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ORIGINAL RESEARCH

The Effect of Social Support on the Mental Health Literacy of Parents Who Have Children with Special Needs: A Moderated Mediating Effect

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Background: It is well known that parents play an important role in the family, particularly the mental health literacy of parents is essential for the growth and development of children. As the parents of children with special needs, they are facing more difficulties and psychological pressure, resulted in more mental health problems.

Purpose: The current study examined the effect of social support on mental health literacy, and its underlying mechanisms regarding the mediating role of coping styles and moderating role of social comparison.

Methods: Using a cross-sectional design, 165 parents of children with special needs (22–67 years old, M=37.72, SD=8.78) participated in the study. The general information questionnaire, Mental Health Literacy Scale (MHLS), Social Support Rating Scale, Simplified Coping Style Questionnaire, and Social Comparison Orientation Scale were used.

Results: We found that objective support positively predicted the mental health literacy, positive coping style played a mediating role between objective support and mental health literacy. In addition, the relationship between objective support and positive coping styles was moderated by social comparisons; for lower levels of opinion social comparison, the effect of objective support on positive coping styles was significantly stronger.

Conclusion: We revealed the underlying mechanisms between social support and mental health literacy. The present study has profound implications for mental health literacy services for parents who have children with special needs.

Keywords: parents of children with special needs, social support, mental health literacy, coping styles, social comparison orientation

Introduction

In 2019, the National Health Commission emphasized that "improving mental health literacy is one of the most fundamental, economical and effective measures to improve the mental health level of the whole people".[1] The concept of mental health literacy (MHL) initially focused on disease response, and then gradually included the content of mental health promotion.[2] It is generally believed that MHL includes knowledge, attitude, skills and other dimensions.[3] Studies have shown that improving MHL can have a positive impact on individual behavior, helping people change attitudes, increasing the probability of using mental health services, and ultimately reducing the occurrence of various psychological problems.[4]

As the basic cell of society, the family is the cradle of the growth of the new generation. And, parents play an important role in children's growth.[5] According to the results of the Second National Sample Survey on Disabled Persons, there are 16.78 million disabled children between the ages of 0 and 6 nationwide, and about 200,000 disabled children between the ages of 0 and 6 are added every year.[6] Compared with parents of ordinary children, parents of children with special needs face greater difficulties, such as higher psychological pressure, lower mental health level, and insufficient social support from the government and society to families of children with special needs.[7]

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To date, research on MHL has focused on community residents and students, while other populations have rarely been included.[8,9] Thus, it is crucial to conduct research on the MHL of parents who have children with special needs given the lack of relevant studies.

Relationship Between Social Support and Mental Health Literacy of Parents Who Have Children with Special Needs

As we know, social support can improve individuals' social adaptability and protect individuals from adverse environments, as well as subjective or objective influences on individuals.[10] Previous study showed that the mental health literacy level of parents who have children with special needs will be affected by social support.[10,11] They need support and help from social groups, government departments, professionals and many other aspects.[12,13]

Social support generally includes objective support and subjective support.[14] We know that the objective support is the objective reality of independence and individual feelings, which is visible or actual support, including direct material assistance, social networks, community relations and participation.[15] While the subjective support is subjective, experienced, or emotional support, which refers to an individual's emotional experience and satisfaction with being respected, supported, and understood in society, which is closely related to the individual's subjective feelings.[16] Social support plays an important role in improving mental health.[17,18] Previous studies have shown a significant negative correlation between social support and parental stress levels,[19] which means people who receive more psychological or material support from family have better mental and physical health.[20] However, rarely lack of study has been discussed the relationship between social support and parents' mental health literacy.[21]

The Mediating Role of Coping Style

The coping styles of parents who have children with special needs may be an effective predictor of mental health literacy. Research showed that the stigma of ASD parents is positively correlated with negative coping styles and negatively correlated with positive coping styles, indicating that the more parents tend to adopt positive coping styles, the lower their level of stigma.[22] According to the previous study, coping style and social support contribute to an individual's level of resilience to mental health problems.[23] Many studies indicate that coping style has a significant impact on mental health status and produces direct or intermediary effects.[24]

Coping refers to the conscious, purposeful, and flexible adjustment behaviors of individuals to the changes in the real environment.[25] Coping style, also known as coping strategy and coping mechanism, is an important mediating factor in the process of psychological stress.[26] Individuals' choice of coping styles is influenced by the degree of social support. In the absence of sufficient social support, individuals tend to adopt negative coping styles when they may have negative emotions or even autism in the face of the impact of stressful events, while individuals with sufficient social support tend to take the initiative to find ways to solve problems and tend to adopt positive coping styles.[27] Studies have shown that overall social support is positively correlated with positive coping, while objective support is negatively correlated with negative coping.[25–27] The more objective support they received from society, family, friends, etc., the less likely they were to adopt negative coping styles.[28] Coping style affects individual health behavior and is closely related to patients' cognition of disease.[29] Positive coping can improve individual coping efficiency, enable individuals to maintain a good attitude in the face of stressful events, solve problems through various means, and be more willing to seek help from important others and professionals.[30,31] In this context, the degree of mental health stigma is relatively weak[32] and the level of mental health literacy is high.

The Relationship Between Social Comparison and Mental Health Literacy

For humans, social comparison is inevitable. Social comparison theory (SCT) states that people have a fundamental desire to evaluate their opinions and abilities when they are uncertain about their situation.[33] According to Festinger, individuals tend to form appraisals by comparing themselves with people of similar opinions and abilities.[34] Previous studies found that those who compared more scored low on self-esteem and scored high on depression.[35]

Previous studies have shown that people with stronger social comparison orientations are prone to negative emotions when they feel weaker than others, and arrogance when they feel stronger than others.[36] However, some studies also found that social comparison is an active, dynamic, and flexible process. It may both promote and diminish individual well-being.[37] Since a person's subjective well-being directly affects her coping style in life, social comparison will affect her coping style to a certain extent. Appropriate social comparison can help improve people's mental health. Moreover, differences in the content of social comparison can greatly affect people's mental health and emotions, and thus affect people's attitudes toward things.[38] Whether such a relationship exists between parents of children with special needs remains to be verified.

In summary, this study explored the relationship between social support, coping style, social comparison, and mental health literacy of parents who have children with special needs and constructed a relationship model for these four variables. We hope that reasonable and effective suggestions can be put forward to improve the mental health level of parents with special children.

Methods and Materials

Participants and Procedures

In this study, a questionnaire survey was used to collect hypothesis test data. Prior to the formal investigation, we conducted a preliminary questionnaire survey among 5 parents of a special education institution in Chongqing. We ran a predictive test to modify items that might be confusing. Based on feedback from 5 parents, we further modified some items to simplify the language and make it easier to understand. G*Power was used to calculate the sample size.[39] Correlation analysis was used as the statistical test method, two-tailed test was used, the effect size was set to 0.3 (moderate), and the α coefficient was 0.05. The sample size was calculated to be 134 persons, and to prevent the sample size from being insufficient due to missing data, we expanded the sample size by 20%, resulting in a sample size of at least 161 persons. The formal investigation was conducted from February to June 2023 at designated disabled Persons' federations and special education institutions in Chongqing. The survey was conducted online and offline at the same time, a total of 183 data were received, and 165 were finally recovered, with a recovery rate of 90.2%. Factors such as incomplete paper questionnaire information, online recycling and short or long regular response time were excluded.

Among the valid samples, 122 were mothers (73.9%), 30 were fathers (18.2%), and 13 were parents of other identities (7.9%). Parents in the survey ranged in age from 22 to 67 (M=37.72, SD=8.78). In this study, all the special children were clinically diagnosed in the hospital, including 94 children with autism (57.0%), 15 children with intellectual disability (9.1%), 31 children with developmental delay (18.8%), 7 children with cerebral palsy (4.2%), and 8 children with speech and communication disorders (4.9%). There were 10 children with other disorder types (6.1%). The study has obtained the informed consent of all participating parents, and parents are informed of the ethical principles of voluntary participation. The study complies with the Declaration of Helsinki and received ethical clearance from the ethical committee of Institute of Psychology, Chongqing Normal University (Ethics approval number: CNU-PSY-202206-020).

Materials

Social Support Rating Scale

This study used the social support rating scale (SSRS) developed by,[16] which includes three dimensions of objective support, subjective support, and utilization of support that comprise 10 questions. The higher the total social support score is, the better the respondent's social support. The SSRS has been proven to be highly authoritative and suitable for the Chinese population. In this study, the internal consistency coefficient was 0.73, and the retest reliability is 0.92.[40]

Simplified Coping Style Questionnaire

The simplified coping style questionnaire (SCSQ), was developed by.[41] It comprises a total of 20 items, including two subscales (positive coping and negative coping), and a four-point scale of 0–3 is used for scoring. The positive coping dimension is composed of items 1–12, and the negative coping dimension is composed of items 13–20. The score of each dimension can be obtained by adding the score of items. This study mainly analyzes the positive coping of the scale. In this study, the internal consistency coefficient was 0.87, and the retest reliability is 0.72.[42]

Social Comparison Orientation Scale

The social comparison orientation scale, developed by,[43] and revised by,[44] was used for a total of 11 items. The Likert 5-point scoring method was used, and the sum of all item scores represents social comparison orientation. The higher the score, the stronger the social comparison orientation. In the US sample, confirmatory factor analysis supported the two factors structure of theoretical conception - ability and opinion, with 6 and 5 questions respectively; In the Dutch sample, there are 7 and 4 questions for the two factors, respectively. The 11th question shifts from opinion factor to ability factor, and the structure of the Chinese version of the scale is consistent with the two factors structure of the Dutch sample. In this study, the internal consistency coefficient was 0.85, and the retest reliability is 0.89. This scale has good reliability and validity and cross-cultural stability.[44]

Mental Health Literacy Scale

The Mental Health Literacy Scale (MHLS), developed by,[45] is mainly used to assess the mental health literacy of the public. The scale has a total of 35 items, including all dimensions involved in the definition of mental health literacy, including identification of common mental diseases; Knowledge of how to seek mental health information; Knowledge of risk factors and causes; Knowledge of self-treatment; Knowledge about getting professional help; And attitudes that promote cognitive or help-seeking behavior.[46] The lowest score on the questionnaire was 35, the highest score was 160, and the higher the score, the higher the mental health literacy. The questionnaire was scored on a 4-point Likert scale, from 1 (very unlikely/not helpful) to 4 (very likely/helpful). And a 5-point Likert scale, from 1 (strongly disagree/ disagree) to 5 (strongly agree/ agree). The study found that this scale has good reliability and validity in the Chinese population.[47] In this study, the internal consistency coefficient was 0.75, and the retest reliability is 0.79. This scale is widely used in China.[47]

Data Analysis

SPSS27.0 was used to perform general descriptive statistics and Pearson correlation analysis (two-sided test, $p < 0.05$ was considered to be significantly correlated); The PROCESS program written by Hayes (2013) is used to detect the mediation effect and the mediated mediation model, which helps to clarify the action path of the mediation effect more clearly.[48] In this study, model 4 of the PROCESS program was adopted for the mediating effect test, and model 7 was adopted for moderating mediating effect test. The sample size was set to 5000 in the model, the sampling method was non-parametric percentile of bias correction, and the confidence interval (CI) was 95%. If the CI did not contain zero, the corresponding effect was significant. If the confidence interval (CI) contains zero, it indicates that the corresponding effect is not significant.[49]

Results

Common Method Bias Test

Given that all data in this study were self-reported by participants, there may be a common methodological bias. In the process of data collection, the methods of anonymous participation, reverse question scoring, and balance scale sequence were adopted for control.[41] The Harman single-factor test method was used to analyze the unrotated factors, and the total number of factors with eigenvalues greater than 1 was 10, and the variance explained by the first factor was 16.8%, which was less than 40% of the critical index.[50,51] This suggests that common method bias had minimal impact on the overall results of our study.

Difference Analysis of Demographic Characteristics and Major Variables

Insert Table 1 summarized the analysis of differences in mental health literacy, social support, coping styles, and social comparison scores of parents of children with special needs based on demographic characteristics.

Descriptive Statistics and Correlation Analysis of Major Variables

Pearson's product-moment correlation analysis was used to analyze social support, coping style, social comparison orientation, and mental health literacy (Table 2). The results showed that social support was significantly positively

Table 1 Demographic Difference Analysis Based on Major Variables

Items	M±SD	Mental Health Literacy	Social Support	Social Comparison	Coping Style
		F	F	F	F
Parents identity	2.05±0.98	2.68*	0.29	1.04	1.92
Education	4.25±1.13	4.13**	2.54*	0.69	1.99
Occupation	4.31±2.26	1.96	2.87*	0.49	0.99
Total monthly household income	3.95±1.36	1.96	1.93	2.28*	1.55
Child's age	1.96±1.64	2.15	0.47	2.33*	2.51*
Symptom type	2.35±2.22	1.34	2.11*	1.50	1.64

Notes: *p < 0.05, **p <0.01.

Table 2 Descriptive Statistics and Correlation Matrix for Each Variable

Variables	M±SD	1	2	3	4	5	6	7	8	9	10
Children's age	1.96±1.64	1									
Social support	3.78±0.74	−0.01	1								
Objective support	2.89±0.90	−0.06	0.70**	1							
Subjective support	5.50±1.21	0.02	0.89**	0.40**	1						
Utilization of support	3.00±0.92	−0.14	−0.03	−0.04	−0.03	1					
Ability Social Comparison	2.86±0.75	−0.08	−0.11	−0.06	−0.10	0.63**	1				
Opinion Social Comparison	2.93±0.79	−0.14	−0.05	−0.05	−0.04	0.95**	0.65**	1			
Positive coping style	1.69±0.58	−0.11	0.29**	0.27**	0.23**	0.24**	0.09	0.25**	1		
Negative coping style	1.15±0.55	−0.13	−0.19*	−0.10	−0.15	0.12	0.20*	0.15	0.30**	1	
Mental health literacy	3.00±0.26	−0.19*	0.10	0.23**	0.01	0.22**	0.12	0.22**	0.28**	0.26	1

Notes: Children's age is a categorical variable, 1 represents 3–6 years old, 2 represents 7–8 years old, 3 represents 9–10 years old, 4 represents 11–12 years old, 5 represents 13–14 years old, and 6 represents 14 years old and above; *p < 0.05, **p <0.01.

correlated with objective support, subjective support, and positive coping styles (r=0.70, p<0.01; r=0.89, p<0.01; r=0.27, p<0.01), while social support was significantly negatively correlated with negative coping styles (r=−0.19, p<0.05); There is a significant positive correlation between objective support and subjective support, positive coping styles, and mental health literacy (r=0.40, p<0.01; r=0.27, p<0.01; r=0.23, p<0.01); There is a significant positive correlation between subjective support and positive coping styles (r=0.24, p<0.01); The utilization of support is significantly positively correlated with social comparison of abilities, social comparison of opinions, positive coping styles, and mental health literacy (r=0.63, p<0.01; r=0.95, p<0.01; r=0.24, p<0.01; r=0.22, p<0.01); There is a significant positive correlation between ability society comparison and opinion society comparison, as well as negative coping styles (r=0.65, p<0.01; r=0.20, p<0.05); There is a significant positive correlation between social comparison and positive coping styles, as well as mental health literacy (r=0.25, p<0.01; r=0.22, p<0.01); Positive coping styles are positively correlated with mental health literacy (r=0.28, p<0.01); Due to the significant negative correlation between children's age and parents' mental health literacy, children's age will be used as a control variable in the subsequent moderated mediation effect analysis.

The Mediating Role of Positive Coping Styles and the Moderating Role of Society Comparative Orientation

In the first step, the objective support of parents who have children with special needs is regarded as the independent variable (X), mental health literacy as the dependent variable (Y), positive coping style as the mediating variable (M), and children's age as the control variable (C). Model 4 in the SPSS macro compiled by Hayes in 2013 was used to test the mediating role of positive coping styles between objective support and mental health literacy. The results are shown in Table 3. Parents' objective support had a significant positive predictive effect on their mental health literacy (β=0.063,

Table 3 Analysis of Mediating Effect of Coping Style Between Social Support and Mental Health

Categories	Effect Value	Boot SE	t	LLCI	ULCI	Relative Effect
Total effect	0.063	0.022	2.916**	0.020	0.105	–
Direct effect	0.047	0.022	2.138*	0.004	0.090	74.4%
Mediating effect	0.016	0.008	–	0.004	0.033	25.6%

Notes: *p < 0.05, **p <0.01.
Abbreviations: Boot SD, boot standard deviation; LLCI, boot confidence interval lower limit; ULCI, boot confidence interval upper limit.

p<0.01). After the positive coping style was included in the regression equation, parents' objective support still had a significant predictive effect on their mental health literacy (β=0.047, p<0.05), parents' objective support positively predicted positive coping style (β=0.261, p< 0.001), and positive coping style positively predicted parents' mental health literacy (β=0.215, p<0.01). The results showed that the 95% confidence interval corresponding to each path did not contain 0, indicating that the total effect, direct effect, and indirect effect were statistically significant (p<0.05). Therefore, the mediating effect of a positive coping style between objective support and mental health literacy was significant. The mediation effect value was 0.02, accounting for 25.6% of the total effect.

Secondly, the objective support of parents who have children with special needs is regarded as the independent variable (X), mental health literacy as the dependent variable (Y), positive coping style as the mediating variable (M), parents' opinion of social comparison orientation as the moderating variable (W), and children's age as the controlling variable (C), and the scores of each variable are centralized. Then, it was put into model 7 of PROCESS for the moderated mediation effect test (Figure 1). The specific test results are shown in Table 4. Objective support from parents of children with special needs positively predicted parents' positive coping styles (β=0.199, p<0.001, 95% CI= [0.105, 0.293]), and opinion social comparison orientation positively predicted parents' positive coping styles (β=0.180, p<0.01, 95% CI= [0.073, 0.286]). The interaction terms of objective support and opinion social comparison orientation had a significant negative predictive effect on the positive coping style of parents of children with special needs (β=−0.150, p<0.05, 95% CI= [−0.268, −0.032]). That is, the social comparison orientation of parents who have children with special needs plays a regulating role between objective support and positive coping style; Positive coping styles of parents who have children with special needs positively predicted mental health literacy (β=0.095, p<0.01, 95% CI [0.028, 0.161]), and objective support of parents who have children with special needs positively predicted mental health literacy (β=0.047, p< 0.05, 95% CI= [0.004, 0.090]). Children's age negatively predicted parents' mental health literacy (β=−0.025, p <0.05, 95% CI= [−0.047,

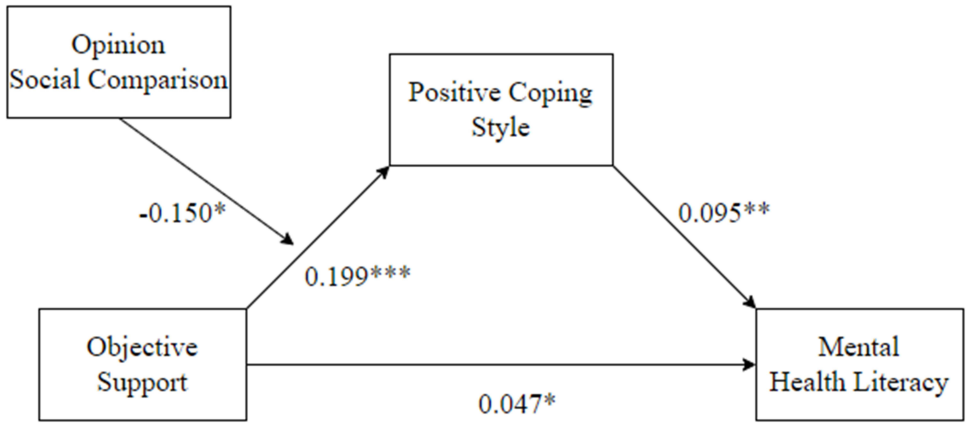

Figure 1 Moderated mediation model.
Notes: *p < 0.05, **p <0.01, ***p < 0.001.

Table 4 Moderated Mediating Effect Test

Regression Equation		Overall Fit Index			Significance of Regression Coefficient			
Result Variable	**Predictive Variables**	**R**	**R^2**	**F**	**SE**	**β**	**t**	**CI**
M	C	0.421	0.177	8.611	0.026	−0.010	−0.400	[−0.062, 0.041]
	X				0.047	0.199	4.202***	[0.105, 0.293]
	W				0.053	0.180	3.338**	[0.073, 0.286]
	X×W				0.060	−0.150	−2.519*	[−0.268, −0.032]
Y	C	0.356	0.127	7.769	0.012	−0.025	−2.106*	[−0.047, −0.002]
	X				0.022	0.047	2.138*	[0.004, 0.090]
	M				0.034	0.095	2.805**	[0.028, 0.161]

Notes: C represents the age of the child, X represents objective support, W represents opinion social comparison, M represents positive coping styles, and Y represents mental health literacy; *p < 0.05, **p <0.01, ***p < 0.001.

−0.002]), so there was a moderating mediator, and opinion social comparison orientation played a moderating role in the first half path of the model.

To better explain the moderated mediation model, the score of opinion social comparison orientation was divided into two groups, high and low, according to plus or minus one standard deviation. A simple slope test was used to investigate the specific moderating effect of opinion social comparison orientation on the influence of parents' objective support on positive coping styles, as shown in Figure 2. The results showed that when the score of opinion social comparison orientation was low, the objective support of parents of children with special needs had a significant positive predictive effect on their positive coping style (B simple=0.318, t =4.402, p<0.001, 95% CI=[0.176, 0.461]), indicating that the lower the opinion social comparison orientation was, the predictive effect of objective support on positive coping styles increased gradually. When the score of opinion social comparison orientation was high, the objective support of parents had no significant predictive effect on the positive coping style of children with special needs (B simple=0.081, t=1.318, p>0.05, 95% CI=[−0.040, 0.201]).

Discussion

This study established a moderated mediation model to investigate the relationship between parents' social support and their mental health literacy and revealed the mediating role of parents' positive coping style between objective support and mental health literacy, as well as the moderating role of opinion social comparison orientation.

Notably, parental identity was significantly correlated with the score of mental health literacy, and mothers have the highest score of mental health literacy, which is consistent with previous studies.[52] Men are usually more optimistic and

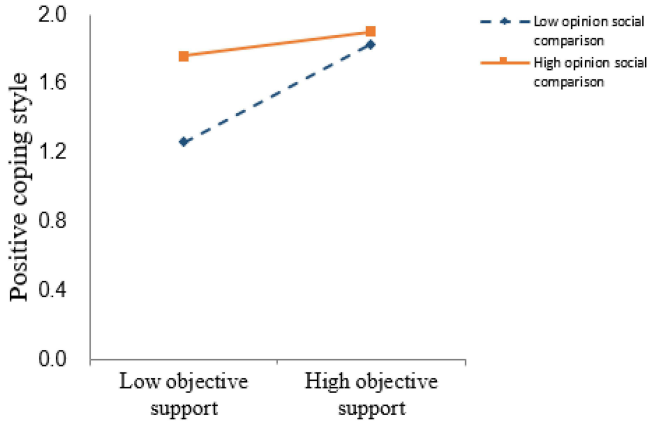

Figure 2 Moderation of opinion social comparison orientation for the relation between objective support and positive coping style.

less sensitive than women, so they are difficult to deeply experience depression and understand the fact that their children are ill. Secondly, male groups have less access to knowledge popularization.[53] The total monthly family income is correlated with the level of mental health literacy. The higher the total monthly household income, the higher the mental health literacy score. Parents with a high monthly family income will seek more resources and ways to improve their spiritual and cultural needs and pay more attention to their mental health after they are relatively satisfied with material resources.[54]

Firstly, with the social support, we found that the objective support of parents who have children with special needs can significantly positively predict the level of mental health literacy, that is, the more objective support parents who have children with special needs receive, the higher the level of parents' mental health literacy. Studies have shown[55] that social support has a significant impact on both physical and mental health, that is, the amount of social support can predict the outcome of an individual's physical and mental health. Moreover, in terms of social support, compared with ordinary parents, parents who have children with special needs encounter more difficulties in the process of raising their children, in order of economic difficulties (1/3), lack of rehabilitation and special education knowledge (1/4), lack of time and energy (1/5), and urgent need of social support.[43] A higher level of social support can help parents master disease-related knowledge and management skills more comprehensively, and at the same time, they have more social resources and make full use of resources to understand and actively treat. Other studies have shown[56] that social support can improve people's ability to access and understand medical information and make use of the healthcare system, and people who participate in social groups usually have higher mental health literacy. Objective support is an important component of social support.[16] This suggests that all sectors of society should invest more resources and energy to provide objective support for special families, to improve the level of mental health literacy of parents with special children.[57]

Secondly, this study also found that positive coping styles of special children's parents play a mediating role between objective support and mental health literacy, which is consistent with our hypothesis, special children's parents get more objective support, parents choose the higher likelihood of positive coping style, mental health literacy level will be higher. On the one hand, the positive and effective response to the problem directly helps to solve the problem, while the negative or avoidant way may lead to depression, anxiety, and other bad psychological states, and then affect the mental health level of individuals.[45,46] On the other hand, studies have shown[58] that social support can protect mental health by improving individuals' ability to cope with negative stimuli and reducing stress responses.[59] Social support is an external factor, and active coping style is an individual's purposeful adjustment ability and an internal factor.[60] The more external social support parents who have children with special needs receive, the more likely they are to adopt positive coping methods to solve problems, reduce negative emotional experiences such as somatization, form a virtuous cycle, maintain good mental health status, and thus improve the level of mental health literacy.[61,62] This shows that changing the negative coping style of parents with special children and coping with problems with a positive attitude will help to improve the level of parents' mental health literacy.

Finally, through the moderated mediation model test, this study found that opinion social comparison orientation had a moderating effect on the relationship between objective support and positive coping style of parents who have children with special needs, and the moderating effect occurred in the first half of the mediation path. Appropriate social comparison can become a way for people to cope with environmental pressure and play its function of adjusting mood.[63] In turn, they are more willing to choose a positive attitude to solve problems.[64] This study also found that the positive coping styles of parents with low social comparison were more significantly affected by objective support than those of parents with high social comparison. Because excessive social comparison will bring negative emotions, social comparison is not completely free of threats and negative effects,[63,65,66] the more inclined to social comparison, the more they want to be recognized by others. Recognizing that one's views are correct is not a virtuous cycle and will affect one's emotional health.[51,52] And that influences how individuals choose to deal with problems. This shows that it is necessary to guide parents who have children with special needs to make correct social comparisons, and community departments provide necessary social resources and support to guide parents to deal with problems in life with a positive attitude, which can improve the mental health literacy level of parents who have children with special needs to a certain extent.

Limitations and Future Directions

In summary, this study explored the internal mechanism between the objective support of parents who have children with special needs and their mental health literacy based on a theoretical and empirical basis. The study clarified that objective support could affect parents' mental health literacy through positive coping style, and that opinion social comparison moderated the relationship between objective support and positive coping style of parents who have children with special needs. The research results have a good practical guiding significance for improving the mental health literacy level of parents who have children with special needs, and provide evidence support for society and rehabilitation institutions for special children to help special families be more targeted.

Although this study has certain theoretical and practical significance, it also has some shortcomings: on the one hand, this study only surveyed the parents who have children with special needs in general and did not take into account the influence of the disorder types of special children on the study variables. In the future, the research objects can be specifically identified as children with a certain disorder type and their parents; On the other hand, using subject subjective reporting method, the reliability of data needs to be further investigated. In the following research, we can consider testing the subjects in the laboratory environment, and the reliability and validity of the data obtained after controlling irrelevant variables may be higher. Finally, the cross-sectional approach is unable to make causal judgments about the relationship between variables. Therefore, future studies may consider using a longitudinal tracking study design to more effectively explain the effect of parents' objective support on the mental health literacy of children with special needs.

Conclusion

The results of this study confirmed that objective support from parents of children with special needs can not only positively predict their mental health literacy, but also indirectly affect their mental health literacy through positive coping styles, which is more obvious in parents of children with special needs with low level of opinion social comparison. These results will help to develop mental health literacy intervention programs for parents of children with special needs, such as more social support from the government and changes in parents' coping styles.

Data Sharing Statement

The raw data supporting the conclusions of this article will be made available by corresponding author, without undue reservation.

Ethics Statement

The studies involving human participants were reviewed and approved by the Ethics Committee of Chong Qing Normal University. The patients/participants provided their written informed consent to participate in this study.

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The authors report no conflicts of interest in this work.

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