

The Relation of Parenting Style and Meaning in Life among Village Middle School Students: The Chain Mediating Effects of Psychological Resilience and Perceived Social Support

Suqun Liao*, Xiuyun Zhong, Minyuan Li

Teacher Education School, Shaoguan University, Shaoguan, Guangdong, China

**Correspondence Author.*

Abstract:

Meaning in life serves as a crucial indicator of adolescents' mental health. To investigate the connection between parenting style and this sense of meaning, along with the impacts of psychological resilience and perceived social support, we recruited 2121 junior high school students aged 12-16 from 24 schools in southern China. These students self-reported on their parenting style, sense of meaning in life, psychological resilience, and level of perceived social support. The results showed psychological resilience and perceived social support have chain mediating role between warm parenting styles and meaning in life. However psychological resilience and perceived social support have masking effects between parental rejection and meaning in life. Under the influence of psychological resilience and perceived social support, both emotionally warm parenting styles and rejecting parenting styles significantly positively predicted the sense of meaning in life. Therefore, although different parenting styles of parents have diverse impacts on life meaning of middle school students, individuals' adaptability to the environment and good understanding of social support would improve the negative effects of poor parenting styles in a certain extent.

Keywords: parenting style; junior high school students; sense of meaning in life; psychological resilience; perceived social support.

INTRODUCTION

Necessity for Research

The sense of meaning in life (MIL) refers to an individual's understanding of the nature and meaning of their own existence and the perception of the goal or mission of life [1]. It is a crucial factor that has a profound impact on both physical and mental health. [2-3]. The absence of MIL stands as a significant contributor to the onset of psychological disorders. When individuals cannot find the value of and reason for their existence, they are more likely to have suicidal thoughts. Due to the uneven development of their physical and psychological well-being, adolescents are particularly susceptible to both external and internal influences, leading to a range of mental health issues such as anxiety, depression, insomnia, feelings of worthlessness, and even suicidal tendencies. A systematic evaluation performed in 2022 revealed that the global incidence of adolescent depression is 34% [4]. According to a meta-analysis recently conducted, the incidence of anxiety disorders among Chinese junior high school students is 27%, that of depressive symptoms is 24%, and that of self-injury and suicide is 26% [4].

Adolescence marks the second major leap in the journey of self-awareness. During this time, teenagers' inner worlds blossom with richness, and they often find themselves deeply contemplating the meaning of life. This exploration of life's meaning is rooted in Frankel's theory of meaning therapy, which highlights individuals' understanding and quest for life's purpose and goals. Callan reported that the family has an important effect on the formation and development of an individual's sense of MIL, and domestic and foreign researches have shown a close correlation between parents' parenting style and adolescents' sense of MIL [4]. This study chooses rural middle school students as the research object, not only because they have significant differences with urban middle school students in educational resources, teachers, family education, etc. It is more because through studying them, we can reveal more profound problems about education equity, sense of MIL and so on, and offer strong support for the improvement and progression of rural education. Therefore, it is important to explore the relationships and possible paths between parenting style and adolescents' sense of MIL.

Literature Review

Parenting style and the sense of meaning in life

Parenting style refers to the collection of parents' behaviours, attitudes and emotions towards their children in the process of childrearing [5] and is an important factor affecting individuals' sense of MIL [6]. Children who are raised in a warm and positive parenting atmosphere generally have a high sense of self-efficacy. They believe that they are valuable and that their life is good, and their sense of MIL is also high [7]. However, in some rural areas, there may be more rejection parents due to limited resources

and higher life pressures. Rejecting parents may lack sensitivity to their children's feelings and fail to meet their emotional needs, which results in their children feeling unaccepted and misunderstood, developing negative emotions, or falling into a negative emotional cycle [8], leading to a reduced sense of MIL and even suicidal ideation [9].

The first hypothesis was that parenting style significantly predicts adolescents' sense of meaning in life.

The mediating effect of psychological resilience

Psychological resilience refers to the process in which individual abilities and characteristics are quickly return to normal and difficulties are successfully solved in the event of serious setbacks and crises [10]. Psychological resilience is significantly positively correlated with an individual's sense of MIL [11] and efficacy [12], while being inversely related to feelings of anxiety and depression [13]. Children who have good family function have better psychological flexibility, a greater sense of MIL, and a lower sense of loneliness [14]. Parenting style is an important external factor affecting the psychological resilience of adolescents, and a democratic education style has a positive influence on psychological resilience [15]. Compared with middle school students whose parents have a negative parenting style, middle school students whose parents have a positive parenting style are more psychologically resilient [12].

In this study, the second hypothesis was that parenting style indirectly influences adolescents' sense of MIL through psychological resilience.

The mediating effect of perceived social support

Perceived social support refers to the power and influence of the support and encouragement of the people and things around an individual, as well as the emotions and satisfaction of receiving love, encouragement and support [16]. Perceived social support is an important element affecting an individual's sense of MIL [17], and the sense of MIL [18] and subjective happiness are significantly positively correlated and significantly negatively correlated with anxiety [19]. The family environment is an important growth environment for middle school students, and a poor family environment reduces adolescents' use of social support [20]. In the context of negative parenting, if secondary school students can perceive social support from other sources (such as friends, teachers, relatives, etc.), this will help reduce their risk of depression and increase their psychological resilience. In contrast, the greater the degree of parents' emotional warmth and care is, the greater the support of others and the better the psychological health of adolescents is.

The third hypothesis was that parenting style indirectly affects adolescents' sense of MIL through perceived social support.

The chain mediating effects of psychological resilience and perceived social support

Owing to the subjective differences in experience, different individuals differ in their feelings of subjective and objective social support in the environment. With the ability to adapt to adversity, psychological resilience can enable individuals to look at setbacks with a positive and rational attitude, be good at dealing with negative emotions, quickly overcome difficulties, continue to adhere to their goals and flexibly adjust their behavioural cognition [21]. Psychological resilience is evidently positively correlated with perceived social support [22-23]. Depression patients with higher levels of resilience have lower levels of suicidal ideation, and perceived social support has a mediating effect on the relationship between resilience and suicidal ideation [24]. Nursing students with good psychological flexibility have less cognitive discrimination against elderly people, and cognitive social support has a mediating effect [25]. In addition, psychological resilience can affect college students' sense of MIL partly through perceived social support [26]. Thus, individual psychological resilience may influence individual cognition, attitudes, and behaviour through perceived social support.

The fourth hypothesis posited that psychological resilience and perceived social support serve as a bridging link between parenting style and adolescents' sense of MIL. A study hypothesis model was constructed, as shown in Figure 1.

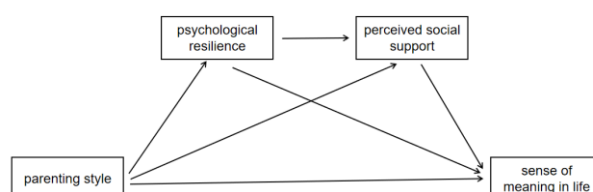


Figure 1. The proposed conceptual scheme

Materials and Methods

Participants

The research participants were adolescents aged 11-16 years ($n = 2121$; mean age 14.05 ± 1.54 years, boys/girls ratio 50.2%/49.7%, grade1/grade2/grade3 ratio 34.3%/36.9%/28.7%), in table 1. They were students from twenty-four middle schools in South China. Before completing the questionnaire, the school informed the students' parents and obtain their consent. Prior to completing the questionnaires at school, verbal consent was obtained from the participants. They were instructed to fill out paper self-report questionnaires in a regular classroom, and the session took approximately 45 minutes.

Table 1. Demographic background information

variable	type	frequency	percent
gender	male	1,061	50.0
	female	1,060	50.0
monthly household income	the first year of junior high school	722	34.0
	the second year of junior high school	781	36.8
	the third year of junior high school	618	29.1
grade	blank	29	1.4
	primary school certificate	567	26.7
	middle school certificate	1,094	51.6
	high school diploma	276	13.0
	bachelor's degree	72	3.4
	else	83	3.9

Research Tool

Brief parenting scale

In this study, we utilized the Chinese version of the concise parenting questionnaire, which was originally developed by Swiss scholars and subsequently revised by Jiang et al [27]. It includes 21 items divided into three dimensions: rejection, emotional warmth, and overprotection. "Fathers" and "mothers" are rated separately. on a 4-point scale: 1 is "never", 2 is "occasionally", 3 is "often" and 4 is "always". The total score is obtained by summing the scores of all items, and a higher score indicates parental use of the parenting style. The scale exhibits good reliability and validity, satisfying psychometric standards and being well-suited for assessing parenting style in China [28].

Psychological resilience scale

Zhang Jianxin and Yu Xiaonan et al. translated and revised the Chinese version of the psychological resilience questionnaire originally developed by Connor-David-Son [29]. It consists of 25 items and is divided into three dimensions: strength, tenacity and optimism. These items are scored via a five-point scale (0 = "never", 4 = "almost always"); the total score is calculated by summing all the items, with a higher score indicating greater resilience. This scale is a measurement tool worth popularizing in China.

Perceived social support scale

In this study, we utilized the Chinese version of the Comprehension Social Support Questionnaire, which was originally developed by Zimet et al. and translated by Jiang Qianyuan [30]. The scale includes 12 self-assessment items divided into three dimensions: friend support, family support, and other support. The items are scored via a 7-point scale; a score of 1 represents "completely disagree", and a score of 7 represents "fully agree". The total score is obtained by summing the scores of all items, with higher scores signifying greater perceived social support. This scale has good reliability and validity [31].

Sense of life scale

The Meaning of Life questionnaire was originally compiled by Steger et al. and later revised by Liu and Gan [32]. It consists of nine items, which are categorized into two dimensions: the presence of meaning in life and the search for meaning in life. The items are scored on a 7-point Likert scale, with 1 point for "totally disagree" and 7 points for "fully agree". The total score is the sum of all item scores, with a higher score indicating a greater sense of meaning in life for an individual [33].

Data Collection and Analysis Methods

Using the SPSS 26.0 statistical software package (IBM Corporation, Armonk, NY, USA), we conducted descriptive statistics, independent-samples t-tests, Pearson correlations, and hierarchical multiple regression analyses to examine the intercorrelations among the core variables. Additionally, the macro PROCESS 4.2 for SPSS was utilized to perform the mediation model analysis. We applied the bootstrapping method with 5,000 resamples to calculate 95% bias-corrected confidence intervals (CI) for the model effects. CI that exclude zero suggest significant effects (at $\alpha = 0.05$). Sex and grade served as control variables to assess the significance of each path in the mediation model. Hypotheses were then tested accordingly.

RESULTS

Common Method Deviation Test and Descriptive Statistics

One factor explained 24.88% of the variance in this study, which was 40% less than the cut-off value. Therefore, the common methodological bias in this study was not serious.

The sample included 2121 students. The descriptive results are presented in Table 2. We conducted independent-samples t-tests to examine gender differences across various measures. The results revealed significant differences in parental rejection, parental emotional warmth, psychological resilience, and perceived social support. Specifically, girls in our sample reported higher levels of parental rejection compared to boys. Conversely, boys scored higher than girls in parental emotional warmth, psychological resilience, and perceived social support.

Table 2. Descriptive statistics for major study variables.

Variables (score range)	Whole sample (<i>N</i> = 2121)	Boys (<i>n</i> =1061)	Girls (<i>n</i> =1060)	<i>p</i> (Boys vs. Girls)
Parental rejection (7-28)	17.91 ±5.42	17.53 ±5.33	18.28 ±5.49	0.002
Parental emotional warmth (7-28)	33.90 ±9.64	34.91 ±9.95	32.89 ±9.22	<.001
Parental over protection (7-28)	32.00 ±5.76	31.91 ±5.76	32.09 ±5.77	0.481
meaning in life (9-63)	41.64±11.04	41.98±12.00	41.31 ±9.98	0.162
Psychological resilience (0-100)	51.09±19.84	53.65±20.54	48.51±18.78	<.001
Perceived social support (12-84)	56.90±14.67	57.74±15.42	56.07±13.84	0.009

Note: The range of the variables is described in the bracket. Data are presented as mean ± SD. Student's t-tests were used.

Correlation Analysis of Each Variable

Table 3 shows the Pearson correlation coefficients and the means of the studied variables. Parental rejection and adolescents' sense of MIL ($r = -0.147$, $p < 0.01$), psychological resilience ($r = -0.209$, $p < 0.01$) and perceived social support ($r = -0.331$, $p < 0.01$) were significantly negatively correlated; parental emotional warmth and adolescents' sense of MIL ($r = 0.417$, $p < 0.01$), psychological resilience ($r = 0.435$, $p < 0.01$) and perceived social support ($r = 0.603$, $p < 0.01$) were significantly positively correlated; and parental overprotection was not significantly associated with adolescents' sense of MIL ($r = 0.007$, $p > 0.05$). As suggested by Baron and Kenny, the presence of a mediating effect must satisfy the independent variables to be significantly related to the dependent variables [34]. Therefore, the mediating effect was further analysed only in the dimensions of parental rejection and parental emotional warmth.

Mediating Effect Analysis

Table 4 shows the results of the mediating effect analysis, and Table 5 shows Model 1. Model 1 revealed that parental emotional warmth was found to have a significant and positive predictive effect on adolescents' sense of MIL ($\beta = 0.113$, $p < 0.01$), mental resilience ($\beta = 0.429$, $p < 0.01$), perceived social support ($\beta = 0.537$, $p < 0.01$), social support ($\beta = 0.162$, $p < 0.01$) and meaning in life ($\beta = 0.124$, $p < 0.01$). Social support evidently positively predicted meaning in life ($\beta = 0.428$, $p < 0.01$). The indirect effects of resilience and perceived social support were significant in the relationship between parental emotional warmth and the sense of MIL among middle school students, with an effect value of 0.358 (95% CI [0.314,0.404]), figure 2. These results suggest that resilience and perceived social support partially mediate the relationship between parental emotional warmth and adolescents' sense of MIL.

Table 3. Correlation analysis

	1	2	3	4	5	6	7	8	9	10	11
1 Gender	1										
2 Grade	0.001	1									
3 Household income	-0.044*	.079**	1								
4 Parental warmth	-0.105**	-0.070**	0.114**	1							
5 Parental rejection	0.069**	-0.022	-.015	-0.363**	1						
6 Parental overprotection	0.015	-0.031	0.062**	-0.042	0.561**	1					
7 Meaning in life	-0.030	0.073**	0.091**	0.417**	-0.147**	0.007	1				
8 Psychology resilience	-0.130**	0.009	0.154**	0.435**	-0.209**	-0.060**	0.339**	1			
9 Understanding social support	-0.057**	-0.008	0.118**	0.603**	-0.331**	-0.111**	0.543**	0.393**	1		
10 Sense of life meaning	-0.065**	0.041	0.093**	0.465**	-0.209**	-0.072**	0.917**	0.385**	0.582**	1	
11 Seeking Sense of life	0.020	0.096**	0.069**	0.260**	-0.035	0.103**	0.869**	0.204**	0.369**	0.601**	1

Note: **At the 0.01 level (two-tailed), the correlation was significant. * At the 0.05 level (two-tailed).

Table 4. Testing the mediating effect (Model 1 parental emotional warmth)

		Effect value	SE	LLCI	ULCI	Effect ratio
total effect		0.488	0.023	0.443	0.532	
direct effect		0.130	0.027	0.077	0.182	26.62%
mediating effect	Total mediating effect	0.358	0.023	0.314	0.404	73.38%
	Path 1	0.061	0.012	0.038	0.085	12.51%
	Path 2	0.263	0.022	0.219	0.306	53.90%
	Path 3	0.034	0.005	0.024	0.045	6.97%

Path 1: Parental emotional warmth > psychological resilience > sense of meaning in life

Path 2: Parental emotional warmth > perceived social support > sense of meaning in life

Path 3: Parental emotional warmth > psychological resilience > perceived social support > sense of meaning in life

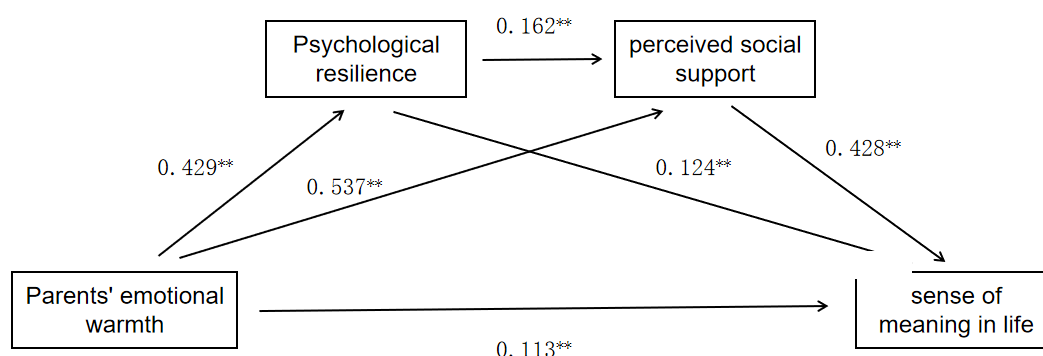


Figure 2. The chain mediating role of psychological resilience and perceived social support in the relationship between parental emotional warmth and adolescents' sense of meaning in life

Model 3 (Figure 3) revealed that parental rejection could evidently positively predict MIL ($\beta = 0.052$, $p < 0.01$), significantly negatively predict resilience ($\beta = -0.201$, $p < 0.01$), and significantly negatively predict perceived social support ($\beta = -0.26$, $p < 0.01$), psychological resilience ($\beta = 0.339$, $p < 0.01$), ($\beta = 0.155$, $p < 0.01$), and positive social support ($\beta = 0.501$, $p < 0.01$). The indirect effect of resilience and perceived social support on the relationship between parental rejection and adolescents' sense of MIL was found to be significant, with an effect value of -0.399 (95% CI [-0.455, -0.343]), showed in table 6. Because the direct

effect was negative and the indirect effect was positive (table 7), the direct effect and the indirect effect predicted an effect value in the opposite direction, indicating that psychological resilience and perceived social support changed the negative effects of parents' refusal to some extent on the meaning of life [35].

Table 5. Hierarchical regression analysis of parental emotional warmth

Variables	Model 1 (Dependent variable: Meaning in life)			Model 2 (Dependent variable: Meaning in life)			Model 3 (Dependent variable: Meaning in life)			Model 4 (Dependent variable: Meaning in life)		
	β	t	95%CI	β	t	95%CI	β	t	95%CI	β	t	95%CI
Gender	0.126	5.245***	[0.079, 0.174]	0.117	4.950***	[0.071, 0.164]	0.107	1.844***	[0.064, 0.151]	0.102	4.662***	[0.059, 0.145]
Grade	0.027	0.712	[-0.048, 0.101]	0.059	1.564	[-0.015, 0.133]	0.022	0.615	[-0.047, 0.091]	0.042	1.210	[-0.026, 0.111]
Parental warmth	0.424	21.514***	[0.386, 0.463]	0.342	15.940***	[0.300, 0.384]	0.150	6.650***	[0.106, 0.195]	0.113	4.845***	[0.067, 0.158]
Psychological resilience				0.201	8.994***	[0.157, 0.245]	-	-	-	0.129	6.136***	[0.088, 0.171]
Understanding social support				-	-	-	0.454	20.093***	[0.410, 0.498]	0.429	18.814***	[0.384, 0.473]
ΔR^2	0.185			0.215			0.131			0.327		
R^2	0.185			0.215			0.315			0.113		
F	159.743***			144.554***			243.534***			205.730***		

Table 6. Testing the mediation effect (Model 2 parental rejection)

		Effect value	SE	LLCI	ULCI	Effect ratio
Total Effect		-0.293	0.044	-0.379	-0.207	
Direct Effect		0.106	0.039	0.029	0.182	-36.18%
Mediating Effect	Total mediating effect	-0.399	0.029	-0.455	-0.343	136.18%
	Path 1	-0.063	0.011	-0.088	-0.042	21.50%
	Path 2	-0.266	0.024	-0.314	-0.219	90.78%
	Path 3	-0.07	0.009	-0.088	-0.052	23.89%

Path 1: Parental rejection > psychological resilience > sense of meaning in life

Path 2: Parental rejection > perceived social support > sense of meaning in life

Path 3: Parental rejection > psychological resilience > perceived social support > sense of meaning in life

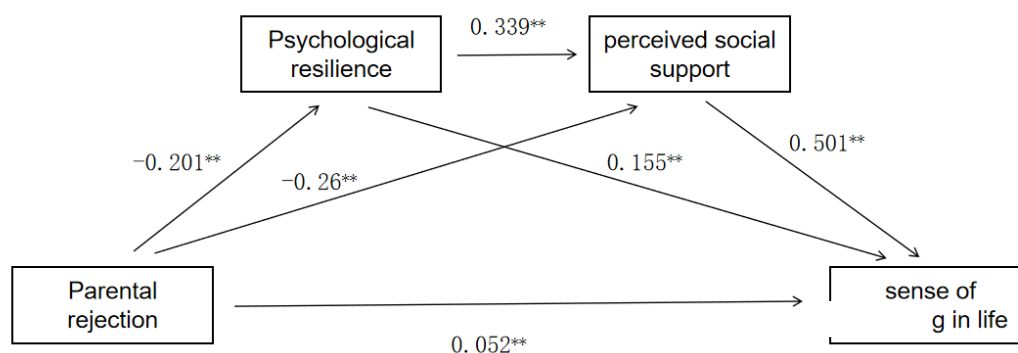


Figure 3. The effect of psychological resilience and perceived social support on the relationship between parental rejection and adolescents' sense of meaning in life

Table 7. Hierarchical regression analysis of parental rejection

Variables	Model 1 (Dependent variable: Meaning in life)			Model 2 (Dependent variable: Meaning in life)			Model 3 (Dependent variable: Meaning in life)			Model 4 (Dependent variable: Meaning in life)		
	β	t	95%CI	β	t	95%CI	β	t	95%CI	β	t	95%CI
Gender	0.086	3.277**	[0.035, 0.138]	0.084	3.387**	[0.036, 0.133]	0.096	4.322***	[0.053, 0.140]	0.094	4.299***	[0.051, 0.137]
Grade	-0.040	-0.958	[-0.122, 0.042]	0.033	0.827	[-0.045, 0.111]	-0.003	-0.082	[-0.072, 0.067]	0.028	0.083	[-0.041, 0.097]
Parental rejection	-0.164	-6.694***	[-0.212, -0.116]	-0.089	-3.775***	[-0.136, -0.043]	0.044	2.002*	[0.001, 0.087]	0.059	2.720**	[0.016, 0.102]
Psychological resilience				0.338	15.505***	[0.295, 0.380]	-	-	-	0.161	7.868***	[0.121, 0.201]
Understanding social support				-	-	-	0.557	28.898***	[0.519, 0.595]	0.501	24.725***	[0.462, 0.541]
ΔR^2	0.027			0.099			0.302			0.020		
R ²	0.027			0.126			0.302			0.322		
F	19.516***			76.394***			229.181***			201.003***		

DISCUSSION

This study aimed to investigate how parenting style predicts middle school students' sense of MIL. It also sought to analyze the impact of psychological resilience and perceived social support on the link between parenting style and adolescents' sense of MIL. The results showed that psychological resilience and perceived social support were positively correlated with adolescents' sense of MIL, and they played a vital role in shaping the relationship between parenting style and adolescents' sense of MIL. In this model, it was found that both parental emotional warmth and parents' rejection had a positive predictive effect on the sense of MIL among middle school students.

Parenting Style Predicts the Sense of Meaning in Life among Junior High School Students

The data revealed that an emotionally warm parenting style was significantly correlated with adolescents' sense of MIL and positively predicted the sense of MIL among middle school students, indicating that the warm support provided by parents to their children in the process of parenting can have a long-term positive effect on students' MIL, which is similar to the results of previous studies [36-37]. The above results support the hypothesis of this study that "parenting style significantly predicts the sense of MIL".

Similar to other studies, in this study, parental rejection was significantly negatively associated with adolescents' sense of MIL [38]. However, after adding psychological resilience and perceived social support to the model, parental rejection positively predicted adolescents' sense of MIL. Since both psychological resilience and perceived social support are evidently and positively correlated with the sense of meaning in life, psychological resilience and perceived social support may obscure the negative effects of parental rejection on the sense of MIL among middle school students [16,26]. Moreover, improving the psychological resilience and perceived social support of middle school students can improve the negative effects of a poor parenting style [39-40].

However, some studies reported that there is no fixed pattern in the influence of a negative parenting style on adolescents' sense of MIL. Parental control showed different patterns in the prediction of adolescents' sense of MIL, with negative predictions in early and middle adolescence but positive predictions in late adolescence [41]. Adolescents' perceptions of their parents' parenting style mainly depend on their coping styles [41]. In addition, social culture may influence teenagers' perceptions of their parents' parenting style. In China's rural social culture, the family is the basic unit of society, close family relations, strong family concept. This cultural background makes adolescents pay more attention to family and kinship ties when they grow up, and they may experience a profound sense of emotional neglect when parental control is absent. [42-43].

The Mediating Role of Psychological Resilience

This study confirmed the hypothesis that parenting style has a direct effect on psychological resilience, and indirectly influences junior high school students' sense of meaning in life through this psychological resilience. The mediation analysis revealed that parental rejection diminishes the psychological resilience of junior high school students, whereas parental emotional warmth boosts their resilience. Furthermore, good psychological resilience enhances individuals' sense of MIL. It is worth noting that rural adolescents often live in different environments than those in cities, and they may face more resource constraints and life pressures. However, this study found that even in this context, psychological resilience still plays a positive role. The above results are similar to those of the studies of Rosenberg AR and Hongfei Du et al., where psychological resilience effectively improved the significance of life among children with poor family functioning [44-45]. Home warmth [46] and good parent-child relationships [41] are conducive to the formation of positive and stable emotions and attitudes in children, thus leading to a high level of psychological resilience and a good sense of meaning in life. Individuals with a high level of psychological resilience are more inclined to seek help from the outside world when they encounter emergencies to maintain their own balance and face life with a positive attitude [47].

Understanding the Mediating Effect of Social Support

In this study, the following hypothesis was supported: "Parenting style indirectly affects adolescents' sense of MIL through perceived social support". Under the rural background, perceived social support among middle school students is positively correlated with parents' emotions, negatively associated with parents' rejection, and significantly positively correlated with adolescents' sense of MIL. These results are similar to those of the studies of Bao Xinzhe, Chen Jing and others [18,48].

Brownell and Shumaker argued that the purpose of social support is to increase individual happiness [49]. Perceived social support is the belief that one may gain social support, which also includes the perceptual process of social support for the surrounding society [50], expectancy evaluation [51] and emotional experience. Middle school students with high social support experience the positive impact of the support of family members, classmates, teachers or friends [52], and their self-perceived life value and meaning are greater [18]. This path explains the indirect influence of parenting style on adolescents' sense of MIL through perceived social support. It also reveals the unique value of social support in the rural environment. The results of the mediation analysis also revealed that the effect size of this path (more than 50%) was greater than that of both direct effects and other indirect effects, indicating that it played a key role in the relationship between parenting style and adolescents' sense of MIL.

Psychological Elasticity and Perceived Social Support have Chain Mediating Effects

Hypothesis 4, "Psychological resilience and perceived social support mediate the link between parenting style and a sense of MIL", is partially accepted. The findings of this research indicated that psychological resilience and perceived social support partially mediate the link between parents' emotional warmth and adolescents' sense of MIL, while there exists an underlying effect on the association between parental rejection and adolescents' sense of MIL [35,53]. In other words, parental rejection has a negative effect on the sense of MIL among middle school students if other factors are not considered, but changes under the influence of psychological resilience and perceived social support.

Psychological resilience and perceived social support were found to be evidently and positively correlated with the sense of MIL among middle school students. For negative stimuli, highly resilient individuals are more likely to ignore negative information [54], be able to evaluate things more positively, and need fewer psychological resources to deal with crisis events [55]. With respect to brain function, the functions of the anterior cingulate cortex and limbic areas, including the amygdala and ventral striatum, are closely related to individuals' mental resilience [56]. Psychological resilience is a personality trait [57] and can influence individuals' perceptions of social support. Resilient children, who are characterized by a high degree of confidence and optimism, are likely to receive supportive reactions from others [58] and establish positive relationships with people other than their parents, such as teachers, classmates and friends [59]. These relationships are particularly important for middle school students, as their gradual separation from their parents somewhat reduces the negative impact of family factors, and their frequent interactions with teachers and peers in school promotes their ability to solve various problems, further supporting the development of their confidence and good psychological resilience [58] and a sense of MIL in terms of identity.

This study revealed that different parenting styles may have multimodal effects on the sense of MIL among middle school students and that different parenting styles and different developmental stages, individual environmental factors and individual characteristics may have different effects. Therefore, in future longitudinal studies, the influence of other individual factors and family or cultural variables on individuals' sense of MIL can be considered to study the mechanism of individuals' sense of

meaning in life over a longer time range. At the same time, based on the results of this study, the future research can further explore how to improve the way of parenting to enhance rural middle school students' sense of life. This study also showed the positive role of psychological resilience and perceived social support in the formation of an individual's sense of MIL. Improving individual psychological resilience and perceived social support can improve the negative effects of adverse environmental factors, including adverse family factors.

CONCLUSION

Parenting style has an significant effect on an individual's sense of meaning in life. Different parenting approaches affect middle school students' sense of life meaning in various ways. Specifically, parents' emotional warmth positively predicts adolescents' sense of meaning in life, with psychological resilience and perceived social support playing a chain-mediating role in this relationship. Psychological resilience and perceived social support act as positive factors that can mitigate the negative effect of parental rejection on individuals' sense of meaning in life.

ACKNOWLEDGEMENT

Thank Xiuyun Zhong made great efforts to complete the writing even after graduating and starting work at a new unit (Qingshui School, West Coast Town, Lianzhou City, Qingyuan City, Guangdong Province, China).

REFERENCES

- [1] The Relationship between Meaning in Life and Mental Health in Chinese Undergraduates: The Mediating Roles of Self-Esteem and Interpersonal Trust. This article belongs to the Section Health Psychology. 2024, 14(8), 720
- [2] Personal resources of resilience in conditions of uncertainty and crises. *psychological journal*,10(2), 27–37. Shorey S, Ng E D, Wong C H J. Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis. *British Journal of Clinical Psychology*, 2022, 61(2): 287-305.
- [3] Xiang Siya, Wei Qiwen, Zheng Shadan, Yang Hui, Li Bingquan. College students' sense of social boredom, the sense of life meaning and suicidal ideation. *The Chinese Journal of Health Psychology*. 2016(4): 522-6.
- [4] Shorey S, Ng E D, Wong C H J. Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis. *British Journal of Clinical Psychology*, 2022, 61(2): 287-305
- [5] Wang Li, Fu Jinzhi. Domestic Study on Parenting and Child Development. *Advances in Psychological Science*, 2005, (03): 298-304
- [6] Li Yan, He Wei, Zhang Xian, et al. The correlation between the sense of life and parenting style, coping style, and happiness index. *Chinese Journal of Health Psychology*, 2014,22 (11): 1683-1685.
- [7] Li Xiuya, Liu Lihua, Fang Yanhong. The influence of parenting style on the sense of life meaning: the intermediary role of filial piety belief. *psychical research*. 2021; 14(2): 162-8.
- [8] Chapman A L, Gratz K L, Brown M Z. Solving the puzzle of deliberate self-harm: The experiential avoidance model. *Behaviour research and therapy*, 2006, 44(3): 371-394.
- [9] Liu Huiying, Wang Wan. Role of self-esteem, experiential avoidance, and depression in the formation of suicidal ideation. *Psychological Science*, 2017,40 (06): 1498-1503.
- [10] Kathleen T, Janyce D. Resilience: A historical review of the construct. *Holist Nurs Pract*, 2004, 8(1): 3-10.
- [11] Dursun P, Alyagut P, Yılmaz I. Meaning in life, psychological hardiness and death anxiety: individuals with or without generalized anxiety disorder (GAD). *Curr Psychol*. 2022; 41(6): 3299-3317.
- [12] Ding X, Zheng L, Liu Y, Zhang W, Wang N, Duan H, Wu J. Parenting styles and psychological resilience: The mediating role of error monitoring. *Biol Psychol*. 2023 May; 180: 108587.
- [13] Tsibidaki A. Anxiety, meaning in life, self-efficacy and resilience in families with one or more members with special educational needs and disability during COVID-19 pandemic in Greece. *Res Dev Disabil*. 2021 Feb; 109: 103830.
- [14] Du H, Li X, Chi P, Zhao J, Zhao G. Meaning in life, resilience, and psychological well-being among children affected by parental HIV. *AIDS Care*. 2017 Nov; 29(11): 1410-1416.

- [15] Zakeri H., Jowkar B., Razmjooe M. (2010). Parenting styles and resilience. *Procedia Soc. Behav. Sci.* 51067–1070.
- [16] Wang Jiecong. Research on the relationship between social support, psychological resilience and sense of life. Shaanxi University of Technology, 2022.
- [17] Li Yuxin, Fan Qiujun, Huang Fengying, Liu Yanan. Existential Isolation and the Meaning in Life: The Mediating Role of Perceiving Social Support. *Advances in Psychology*, 2024, 14: 714.
- [18] Bao Xinzhe, Zhao Cailing, Renqin. The Relationships between Perceived Social Support, Vocational Selection Anxiety and Sense of Meaning in Life of College Student. *Advances in Psychology*, 2020, 10: 1145.
- [19] Labrague; Janet Alexis deLosSantos; COVID-19 anxiety among front line nurses: predictive effects of organizational support, personal resilience, and social support ", *Journal of Nursing Management*, 2020.
- [20] Liu L, Meng W, Liu B. The Mediating Role of Social Support in the Relationship Between Parenting Styles and Adolescent Drug Abuse Identification. *Front Psychol.*2022; 12: 802408. Published 2022 Jan 10.
- [21] Fu Yaqiang, Wei Xuan. Relationship between resilience, stress cognition and coping and mental health of primary and middle school students. *Chinese Journal of Health Psychology*, 2013, 21 (05): 735-738.
- [22] Wang Jinhua, Zhang Fuli, Ye Hong, et al. Research on the correlation between psychological resilience and perceived social support of regular training nurses. *Psychology Monthly*, 2023, 18 (21): 50-52.
- [23] Guo Yinan, Xu Le, Xie Nana, et al. The current status of psychological resilience and social support among junior nurses and their relevance. *PLA Nursing Journal*, 2017, 34 (13): 26-29.
- [24] Zhang Zhenming, Lin Lin. The relationship between resilience and suicidal ideation in depression: understanding the mediating effect of social support. *Journal of Southeast University (Medical edition)*, 2023, 42 (05): 736-740.
- [25] Xia Wangjie, He Huihui, Wang Suhang, et al. Understanding the intermediary effect of social support between psychological resilience and geriatric discrimination in undergraduate nursing students. *Health vocational education*, 2023, 41 (11): 144-147.
- [26] Hu Minghui, Chen, and Zhang Xiaowen. The relationship between psychological resilience and sense of life: understanding the intermediary role of social support. *Chinese Journal of Health Psychology*, 2020, 28 (05): 776-779.
- [27] Jiang Jiang, Lu Zhengrong, Jiang Jing, et al. Preliminary revision of the Chinese version of the Brief Parenting Questionnaire. *Psychological Development and Education*, 2010, 26 (01): 94-99.
- [28] Jiang Jiang, Lu Zhengrong. Preliminary revision of the Chinese version of the Simple parenting Questionnaire (s-EMBU-C) // Beijing Society of Social Psychology. Summary of 2009 Annual Conference of Beijing Social Psychology Association. Beijing Key Laboratory of Applied Experimental Psychology, School of Psychology, Beijing Normal University; 2009: 1.
- [29] Connor KM, Davidson JR. Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depress Anxiety*. 2003; 18(2): 76-82.
- [30] Jiang Qianjin. Understanding of the Social Support Scale (PSSS). See Wang Xiangdong, Wang Xilin, Ma Hong (editor). *The Mental Health Rating Scale Manual*, 1999, 131–133.
- [31] Yang Qiang, Ye Baojuan. Understanding the impact of social support on adolescent life satisfaction. *Psychological Science*, 2014, 37 (3): 610.
- [32] Liu S., Gan Y. Reliability and Validity of the Chinese Version of the Meaning in Life Questionnaire. *Chin. Ment. Health J.*2010; 24: 478–482.
- [33] Yang X., Fan C., Liu Q., Lian S., Cao M., Zhou Z. The Mediating Role of Boredom Proneness and the Moderating Role of Meaning in Life in the Relationship between Mindfulness and Depressive Symptoms. *Curr. Psychol.* 2021; 40: 4635–4646.
- [34] Wen Zhonglin, Ye Baojuan. Analysis of mediation effects: method and model development. *Advances in Psychological Science*, 2014, Vol. 22 (5): 731-745._

- [35] Liu Zhenliang, Liu Tiantian, Mu Shoukuan. The statistical analysis framework of masked effects and its application. *Psychological technology and Application*, 2021, 9 (10): 610-618.
- [36] Zhu Zhihong, Sun Shuzhen, Zheng Xue, Wang Xuancheng. Educational style and meaning of life in higher vocational students: the intermediary role of self-esteem. *The Chinese Journal of Mental Health*. 2011; 25(9): 695-9.
- [37] Shek DTL, Chai CWY, Dou D. Parenting factors and meaning of life among Chinese adolescents: A six-wave longitudinal study. *J Adolesc*. 2021 Feb; 87: 117-132.
- [38] Chen Xiaoyan. The relationship between parenting style and the meaning of life: the mediating role of self-esteem. *Advances in Psychology*. 2022 Aug 4; 12: 2678.
- [39] Sobhani S, Jamilian H, Paknejad I. Prediction of resilience based on parenting and coping strategies in patients with psychosomatic disorders. *BMC Psychol*. 2024 May 19; 12(1): 280.
- [40] Zhao M, Fu W, Ai J. The Mediating Role of Social Support in the Relationship Between Parenting Stress and Resilience Among Chinese Parents of Children with Disability. *J Autism Dev Disord*. 2021 Oct; 51(10): 3412-3422.
- [41] Barber B.K., Harmon E.L. Violating the self: Parental psychological control of children and adolescents. In: Barber B.K., editor. *Intrusive Parenting: How Psychological Control Affects Children and Adolescents*. American Psychological Association; Washington, DC, USA: 2002, 15–52.
- [42] Qin D.B., Chang T.F., Han E.J., Chee G. Conflicts and communication between high-achieving Chinese American adolescents and their parents. *New Dir. Child Adolesc. Dev*. 2012; 2012: 35–57. <https://pubmed.ncbi.nlm.nih.gov/22407881/>
- [43] R.A. Bean, B.K. Barber, D.R. Crane Parental support, behavioral control, and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues*, 27(10), 2006, 1335-1355.
- [44] Rosenberg AR, Bradford MC, Junkins CC, Taylor M, Zhou C, Sherr N, Kross E, Curtis JR, Yi-Frazier JP. Effect of the Promoting Resilience in Stress Management Intervention for Parents of Children With Cancer (PRISM-P): A Randomized Clinical Trial. *JAMA Netw Open*. 2019 Sep 4; 2(9): e1911578. <https://pubmed.ncbi.nlm.nih.gov/31532518/>
- [45] Du H, Li X, Chi P, Zhao J, Zhao G. Meaning in life, resilience, and psychological well-being among children affected by parental HIV. *AIDS Care*. 2017 Nov; 29(11): 1410-1416.
- [46] Dong Jinhua. Effect of parenting style on exam anxiety in junior school students: mediation of resilience. *Psychological monthly journal*. 2020.
- [47] Shen Chengchun. On the relationship between psychological resilience and the sense of life meaning among college students. *Industry and Technology Forum*, 2022, 21 (08): 94-95.
- [48] Chen Jing, Zhao Lingxi. College students understand social support and their parenting style. *collect*. 2018; 2.
- [49] Shumaker S A, Brownell A. Toward a theory of social support: Closing conceptual gaps. *Journal of social issues*, 1984, 40(4): 11-36.
- [50] Yang Qiang, Ye Baojuan. The Effect of Gratitude on Adolescents' Life Satisfaction. *Psychological Science*, 2014, 37(3): 610-616.
- [51] Zhao Jiayi. High school students understand the relationship between social support, psychological resilience and coping style and educational strategies. *Shaanxi University of Technology*, 2024.
- [52] Li Yanchun. Investigation on the status quo of college students' social support and perception. *Chongqing: Southwest University*, 2011.
- [53] Wang Dongyan, Zhang Xiuqin, Zhou Su. Comparison and application of the masked effect with the mediation effect. *Science and Technology Wind*, 2022, (33): 141-143.
- [54] Yi F, Li X, Song X, Zhu L. The Underlying Mechanisms of Psychological Resilience on Emotional Experience: Attention-Bias or Emotion Disengagement. *Front Psychol*. 2020 Sep 17; 11: 1993. <https://pubmed.ncbi.nlm.nih.gov/33041879/>

- [55] Schiele MA, Domschke K. Epigenetics at the crossroads between genes, environment and resilience in anxiety disorders. *Genes Brain Behav.* 2018 Mar; 17(3): e12423. <https://pubmed.ncbi.nlm.nih.gov/28873274/>
- [56] Holz NE, Tost H, Meyer-Lindenberg A. Resilience and the brain: a key role for regulatory circuits linked to social stress and support. *Mol Psychiatry.* 2020 Feb; 25(2): 379-396. <https://pubmed.ncbi.nlm.nih.gov/31628419/>
- [57] Block J.H., Block J. The role of ego-control and ego-resiliency in the organization of behavior. In: Collins W.A., editor. *Development of Cognition, Affect, and Social Relations, the Minnesota Symposia on Child Psychology. Volume 13.* Erlbaum; Hillsdale, NJ, USA: 1980, 39–101.
- [58] Block J., Kremen A.M. IQ and ego-resiliency: Conceptual and empirical connections and separateness. *J. Personal. Soc. Psychol.* 1996; 70: 349–361. Klohnen E.C. Conceptual analysis and measurement of the construct of ego-resiliency. *J. Personal. Soc. Psychol.* 1996; 70: 1067–1079.