

A Study on the Relationship Between Causes of Suicide Among Chinese High School Students and Verbal Behavior Patterns in Their Families of Origin

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Abstract. This study investigates how suicidal ideation is associated with verbal communication patterns within the family environments of Chinese high school students. A total of 151 high school students aged 17 to 19 were randomly selected within China to complete an online questionnaire survey. To measure the relevant variables, three validated instruments were utilized: the Beck Scale for Suicide Ideation (BSI), the localized Chinese adaptation of the Family Environment Scale (FES-CV), and the EMBU (Egna Minnen av Barndoms Uppfostran), which assesses parental rearing styles. Data were analyzed using SPSS for correlation analysis, ANOVA, descriptive statistics, and linear regression. The results revealed suicidal ideation was strongly inversely related to family support ($r = -.732, p < .01$), while a modest but statistically significant positive link was observed between suicidal thoughts and rejecting parenting styles ($r = .165, p < .05$). Regression analysis indicated that both family support and parenting style were statistically significant predictors of suicidal ideation ($F = 105.870, p < .001$), with the regression model explaining 58.8% of the total variance in suicidal ideation ($R^2 = .588$). These findings highlight the essential influence that both family interaction dynamics and parenting approaches have on adolescents' psychological well-being, suggesting that families should foster a supportive and positive verbal environment in daily education to reduce suicide risk.

1. Introduction

In contemporary society, suicide among Chinese high school students has become a serious concern. This study posits that family-related factors—especially verbal and behavioral patterns within the family—may significantly influence adolescent suicidal ideation. From a developmental psychology perspective, high school students are typically in the adolescent stage as described in Erikson's theory of psychosocial development, during which they are still exploring their identity and possess relatively vague self-concepts [1]. Under such circumstances, pressure from the family can easily trigger emotional

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disturbances such as anxiety, irritability, or depression. In the absence of appropriate parental guidance and intervention, high school students may be more susceptible to a range of psychological problems. Previous research has indicated that positive family communication can help alleviate adolescents' anxiety, depression, and other negative emotions, while negative verbal behaviors such as criticism and blame often exacerbate psychological distress and even trigger suicidal ideation [2]. Nonetheless, empirical studies exploring the causal links between specific family verbal interaction patterns and adolescent suicidal ideation remain notably limited, particularly within the context of Chinese high school students. Therefore, this study takes Chinese high school students as the sample and employs a questionnaire-based survey to investigate the relationship between family-of-origin verbal behaviors and adolescent suicidal ideation. The goal is to reveal how family communication styles influence adolescents' attitudes toward life and suicide. Descriptive statistics and correlational analysis are applied to process and analyze the collected data.

2. Literature review

Recent large-scale investigations have revealed an alarming trend in the prevalence of mental health issues among high school students in mainland China. According to a meta-analysis by Yu, Zhang, and Yin [3]. Over the past few years, suicide has risen to become a prominent factor contributing to death among Chinese adolescents aged 15 to 24, sparking widespread societal attention. Adolescent suicidal ideation is considered a severe psychological tendency with high risk, and is commonly influenced by an interaction of biological, psychological, and social factors. Many researchers have sought to understand its underlying mechanisms, gradually extending the study of individual psychological characteristics to include family factors—especially the patterns of communication, emotional expression, and verbal behavior within families of origin.

Studies have shown that negative verbal behaviors in families of origin—such as criticism, sarcasm, verbal intimidation, and neglect—are associated with increased depressive emotions in adolescents, lower self-esteem, and a stronger tendency toward suicidal ideation [2]. From this perspective, family communication quality is regarded as a key predictor of adolescents' mental health. Supportive communication may enhance adolescents' sense of connection and alleviate feelings of isolation, whereas negative communication can exacerbate internal emotional conflict and promote self-injurious tendencies [4,5].

To assess suicidal ideation (SI), the Beck Scale for Suicide Ideation (BSI) was employed. This instrument has been extensively utilized among Chinese adolescents and is recognized for its strong reliability and validity [6]. It serves as an effective measure of both the frequency and intensity of suicidal thoughts within a specific time frame. In addition, this study adopted standardized tools to evaluate various aspects of the family environment. Specifically, the Egnä Minnen av Barndoms Uppfostran (EMBU) was used to assess parental rearing practices [7], while the Chinese version of the Family Environment Scale (FES-CV) measured levels of family communication and emotional support [8]. All three tools have been widely validated in psychological research within China.

Extensive research has indicated that parenting styles characterized by emotional neglect, rejection, overprotection, and verbal hostility significantly increase the risk of adolescents experiencing psychological distress, depression, and suicidal ideation [9]. In particular, low parental warmth and emotional support, combined with high levels of control, are often linked to poor mental outcomes in adolescents. Prior studies have found that under such dysfunctional communication patterns, adolescents are more likely to develop low self-esteem and ineffective coping strategies, increasing their vulnerability to

despair and despair, and ultimately increasing the risk of suicide [6].

Moreover, family communication appears to affect adolescents of different genders in distinct ways. Research on the development of depression has suggested, such as exhibiting depressive symptoms or self-injury—such as depression and self-injury—when faced with negative evaluation, whereas male adolescents may be more prone to externalizing behaviors, such as anger and aggression [10]. This view is supported by empirical evidence from studies conducted in China. For instance, Zhang Yali and colleagues pointed out that female high school students are more vulnerable to emotional distress following intense family conflicts, leading to self-denial, heightened depression, and increased suicide risk. Their study incorporated 252 empirical studies, involving a total of 1,017,421 high school participants [3].

The risk of adolescent suicide may also be shaped by socioeconomic status. Families with lower socioeconomic conditions often face limited resources, lower parental education levels, and greater life stress, which can hinder effective emotional communication and support among family members [2]. Even in economically stable families, the absence of emotional expression and active response can still cause psychological distance and conflict between parents and children, potentially leading to emotional detachment and psychological issues in adolescents.

Both Chinese and international researchers have adopted a variety of measurement methods—such as structured interviews, questionnaires, behavioral observations, and standardized psychological instruments—to collect relevant data. Applying meta-analysis based on established psychological theories, Zhang Yali and colleagues analyzed longitudinal data from 2010 to 2020 on the occurrence of psychological issues among secondary-level students in mainland China. Their findings revealed trends in emotional distress and its correlation with family background factors. These studies further highlighted the importance of family communication patterns and parenting style as predictors of adolescent suicidal ideation [2, 3].

In a related longitudinal study on Chinese adolescents, Zhou and colleagues found that communication styles within the family significantly predicted suicidal ideation. Their results indicated that open, expressive communication within the family helps adolescents enhance their emotional regulation, reduce loneliness and self-denial, and prevent the onset of suicidal ideation. In contrast, avoidant or negative communication patterns—characterized by criticism and suppression—imposed sustained psychological pressure and significantly elevated suicide risk. This body of research underscores the critical importance of internal family communication in maintaining adolescents' psychological well-being [11].

Furthermore, Liu, Wang, and Wang found in their study on Chinese adolescents that family support moderates gender differences in responses such as depression and self-blame. Their research indicated that female adolescents are more likely to exhibit internalized emotional responses—such as depression, self-blame, and self-injury—when facing emotional distress, whereas emotional support from parents, especially mothers, can significantly buffer this process and reduce the likelihood of suicidal ideation. The study emphasized the critical role of maternal emotional support in adolescent emotional development, particularly highlighting the importance of both the quality and frequency of emotional communication between mothers and adolescents [12].

In summary, existing literature has provided a solid empirical foundation for understanding the pathway from “family verbal behavior” to “adolescent suicidal ideation.” However, there remain notable research gaps and limitations. On the one hand, many existing studies tend to generalize family communication as either “emotional support” or “negative verbal behavior,” lacking detailed quantitative analysis of specific forms, contexts, and frequencies of communication. On the other hand, some studies are limited in

scope, focusing only on certain cities or age groups, making it difficult to comprehensively reflect the variations across different age, gender, and socioeconomic subpopulations.

3. Methodology

This study adopted a cross-sectional survey method using questionnaires to investigate the relationship between suicidal ideation among Chinese high school students and verbal behavior patterns in their families of origin. The research integrated questionnaire data to analyze the influence of family verbal behaviors on suicidal thoughts among teenagers. Statistical analyses, including correlation analysis, ANOVA, descriptive statistics, and linear regression, were conducted using SPSS. A participants were recruited using a non-random convenience approach 151 high school students from China as participants. All participants completed the survey voluntarily and gave informed consent prior to participation. The sample included students aged 17 to 19 years, in order to ensure broader data generalizability. Three standardized Chinese-adapted psychometric instruments were selected for this study, all of which have been validated in prior studies and demonstrated satisfactory reliability and validity, in line with psychological measurement standards. The instruments used were as follows:Beck Scale for Suicide Ideation (BSI): This scale assesses the frequency and severity of suicidal thoughts and plans within a recent time frame. It has shown strong reliability in adolescent samples and has been widely used in Chinese research as a valid psychological assessment tool. (FES-CV): This instrument measures family verbal support, emotional warmth, and conflict dimensions, capturing features of family communication. The Chinese version has shown good construct validity and test–retest reliability, making it appropriate for studies on family relationships. Egna Minnen av Barndoms Uppfostran (EMBU): This scale evaluates adolescents’ perceptions of parental rearing styles, including dimensions such as rejection, emotional warmth, and overprotection. The version adapted by Yue et al. for use in China demonstrated strong internal coherence, acceptable split-half metrics, and validated construct dimensions, and it has been widely employed in adolescent samples across China [6, 7, 8].

4. Results

Descriptive statistics showed that the suicidal ideation scores fell within the range of 5 to 9, averaging 7. 78, suggesting a notably elevated risk of suicidal inclination among some high school students. Scores for family support and parenting style were concentrated between 17 and 19, with a mean of 17. 99, suggesting that the majority of participants perceived a high level of family support (see Table 1).

Table 1. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error

TOTAL1	151	2	17	19	17.99	.073	.898	.807	.013	.197	-1.770	.392
TOTAL2	151	1	17	18	17.99	.007	.081	.007	-12.288	.197	151.000	.392
TOTAL3	151	4	5	9	7.78	.121	1.487	2.212	-.406	.197	-1.838	.392
Valid (listwise)	N151											

Correlation analysis using Pearson’s correlation coefficient and Spearman’s rho revealed a significant negative correlation between family support (TOTAL1) and suicidal ideation (TOTAL3), $r = -.732$, $p < .001$ (see Table 2), indicating that the more supportive the verbal communication within a family, the less likely adolescents were to feel that they had "no reason to live." In addition, parenting style (TOTAL2) demonstrated a slight but clearly significant positive link to suicidal ideation, $r = .165$, $p < .05$, suggesting that more negative parenting styles may slightly increase adolescents’ psychological risk (see Table 2). Furthermore, multiple regression analysis revealed that family support and parenting style were significant predictors of suicidal ideation, $F = 105.870$, $p < .001$, with the regression model explaining $R^2 = .588$ of the total variance in suicidal ideation among adolescents (see Table 3). This indicates that the two predictors together accounted for 58.8% of the variance in suicidal ideation scores. These findings demonstrate that family-of-origin support and parenting styles are important predictors of the development of suicidal ideation in adolescents (see Table 3).

Table 2. Results of Pearson correlations analysis

		TOTAL1	TOTAL2	TOTAL3
TOTAL1	Pearson Correlation	1	.091	-.735**
	Sig. (2-tailed)		.269	.000
	N	151	151	151
TOTAL2	Pearson Correlation	.091	1	.153
	Sig. (2-tailed)	.269		.060
	N	151	151	151
TOTAL3	Pearson Correlation	-.735**	.153	1

	Sig. (2-tailed)	.000	.060	
	N	151	151	151

**. Correlation is significant at the 0. 01 level (2-tailed).

Table 3. Results of ANOVA^a analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	195. 288	2	97. 644	105. 870	. 000b
	Residual	136. 500	148	. 922		
	Total	331. 788	150			

- a. Dependent Variable: TOTAL3
- b. Predictors: (Constant), TOTAL2, TOTAL1

Results of correlation analysis are shown in Table 4.

Table 4. Results of correlation analysis

			TOTAL1	TOTAL2	TOTAL3
Kendall's tau_b	TOTAL1	Correlation Coefficient	1. 000	. 086	-. 693**
		Sig. (2-tailed)	.	. 267	. 000
		N	151	151	151
	TOTAL2	Correlation Coefficient	. 086	1. 000	. 164*
		Sig. (2-tailed)	. 267	.	. 043
		N	151	151	151
	TOTAL3	Correlation Coefficient	-. 693**	. 164*	1. 000
		Sig. (2-tailed)	. 000	. 043	.
		N	151	151	151
Spearman's rho	TOTAL1	Correlation Coefficient	1. 000	. 091	-. 732**
		Sig. (2-tailed)	.	. 268	. 000
		N	151	151	151
	TOTAL2	Correlation Coefficient	. 091	1. 000	. 165*
		Sig. (2-tailed)	. 268	.	. 043
		N	151	151	151
	TOTAL3	Correlation Coefficient	-. 732**	. 165*	1. 000
		Sig. (2-tailed)	. 000	. 043	.

		N	151	151	151
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**. Correlation is significant at the 0. 01 level (2-tailed).

*. Correlation is significant at the 0. 05 level (2-tailed).

5. Discussion and implications

This study explored the relationship between suicidal ideation among Chinese high school students and verbal behavior patterns in their families of origin. By surveying 151 high school students and using the Beck Scale for Suicide Ideation (BSI), the Chinese version of the Family Environment Scale (FES-CV), and the Egna Minnen av Barndoms Uppfostran (EMBU), relevant correlation and regression analyses were conducted. The results revealed a significant negative correlation between family verbal behaviors and adolescent suicidal ideation. Specifically, more frequent positive verbal exchanges between family members were associated with lower levels of suicidal ideation in adolescents. In contrast, verbal communication patterns characterized by criticism, neglect, or emotional suppression were positively correlated with higher suicidal ideation scores. Regression analysis further confirmed that family support and parenting style served as notable contributors to SI among adolescents.

This outcome indicates that effective, supportive family communication can act as a buffer against suicidal ideation in adolescents. Conversely, negative or avoidant communication styles may increase psychological risk. However, this study has several limitations. First, the sample was limited in scope, like geographically limited and demographically narrow, with a relatively small and localized group. The findings may not be generalizable to all high school populations. Future studies should expand the sample size and a diverse composition encompassing students from various geographic areas, cultural contexts, and economic levels, to further validate the findings and enhance generalizability of findings.

Moreover, future research should examine the moderating role of cultural and family background on the observed relationships. Attention should also be paid to maternal verbal styles and emotional expressions, especially in managing adolescents' emotional responses. Previous studies have shown that adolescents facing stress and emotional suppression may experience increased self-blame and helplessness, leading to stronger suicidal tendencies. This underscores the need for further research on specific emotional risk mechanisms such as emotional suppression, self-esteem, and rumination as mediators, to clarify how family factors interact with suicidal ideation. Additionally, parental rearing style differences across gender should be considered—for example, in similar family environments, boys and girls may perceive parental rejection or overprotection differently.

Future studies should also refine their theoretical models by integrating multi-dimensional factors. For example, subgroup analysis by age, gender, or socioeconomic status (SES) may help clarify whether specific family verbal behaviors contribute differently to suicidal ideation among subgroups. Grade level may also play a role—for instance, younger high school students may struggle with emotional identification, while senior students may face pressure from academic and life transitions. Prior research has shown that adolescents' responses to negative verbal evaluation may differ by developmental stage, indicating the necessity to examine how age moderates the relationship between verbal behaviors and psychological outcomes [10].

Further, integrating behavioral observation methods, structured interviews, and

longitudinal designs can enhance the depth of findings. This study also recommends practical interventions for families and schools: promoting open, warm, and empathetic communication between parents and adolescents; reducing criticism and emotional suppression; and fostering a trusting, secure parent-child relationship. Through mindfulness training, parent-focused emotional regulation strategies, and psychoeducation, parents can be guided to create healthier communication climates. Finally, public awareness campaigns should be strengthened to help families understand the importance of emotional expression, relational bonding, and their critical role in adolescents' psychological development.

6. Conclusion

This study investigated the relationship between suicidal ideation among Chinese high school students and their families' language behaviour patterns. Through a questionnaire survey and data analysis of 151 high school students, it was found that family support levels were significantly negatively correlated with adolescents' suicidal ideation, while negative parenting styles were positively correlated with suicidal ideation. Regression analysis results further indicated that family language support and parenting styles are important predictive factors for adolescents' suicidal ideation. The findings underscore the central role of the family in adolescent mental health, suggesting that parents should provide more positive, open, and emotionally supportive interactions in daily communication to effectively prevent adolescent suicide risk. Future research should expand the sample size to explore the moderating effects of cultural, gender, and age variables, and combine long-term follow-up with intervention practices to enhance the breadth and practical value of the research.

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