaction", the correlation of which reaches the significant level of $P < 0.001$. Close parent-child relationship also contributes to the formation of children's "subjective sense of well-being", its significance reaching the level of $P < 0.01$.

To sum up, there is a strong correlation between "psychological resilience" and "subjective sense of well-being" in mainland Chinese children. Mothers' parenting attitude, mothers' childrearing

perceptions, level of satisfaction, responsive parenting attitude and warm teacher-child relationship all have positive impact on children's "psychological resilience" and "subjective sense of well-being". However, the use of electronic products will bring negative effects on children's "psychological resilience" and "subjective sense of well-being."

Note: Due to some factorial issues, the analysis for Q16 shall be revised in future studies.

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Zhou Nianli

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