

The Relationship Between Social Exclusion and Suicidal Ideation: The Mediating Role of Psychological Flexibility

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Abstract. Objective: To explore the relationship between social exclusion and suicidal ideation and its mechanism of action. Methods: 242 college students were surveyed using the Social Exclusion Scale for College Students, the Chinese version of the Cognitive Fusion Questionnaire-Fusion (CFQ-F), the Acceptance and Action Questionnaire (A&A) Second Edition, and the Self-Rating Scale for Suicidal Ideation (SRS). Results: Both cognitive fusion and experiential avoidance dimensions of psychological flexibility fully mediated the relationship between social exclusion and suicidal ideation. Conclusion: Social exclusion acts on suicidal ideation in the university population through psychological flexibility, and interventions on psychological flexibility may be beneficial in mitigating the negative effects of social exclusion.

Keywords: Social exclusion, suicidal ideation, psychological flexibility, cognitive fusion, experiential avoidance.

1. Introduction

With the acceleration of life pace and the increase of competitive pressure, college students tend to have all kinds of psychological problems in the face of this fast-paced, high-pressure life, and these psychological problems can lead to an increase in some extreme behaviours of college students, such as suicidal behaviours. According to the World Health Organization, suicide is the fourth leading cause of death in the 15-29 year old age group globally as of 2019. (*World Health Organisation, 2021*). Meanwhile, a study by the *Chinese Centre for Disease Control and Prevention (CDC)* has also shown that Chinese adolescents are at serious risk of suicide due to intense academic competition (*2022 National Blue Book of Depression, 2022*). Therefore, the issue of suicidal tendencies among college students under high pressure deserves extensive attention from mental health-related researchers.

College students face many stressors, among which interpersonal relationships are one of the more important stressors (Yang Jiaming et al., 2023). There are cases of university students being rejected by their peers. Data of a survey with 1999 people released by China Youth Daily indicated that, in a survey of 1999 people, 86% of the respondents believe that there exists "cold violence" in the campus around them, and 60.1% of the respondents believe that "cold violence" will leave a shadow in the heart of the person concerned, sarcastic, abusive and ridiculing are considered to be the most important sources of stress, 60.1% of the respondents believed that "cold violence" on campus would leave a shadow in the heart of the person concerned, and sarcasm, verbal abuse and ridicule were considered to be the most common forms of cold violence on campus. (Campus cold violence, pain to the heart is difficult to heal - China Youth Online, 2017). The most common form of cold violence in schools is sarcasm, insults and ridicule. And some social exclusion behaviours like cold violence often result in tragedy for the excluded. The impact of social exclusion on college students' suicidal ideation has been widely studied by mental health researchers, such as Liu Zhihong et al. who found that social exclusion positively predicts adolescent suicidal ideation (Liu Zhihong & Zhang, 2017). (Liu, Zhihong & Zhang, Shanshan, 2023). The study of social exclusion has been a major topic in mental health research. Through reviewing the previous literature, we know that there are relatively few studies exploring the mechanism of social exclusion on suicidal ideation. Meanwhile, We found that psychological flexibility, as an important indicator of mental health, is related to social exclusion

and suicidal ideation to a certain extent, so the present study attempts to explore whether psychological flexibility plays a certain mediating role between social exclusion and suicidal ideation.

2. Literature Review and Research Hypothesis

2.1. Impact of social exclusion on suicidal ideation

The concept of social exclusion initially focused on personality traits, with Twenge arguing that social exclusion is the phenomenon of individuals being ostracised by others due to the presence of some personality traits that are not preferred by others (Twenge et al., 2001). According to Leary, social exclusion is a phenomenon in which an individual's desire to socialise with others or with a group is ignored or excluded, resulting in unfulfilled expectations of social interaction (Leary & Mark, 1990). (Leary & Mark, 1990). Chinese scholars have synthesised the concept of social exclusion from both domestic and international studies, and believe that social exclusion can be a short-lived phenomenon or a long-term process, specifically referring to a situation in which an individual or a group is rejected by other individuals or groups, resulting in the obstruction of their basic needs (Du Jianzheng & Xia, 1990). There are a number of measures of social exclusion, one of the more widely used is the Social Exclusion Questionnaire for College Students developed by domestic scholars Wu Huijun et al. (Wu Huijun, 2013). The questionnaire was developed by Wu Huijun et al. Another research variable in this study, suicidal ideation, a concept that has received more attention from researchers related to mental health, refers to a mental activity in which an individual is about to prepare for suicide or practice suicidal actions based on a number of factors (Zheng Aiming et al., 2012). Suicidal ideation is a concept that has received more attention from mental health researchers. The questionnaire used to measure suicidal ideation is the Self-Rating Idea of Suicide Scale (SIOSS) developed by Chaoyun Xia et al. This questionnaire is a combination of Symptom Checklist 90 (SCL-90), Beck Depression Inventory (BDI) and other scales, combined with clinical experience, and has good reliability and validity. (Xia Chaoyun et al., 2007). Numerous studies have shown that social exclusion is a positive predictor of suicidal ideation. The interpersonal theory of suicide suggests that poor interpersonal status is an important source of suicidal ideation, which is triggered when an individual feels that he or she is a burden to family, friends, and society, or is unable to satisfy the need to form bonds with others (Joiner, T., 2005). Many scholars have conducted specific research on social exclusion and suicidal ideation. Liu Zhihong et al. found that the higher the level of exclusion, the higher the suicidal ideation (Liu, Zhihong & Zhang, 2005). (Liu, Zhihong & Zhang, Shanshan, 2023). Similarly, Wang Hanqing et al. found similar findings in a group of college students, that is, college students who were often socially excluded were more likely to engage in selfinjurious behaviours (Wang Hanqing et al., 2023) (Wang Hanqing et al., 2023). In addition, depression is associated with suicidal tendencies. In addition, depression is a psychological variable closely related to suicidal ideation and can positively predict suicidal ideation (Su Binyuan et al., 2024). For example, Niu et al. found that social exclusion was positively related to depression, and Nezlek et al. found that social exclusion caused pain and depression (Nezlek et al., 2024). (Nezlek et al., 2015; Niu et al., 2016). In summary, previous research has shown that there is a positive relationship between social exclusion and suicidal ideation, and this study will validate this relationship in a population of university students.

2.2. The effect of psychological flexibility on suicidal ideation

Psychological flexibility is an important variable in the field of mental health, psychological flexibility is the ability of an individual to be consciously aware and accepting of all experiences and experiences in the present moment and to act on them with values that play an important role in ameliorating signs of psychopathology (McCracken, 2013). Psychological flexibility encompasses two dimensions: experiential avoidance and cognitive fusion. Experiential avoidance is the unwillingness to face a negative experience head on and try to change it, where negative experiences can be expressed as thoughts, emotions, actions, and all unwanted and disliked experiences; cognitive

fusion is a manifestation of a person's behaviour being controlled by verbal stimuli, which leads to limitations in thinking and a loss of the ability to gain insights into other factors in the environment (Yanhong Chen et al. 2019; Č Čekrljija & Schermer, 2023; Ciarrochi et al. 2010; Yasinski et al. 2020). As mentioned earlier, depression has a positive effect on suicidal ideation, and a large number of researchers have found that psychological flexibility has some negative effect on depression. For example, Kashdan et al. synthesised previous research and found that increased psychological flexibility improved the pathological factor of rigidity in depression (Kashdan & Rottenberg, 2010). (Kashdan & Rottenberg, 2010). For example, Kashdan et al. Xinyi Hu et al. found that individuals with greater psychological flexibility were less likely to avoid negative experiences through repression and avoidance coping, which reduced their likelihood of depression (Xinyi Hu & Chen, 2010). (Xinyi Hu & Yinghe Chen, 2020). The study Zhang YB et al. found that increased psychological flexibility can reduce the occurrence of depression and other psychological problems among college students (Zhang YB & Liu YH, 2020). (Zhang, Yingbo & Liu, We deduce that psychological flexibility has a significant impact on the development of depression and other psychological problems among college students. From this, we infer that psychological flexibility also has a negative effect on suicidal tendency. Although there is not much research on the relationship between psychological flexibility and suicidal ideation, some researchers have found that psychological flexibility can reflect psychological flexibility to some extent (Block, 1964) and can be a benign intervention for suicidal ideation. For example, Zhang Zhenming et al. found that the higher the psychological flexibility of an individual, the lower the suicidal ideation (Zhang & Lin, 1964). (Zhang, Z. & Lin, 2023). The Chao Chuanxuan found the same findings in a group of college students, i.e., college students with higher psychological resilience were less likely to develop suicidal ideation (Chuanxuan Chao, 2014). Some scholars have also found that by intervening with psychological resilience, students are less likely to have suicidal thoughts. Some other scholars have found that some training to intervene in psychological resilience can effectively intervene in suicidal ideation, for example, Qu Xiaoli conducted psychological resilience training for 91 college students from 13 colleges and universities in Suzhou, and found that suicidal ideation decreased in the training group (Qu Xiaoli, 2013) The results found that suicidal tendency decreased in the training group (Qu, 2013). In summary, we infer that psychological flexibility has a negative effect on suicidal ideation, and this relationship will be verified in the current study.

2.3. Impact of social exclusion on psychological flexibility

At the same time, some studies have found that social relationships can have a certain effect on psychological flexibility and psychological resilience, which is closely related to psychological flexibility. Lei Tianyue et al. found that social exclusion can negatively affect psychological flexibility, and that social factors can cause individuals to produce cognitive fusion and experiential avoidance, thus reducing their psychological flexibility (Lei Tianyue et al., 2019). (Lei Tianyue et al., 2019) Waldeck et al. also found that psychological flexibility is reduced in excluded individuals (Waldeck et al., 2015). Arslan came to a similar conclusion that individuals who are socially excluded are less psychologically flexible (Arslan, 2020). From another perspective, previous research has also shown that there is a positive effect of positive social relationships on psychological flexibility and related variables. It has been found that individuals with higher appreciative social support typically have higher psychological flexibility (Wenli et al., 2023; Lök & Bademli, 2021). In summary, social exclusion may have a negative impact effect on psychological flexibility, which we will verify in our study.

2.4. Relationship between social exclusion, suicidal ideation and psychological flexibility

The above studies show that social exclusion is a positive predictor of suicidal ideation, psychological flexibility is a negative predictor of suicidal ideation, and social exclusion is a negative predictor of psychological flexibility. We hypothesise that psychological flexibility may be a mediator variable between social exclusion and suicidal ideation, influencing the relationship

between the two. Therefore, this study first validated the relationships between social exclusion and suicidal ideation, psychological flexibility and suicidal ideation, and social exclusion and psychological flexibility, and proposed the hypothesis that psychological flexibility plays a mediating role between social exclusion and suicidal ideation. The hypothesised relationship between the three is shown in Fig.1.

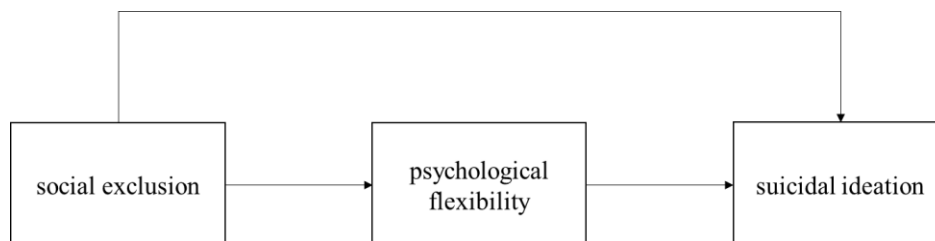


Figure 1. Hypothesised relationship between social exclusion, suicidal ideation, psychological flexibility

3. Research methodology

3.1. Research sample

In this study, online questionnaire research was conducted for the college student population through the Questionnaire Star platform, using convenience sampling. A total of 252 questionnaires were collected, of which 242 were valid (validity rate 96.032%), including 167 males (69.008%) and 75 females (30.992%), with an age span of 18-35 years old, and a mean age of 22.000 (SD=2.565) years old. After the questionnaires were answered, each valid subject was able to be paid 2 RMB.

3.2. Research tools

3.2.1 Measurement of social exclusion

Social exclusion was measured using the Social Exclusion Questionnaire for Undergraduate (SEQU) developed by Wu Huijun et al. (Wu, Huijun et al., 2013) The scale consists of 19 questions. The scale consists of 19 questions and is scored on a 5-point Likert scale, with a score of 1 indicating complete non-conformity and 5 indicating complete conformity, with higher total scores representing a greater degree of exclusion. The Cronbach's alpha of this scale in this study was 0.972, with good reliability.

3.2.2 Measures of psychological flexibility

Psychological flexibility can be categorised into two dimensions, cognitive fusion and experiential avoidance, which have generally been measured separately in previous studies (Parish Councilor Zhang et al., 2012). In this study, cognitive fusion was measured using the Chinese version of the Cognitive Fusion Questionnaire-Fusion (CFQ-F), which was revised by domestic scholars Zhang Weichen et al. (Zhang Weichen et al., 2014). The scale consists of 9 questions and is scored on a 7-point Likert scale, with 1 being never and 7 being always, with higher total scores indicating higher levels of cognitive fusion, which in turn indicates poorer psychological flexibility. The Cronbach's alpha for this scale in this study was 0.945, which is a good reliability. In this study, experiential avoidance was measured using the Acceptance and Action Questionnaire-2nd Edition (AAQ-II) revised by Cao, Jing et al. (Jing Cao et al., 2013). The scale consists of 7 questions and is scored on a 7-point Likert scale, with 1 being never and 7 being always, with higher total scores representing higher levels of experiential avoidance, and in turn, poorer psychological flexibility. The Cronbach's alpha for this scale in this study was 0.944, which is a good reliability.

3.2.3 Measurement of suicidal tendencies

In this study, suicidal ideation was measured using the Self-rating Idea of Suicide Scale (SIOSS) developed by Xia Chaoyun et al. (Xia Chaoyun et al., 2007). The scale consists of 26 questions. The

scale consists of 26 questions and is scored as "yes" and "no", with "yes" scoring 2 points and "no" scoring 1 point. "The higher the total score, the higher the suicidal tendency. The Cronbach's alpha of the scale in this study was 0.836, which is a good reliability.

3.3. Data Statistics

In this study, SPSS 24.0 was used for descriptive statistics and correlation analysis of the data, and Process 3.0 was used for mediation effect analysis.

4. Analysis of results

4.1. Common method bias test

Using Harman's one-way test for common method bias, a total of 10 factors had an eigenroot greater than 1, and the first factor explained 38.804 per cent of the total variance, which is less than 40 per cent, suggesting that the data in this study do not suffer from serious common method bias.

4.2. Descriptive statistics of social exclusion, suicidal tendencies, psychological flexibility

Descriptive statistics were performed for social exclusion, suicidal ideation, and psychological flexibility (cognitive fusion and experiential avoidance dimensions), and the results of the descriptive statistics are shown in Table 1.

Table 1. Descriptive statistics of social exclusion, suicidal tendencies, psychological flexibility

variant	minimum and maximum values	average value	standard deviation
social exclusion	1.000~5.000	2.528	1.003
suicidal ideation	1.000~1.920	1.421	0.209
cognitive fusion	1.000~7.000	3.923	1.413
empirical avoidance	1.000~7.000	3.912	1.482

Note: Sample size is 242.

4.3. Correlation analysis between social exclusion, suicidal ideation, psychological flexibility

Pearson correlation analyses were conducted on the two dimensions of social exclusion, suicidal ideation, and psychological flexibility (cognitive fusion and experiential avoidance), and the results of the analyses are presented in Table 2. The results indicate that social exclusion, suicidal ideation, and the two dimensions of psychological flexibility (cognitive fusion and experiential avoidance), both of the four variables were significantly positively correlated with each other, and that exploration of the mediating effect could be pursued.

Table 2. Correlation analysis between social exclusion, suicidal ideation, psychological flexibility

variant	social exclusion	suicidal ideation	cognitive fusion	empirical avoidance
social exclusion	1			
suicidal ideation	0.453**	1		
cognitive fusion	0.776**	0.505**	1	
empirical avoidance	0.768**	0.534**	0.896**	1

Note: Sample size is 242. *p<0.05, **p<0.01.

4.4. Analysis of the mediating effect of psychological flexibility between social exclusion and suicidal ideation

Using gender and age as control variables, social exclusion as the independent variable, suicidal ideation as the dependent variable, and the two dimensions of psychological flexibility (cognitive fusion and experiential avoidance) as mediator variables, respectively, mediation effect analyses were

conducted. The results of the mediation model test are shown in Table 3, and the results of the mediation effect analysis are shown in Table 4.

The results of the mediation model test showed that the positive effects of the three paths of social exclusion → suicidal ideation ($\beta=0.475$, $t=7.863$, $p=0.000$), social exclusion → cognitive fusion ($\beta=0.812$, $t=19.566$, $p=0.000$), and cognitive fusion → suicidal ideation ($\beta=0.392$, $t=4.303$, $p=0.000$) were all significant; The positive effects of the three paths of social exclusion → suicidal ideation ($\beta=0.475$, $t=7.863$, $p=0.000$), social exclusion → experiential avoidance ($\beta=0.789$, $t=18.444$, $p=0.000$), and experiential avoidance → suicidal ideation ($\beta=0.455$, $t=5.249$, $p=0.000$) were all significant as well.

The results of the mediation effect analysis showed that the total effect of social exclusion on suicidal ideation was significant ($\beta=0.475$, 95% CI=[0.356-0.594]) when the cognitive fusion dimension of psychological flexibility was used as the mediator variable, where the direct effect of social exclusion on suicidal ideation was insignificant ($\beta=0.157$, 95% CI=[-0.029-0.342]) and the indirect effect was significant ($\beta=0.318$, 95% CI=[0.159~0.474]), suggesting that cognitive fusion plays a fully mediating role between social exclusion and suicidal ideation. When the empirical avoidance dimension of psychological flexibility was used as a mediator variable, the total effect of social exclusion on suicidal ideation was significant ($\beta = 0.475$, 95% CI = [0.356 to 0.594]), where the direct effect of social exclusion on suicidal ideation was not significant ($\beta = 0.115$, 95% CI = [-0.061 to 0.291]) and the indirect effect was significant ($\beta = 0.360$, the 95% CI = [0.204 to 0.520]), suggesting that experiential avoidance acts as a full mediator between social exclusion and suicidal ideation.

Table 3. Analysis of the mediating effect of psychological flexibility between social exclusion and suicidal ideation

regression equation		goodness-of-fit indicator				Significance of coefficients		
outcome variable	predictor variable	R	R-sq	F	p	β	t	p
suicidal ideation	social exclusion	0.459	0.210	21.128	0.000	0.475	7.863	0.000
cognitive fusion	social exclusion	0.786	0.618	128.129	0.000	0.812	19.566	0.000
suicidal ideation	social exclusion	0.517	0.268	21.642	0.000	0.157	1.665	0.097
	cognitive fusion					0.392	4.303	0.000
suicidal ideation	social exclusion	0.459	0.210	21.128	0.000	0.475	7.863	0.000
empirical avoidance	social exclusion	0.770	0.593	115.711	0.000	0.789	18.444	0.000
suicidal ideation	social exclusion	0.541	0.293	24.502	0.000	0.115	0.292	0.198
	empirical avoidance					0.455	5.249	0.000

Note: Sample size is 242.

Table 4. Analysis of the mediating effect of psychological flexibility between social exclusion and suicidal ideation

mediator variable	type of effect	β	t	p	LLCI	ULCI
cognitive fusion	total effect	0.475	7.863	0.000	0.356	0.594
	direct effect	0.157	1.665	0.097	-0.029	0.342
	indirect effect	0.318			0.159	0.474
empirical avoidance	total effect	0.475	7.863	0.000	0.356	0.594
	direct effect	0.115	1.292	0.198	-0.061	0.291
	indirect effect	0.360			0.204	0.520

Note: Sample size is 242.

5. Discussion

The results of this study indicate that social exclusion has a positive effect on suicidal ideation after controlling for age and gender variables, which is in line with the hypotheses of this study and consistent with the findings of previous studies (Chen, H. et al. 2020; Li, J. Y. & Fong, M.S., 2022; Liu, Chih-Hung & Zhang, Shanshan, 2023; Wang, H. H., et al. 2023; O'Connor & Kirtley, 2018; Tucker & Wingate, 2014; Wang et al. 2022), a finding that corroborates the interpersonal theory of suicide, which states that poor interpersonal status contributes significantly to an individual's suicidal ideation, and that suicidal ideation occurs when an individual feels that he or she is a burden to those around them or is unable to satisfy the need to form a bond with others (Joiner, T., 2005). The college student population is one that has just broken away from the high school environment and into a new environment that requires relative independence. And in such an environment where various problems need to be solved independently, interpersonal support is one of the more important influences on the physical and mental health of the college student population (He et al., 2019; Li Xu et al., 2016). Therefore, the lack of a sense of support due to social exclusion can easily provoke depression, anxiety, stress, and other negative emotions closely related to suicide in college student groups, increasing the probability of suicidal tendencies. On the contrary, college student groups with relatively high perceived social support have a much lower probability of developing suicidal tendencies as well as other psychological problems (He et al., 2019).

The present study also found that both dimensions of psychological flexibility play a fully mediating role between social exclusion and suicidal ideation, i.e., social exclusion positively affects suicidal ideation mainly by reducing psychological flexibility. Previous studies have shown that psychological flexibility is an important regulatory capacity for maintaining people's mental health (Xinyi Hu & Yinghe Chen, 2020; Jingyi Yan et al. 2022; Yingbo Zhang & Bao Liu, 2019), and our findings further suggest that psychological flexibility is not entirely determined by individual traits, and that the level of psychological flexibility can be influenced by the social environment. Many cases of psychological flexibility being changed through interventions or reduced in negative environments have also been found in previous studies (Xinyi Hu & Yinghe Chen, 2020; Yang Xiao et al., 2023). It can be seen that negative social relationships can lead to the loss of good psychological regulation in the college student population, resulting in suicidal tendencies, and psychological flexibility is an important mechanism of action between social exclusion and suicidal tendencies.

This study has good theoretical and practical significance. In terms of theoretical significance, we explored the mechanism of social exclusion on suicidal tendency and improved the relevant theoretical framework. In terms of practical significance, we found that psychological flexibility plays an important role in bridging the gap between social exclusion and suicidal ideation, and the interventions of psychological flexibility have been widely explored (Yang et al., 2023), and the discovery of this mediator relationship can be applied to improve the negative effects of social exclusion on college students.

References

- [1] The 2022 National Blue Book of Depression . People's Daily (2022).
- [2] Jing Cao, Yang Ji & Zhuohong Zhu. (2013). Reliability and validity of the Acceptance and Action Questionnaire (AAQ), second edition, Chinese version, for college students. *Chinese Journal of Mental Health*, 27 (11), 873-877.
- [3] Chuanxuan Chao, et al. (2014). The relationship between water culture identity, psychological resilience, and suicidal ideation among college students. *Health Medicine Research and Practice*, 11 (4), 9-11+16.
- [4] Chen, Y. Li, Yunduan Li & CuiyingFan. (2020). The effects of cyberbullying on non-suicidal self-injury: the chain-mediated effects of social exclusion and negative emotions. *Chinese Special Education*, 1, 73-78.

- [5] Yanhong Chen, Ying Zhao, Yanmei Duan, Xiaoyu Bai, et al. (2019). Reliability and validity analysis of the Adolescent Avoidance and Integration Questionnaire (short version). *Chinese Journal of Clinical Psychology*, 27 (6), 1192-1195+1114. <https://doi.org/10.16128/j.cnki.1005-3611.2019.06.023>.
- [6] Jianzheng Du & Bingli Xia. (2008). Social exclusion in psychological perspective. *Advances in Psychological Science*, 6, 981-986.
- [7] Zhiqiang He, Xiaoya Sun, Liqun Wang, et al. (2019). Correlation between social support and negative emotional suicidal behaviour among college students. *China School Health*, 40 (5), 704-706+711. <https://doi.org/10.16835/j.cnki.1000-9817.2019.05.017>.
- [8] Xinyi Hu, & Yinghe Chen. (2020). Effects of perceived epidemic stress and psychological flexibility on depression among college students: a moderated mediating role. *Chinese Journal of Clinical Psychology*, 28 (4), 739-742. <https://doi.org/10.16128/j.cnki.1005-3611.2020.04.018>.
- [9] Tianyu Lei, Zhenghua Tang, T. Wu, et al. (2019). The effects of social factors on college students' psychological status - the mediating role of psychological flexibility. *Psychology Monthly*, 14 (4), 14-17. <https://doi.org/10.19738/j.cnki.psy.2019.04.006>.
- [10] Jingyan Li & Maosheng Fang. (2022). Borderline personality tendency and suicide risk among college students: the mediating role of social exclusion and insomnia and gender differences. *Chinese Journal of Health Psychology*, 30 (4), 615-620. <https://doi.org/10.13342/j.cnki.cjhp.2022.04.027>.
- [11] X. Li, Hanyu Zheng & Q. Lu. (2016). Analysis of suicidal ideation and its influencing factors among college students. *Chinese Public Health*, 32 (3), 359-362.
- [12] Zhihong Liu & Shanshan Zhang. (2023). The relationship between social exclusion and suicidal ideation in adolescents: a moderated two-path model. *Journal of Educational Biology*, 11 (5), 373-378+383.
- [13] Xiaoli Qu. (2013). An experimental study of "psychological resilience training" in intervening college students' suicidal behaviours. *Journal of Donghua University of Science and Technology (Social Science Edition)*, 32 (2), 181-185.
- [14] World Health Organisation. (2021, June 17). [World Health Organisation]. Suicide. <https://www.who.int/zh/news-room/fact-sheets/detail/suicide>.
- [15] B.Y. Su, S.L. Kuo, B.R. Hsieh, et al. (2024). Measures of potential suicide risk among college students: A person-centred analysis perspective. *Psychological Development and Education*, 4, 572-588. <https://doi.org/10.16187/j.cnki.issn1001-4918.2024.04.12>.
- [16] Hanqing Wang, Ping Yu, Xinyan Zhao, et al. (2023). Effects of social exclusion on non-suicidal self-injurious behaviours of college students: a moderated mediation model. *Chinese Journal of Health Psychology*, 31 (12), 1859-1864. <https://doi.org/10.13342/j.cnki.cjhp.2023.12.019>.
- [17] Wen, Z.H. Cai, C.Y. Wan, et al. (2023). Correlation analysis of psychological resilience of family members of depressed patients with their personality traits and social support. *International Journal of Psychiatry*, 50 (5), 1194-1197+1215. <https://doi.org/10.13479/j.cnki.jip.2023.05.069>.
- [18] Huijun Wu, Shuyue Zhang & Yuqian Zeng. (2013). Development and reliability testing of a social exclusion questionnaire for university students. *Chinese Journal of Health Psychology*, 21 (12), 1829-1831. <https://doi.org/10.13342/j.cnki.cjhp.2013.12.012>.
- [19] Zhaoyun Xia, Dongbo Wang, Xudong He, et al. (2007). Application of the Self-Rating Scale for Suicidal Ideation in College Students. *Chinese Journal of Psychiatry*, 40 (2), 94.
- [20] Cold violence on campus, pain to the heart can not be healed - China Youth Online. (2017, July 23). https://news.cyol.com/content/2017-07/23/content_16324927.htm.
- [21] Jingyi Yan, Qi Sun, Xueqian Zhang, et al. (2022). Effects of family closeness and psychological flexibility on depression in adolescents. *Psychology Monthly*, 17 (18), 5-7. <https://doi.org/10.19738/j.cnki.psy.2022.18.002>.
- [22] Jia-Ming Yang, Jia-Yu Zhao, Wen-Siu Luo, et al. (2023). Effects of stressors and stress responses on daily life of college students with migraine. *Sichuan Mental Health*, 36 (6), 527-531.
- [23] Xiao Yang, Ying Cao & Cheng Jiang. (2023). Effective mechanisms of psychological flexibility in preventing and intervening college students' mental health problems. *Journal of Shanxi Energy College*, 36 (5), 26-28.

- [24] Qi Zhang, Shujuan Wang & Zhuo Hong Zhu. (2012). A psychopathological model and treatment model of acceptance and commitment therapy. *Chinese Journal of Mental Health*, 26 (5), 377-381.
- [25] W.C. Zhang, Y. Ji, X. Li, et al.. (2014). Reliability analysis of the Chinese version of the Cognitive Fusion Questionnaire. *Chinese Journal of Mental Health*, 28 (1), 40-44.
- [26] Y.B. Zhang & B. Liu. (2019). A study on the correlation between mental health and psychological flexibility among college students. *China Health Statistics*, 36 (2), 252-254.
- [27] Z.M. Zhang & L. Lin. (2023). The relationship between psychological flexibility and suicidal ideation in depressed patients: the mediating effect of perceived social support. *Journal of Southeast University (Medical Edition)*, 42 (5), 736-740.
- [28] A.M. Zheng, T.N. Chen, T.T. Zhu, et al. (2012). Development and Reliability Test of Suicidal Tendency Questionnaire for College Students. *Chinese Journal of Clinical Psychology*, 20 (6), 756-758.
- [29] Arslan, G. (2020). Corrigendum to “Mediating role of the self-esteem and resilience in the association between social exclusion and life satisfaction among adolescents” [Personality and Individual Differences 51 (2019) 109514]. *Personality and Individual Differences*, 161, 109955. <https://doi.org/10.1016/j.paid.2020.109955>.
- [30] Block, J. (1964). The Q-sort method in personality assessment and psychiatric research. <https://www.semanticscholar.org/paper/The-Q-sort-method-in-personality-assessment-and-Block/a1cd30b7bf01ed65f7f11d349f85776b1af97c87>.
- [31] Čekrljija, Đ., & Schermer, J. A. (2023). Being Flexible in Zuckerman’s Alternative Personality Space: Relationships Between Psychological Flexibility and the Alternative Five-Factor of Personality. *Journal of Individual Differences*, 1614-0001/a000416. <https://doi.org/10.1027/1614-0001/a000416>.
- [32] Ciarrochi, J., Bilich, L., & Godsel, C. (2010). Psychological flexibility as a mechanism of change in Acceptance and Commitment Therapy. *Assessing Mindfulness and Acceptance: Illuminating the Processes of Change*, (P51–76).
- [33] Joiner, T. (2005). Why people die by suicide. <https://psycnet.apa.org/record/2006-06716-000>.
- [34] Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30 (7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>.
- [35] Leary, & Mark, R. (1990). Responses to Social Exclusion: Social Anxiety, Jealousy, Loneliness, Depression, and Low Self-Esteem. *Journal of Social & Clinical Psychology*, 9 (2), 221–229. <https://doi.org/10.1521/jscp.1990.9.2.221>.
- [36] Lök, N., & Bademli, K. (2021). The Relationship Between the Perceived Social Support and Psychological Resilience in Caregivers of Patients with Schizophrenia. *Community Mental Health Journal*, 57 (2), 387–391. <https://doi.org/10.1007/s10597-020-00665-w>.
- [37] McCracken, L. M. (2013). Committed action: An application of the psychological flexibility model to activity patterns in chronic pain. *The Journal of Pain*, 14 (8), 828–835. <https://doi.org/10.1016/j.jpain.2013.02.009>.
- [38] Nezelek, J. B., Wesselmann, E. D., Wheeler, L., & Williams, K. D. (2015). Ostracism in Everyday Life: The Effects of Ostracism on Those Who Ostracize. *The Journal of Social Psychology*, 155 (5), 432–451. <https://doi.org/10.1080/00224545.2015.1062351>.
- [39] Niu, G.-F., Sun, X.-J., Tian, Y., Fan, C.-Y., & Zhou, Z.-K. (2016). Resilience moderates the relationship between ostracism and depression among Chinese adolescents. *Personality and Individual Differences*, 99, 77–80. <https://doi.org/10.1016/j.paid.2016.04.059>.
- [40] O’Connor, R. C., & Kirtley, O. J. (2018). The integrated motivational-volitional model of suicidal behaviour. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 373 (1754), 20170268. <https://doi.org/10.1098/rstb.2017.0268>.
- [41] Tucker, R. P., & Wingate, L. R. (2014). Basic need satisfaction and suicidal ideation: A self-determination perspective on interpersonal suicide risk and suicidal thinking. *Archives of Suicide Research: Official Journal of the International Academy for Suicide Research*, 18 (3), 282–294. <https://doi.org/10.1080/13811118.2013.824839>.
- [42] Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can’t join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, 81 (6), 1058–1069. <https://doi.org/10.1037/0022-3514.81.6.1058>.

- [43] Waldeck, D., Tyndall, I., & Chmiel, N. (2015). Resilience to Ostracism: A Qualitative Inquiry. *The Qualitative Report*, 20 (10), 1646–1670.
- [44] Wang, P., Gao, P., & Yu, Z. (2022). The role of social exclusion in the formation of suicidal ideation among the elderly in rural pension institutions. *Frontiers in Psychology*, 13, 1019898. <https://doi.org/10.3389/fpsyg.2022.1019898>.
- [45] Yasinski, C., Hayes, A. M., Ready, C. B., Abel, A., Görg, N., & Kuyken, W. (2020). Processes of change in cognitive behavioral therapy for treatment-resistant depression: Psychological flexibility, rumination, avoidance, and emotional processing. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 30 (8), 983–997. <https://doi.org/10.1080/10503307.2019.1699972>.