



Category: Arts and Humanities

SYSTEMATIC REVIEW

A Systematic review of the association between emotional intelligence and suicidal ideation in the english and chinese literature

Una revisión sistemática de la asociación entre inteligencia emocional e ideación suicida en la literatura inglesa y china

Xiaochang Zho¹  , Aqeel Khan²  , Ibnatul Jalilah Yusof³  

¹Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia (UTM), Johor, Malaysia.

²Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia (UTM), Johor, Malaysia.

³Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia (UTM), Johor, Malaysia.

Cite as: Zhou X, Khan A, Jalilah Yusof I. A Systematic review of the association between emotional intelligence and suicidal ideation in the english and chinese literature. Salud, Ciencia y Tecnología - Serie de Conferencias. 2024; 3:913. <https://doi.org/10.56294/sctconf2024913>

Submitted: 09-02-2024

Revised: 28-04-2023

Accepted: 11-06-2024

Published: 12-06-2023

Editor: Dr. William Castillo-González 

ABSTRACT

Throughout history, suicide has presented a significant public health concern on a worldwide scale. Many research investigations have highlighted the harmful connection between emotional intelligence and thoughts of suicide. However, no published articles have systematically reviewed relevant research in China. The objective of this paper is to examine and assess literature concerning the correlation between emotional intelligence and thoughts of suicide within the last ten years. The review includes sources in both English and Chinese languages. Chinese and English databases were queried using keywords such as emotional intelligence, emotional competence, suicidal ideation, and suicidal thoughts. Three reviewers conducted individual assessments of titles, abstracts, and complete texts according to predefined eligibility criteria. Data synthesis involved the extraction and analysis of research methodologies and outcomes. Sixteen studies that met the eligibility criteria were included in this systematic review. These studies, published between 2013 and 2022, demonstrated good methodological quality. The Wong and Law Emotional Intelligence Scale (WLEIS) and Emotional Intelligence Scale (EIS) were frequently employed in these articles, with several studies suggesting that an individual's ability to manage emotions was closely linked to suicidal ideation. Additionally, emotional cognition and others' emotional management abilities were predictive of suicidal ideation to some extent. The findings highlight a notably strong negative correlation between emotional intelligence and thoughts of suicide. This indicates that emotional intelligence could serve as a fundamental component for future investigations into interventions for suicidal ideation.

Keywords: Emotional Intelligence; Suicide; Suicidal Ideation; Systematic Review.

RESUMEN

A lo largo de la historia, el suicidio ha supuesto un importante problema de salud pública a escala mundial. Numerosas investigaciones han puesto de relieve la nociva conexión entre la inteligencia emocional y los pensamientos suicidas. Sin embargo, ningún artículo publicado ha revisado sistemáticamente las investigaciones pertinentes en China. El objetivo de este trabajo es examinar y evaluar la literatura relativa a la correlación entre la inteligencia emocional y los pensamientos suicidas en los últimos diez años. La revisión incluye fuentes en inglés y chino. Se consultaron bases de datos chinas e inglesas utilizando palabras clave como inteligencia emocional, competencia emocional, ideación suicida y pensamientos suicidas. Tres revisores realizaron evaluaciones individuales de los títulos, resúmenes y textos completos según criterios de elegibilidad predefinidos. La síntesis de datos incluyó la extracción y el análisis de las metodologías de

investigación y los resultados. Dieciséis estudios que cumplieron los criterios de elegibilidad se incluyeron en esta revisión sistemática. Estos estudios, publicados entre 2013 y 2022, demostraron una buena calidad metodológica. La Escala de Inteligencia Emocional de Wong y Law (WLEIS) y la Escala de Inteligencia Emocional (EIS) se emplearon con frecuencia en estos artículos, y varios estudios sugirieron que la capacidad de un individuo para manejar las emociones estaba estrechamente relacionada con la ideación suicida. Además, la cognición emocional y las capacidades de gestión emocional de los demás predecían en cierta medida la ideación suicida. Los hallazgos destacan una correlación negativa notablemente fuerte entre la inteligencia emocional y los pensamientos suicidas. Esto indica que la inteligencia emocional podría servir como componente fundamental para futuras investigaciones sobre intervenciones para la ideación suicida.

Palabras clave: Inteligencia Emocional; Suicidio; Ideación Suicida; Revisión Sistemática.

INTRODUCTION

Throughout history, suicide has been a considerable public health issue globally. In 2019, the World Health Organization reported that more than 700 000 individuals died by suicide. China accounted for approximately 116 324 of these suicides, constituting roughly 16 % of the global total.^(1,2,3)

The onset of all suicidal behavior typically stems from suicidal ideation. However, it's important to note that while individuals who attempt suicide likely experienced suicidal ideation, not everyone who entertains such thoughts will act upon them. Suicidal ideation serves as an important indicator for assessing suicide risk and is a significant predictor of potential suicidal behavior.^(4,5,6) Understanding and researching suicidal ideation is crucial for comprehending and addressing suicidal behavior. It's important to note that a greater number of individuals experience suicidal thoughts compared to those who actually commit suicide.⁽¹⁾ However, for individuals who engage in suicidal behavior, experiencing suicidal ideation significantly heightens the risk of completing suicide.⁽⁷⁾

Multiple academic studies have affirmed the inverse relationship between emotional intelligence and suicidal ideation.^(4,8,9,10) In general, higher levels of emotional intelligence tend to correlate with decreased levels of suicidal ideation, whereas lower levels of emotional intelligence are associated with higher levels of suicidal ideation.^(6,7,11,12,13,14) Emotional intelligence, which encompasses the capacity to regulate one's emotions in social situations, plays a pivotal role in mitigating the onset and advancement of suicidal ideation. Individuals who are well-adjusted within society, family, school, or the workplace generally exhibit a lower risk of suicide even when confronted with significant stress.^(15,16)

The objective of this paper is to conduct a systematic review and comprehensive analysis of existing research investigating the relationship between emotional intelligence and suicidal ideation across Chinese and English literature sources. This review seeks to evaluate the present status of research in this area and pinpoint any inherent limitations in the existing studies. The objective is to outline new pathways for future research endeavors.

MATERIALS AND METHOD

Design

This study is a systematic review.

Search Strategy

In this paper, three of the most extensive and frequently utilized Chinese databases were selected, namely CNKI, Wanfang, and CQVIP, along with four English databases, namely Web of Science, Scopus, ScienceDirect, and PubMed. These databases were searched using keywords such as emotional intelligence, emotional competence, suicidal ideation, and suicidal thoughts.

Selection Criteria

The literature inclusion criteria must meet the following conditions: 1. The literature should be empirical research and serve as a primary source. 2. The measurement tool used should be clearly stated. 3. The article should be written in either Chinese or English. 4. The article should encompass an analysis and elucidation of the relationship between emotional intelligence and suicidal ideation.

The article exclusion criteria are as follows: 1. Literature that is not based on primary sources. 2. Articles not written in Chinese or English. 3. Lack of clear indication or explanation of the data or measurement tools used.

Data Extraction and Synthesis

One researcher initially completed the extraction and coding of the article data independently. Subsequently, the second researcher verified the original text. In cases where coding discrepancies were identified compared to the original article, corrections were made after discussion between the two researchers to ensure accurate coding of the literature. The coding process encompassed various aspects including authorship, year of publication, sampling area, sampling population, sample size, measurement tools, and data results. Sample characteristics and data outcomes were reported using a synthesized statement.

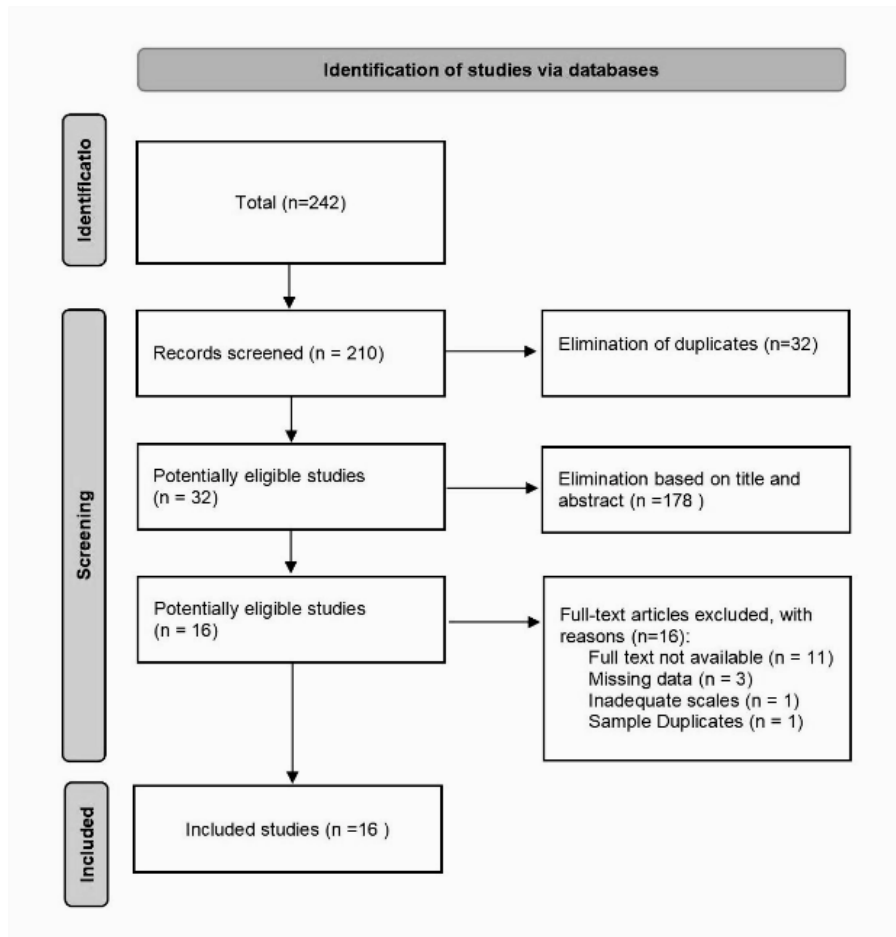


Figure 1. PRISMA Flow Diagram

RESULTS

Study Selection

An electronic database search produced 242 records, out of which 32 duplicates were identified and removed. Following this, 210 records were screened based on title and abstract, resulting in the exclusion of 178 irrelevant records. This left 32 records for full-text review. Upon full-text assessment, 16 records were excluded. Reasons for exclusion included 11 records with unavailable full text, 3 with missing data, 1 showing inappropriate scale usage, and 1 representing a duplicate sample. Ultimately, 16 records fulfilled the criteria for inclusion in the study. The screening process is illustrated in figure 1.

Study Characteristics

The majority of the studies were conducted in China (n=4) and Spain (n=7), employing a cross-sectional approach. Sample sizes ranged from 65 to 2796. Three studies involved samples of individuals with depression, while one study focused on unemployed individuals. Different instruments were utilized to evaluate emotional intelligence and suicidal ideation, with the Emotional Intelligence Scale (EIS) used in three studies, the Wong and Law Emotional Intelligence Scale (WLEIS) in six studies, and the Suicidal Behavior Questionnaire-Revised (SBQ-R) in four studies.

Results from Selected Studies

Research Involving Depressed Patients

Two of the three studies with samples of depressed patients examined emotional intelligence as either a mediator or moderator variable, while the third article explored the interaction among emotional intelligence, dysphoria, and suicidal ideation in depressed patients. Data from all three studies consistently demonstrate an inverse correlation between emotional intelligence and suicidal ideation.

According to a 2015 study,⁽²⁾ emotional intelligence among depressed individuals mitigates suicidal thoughts and behaviors by regulating cognition. In their exploration of emotional intelligence as a mediator between rumination and suicidal ideation, the authors classified rumination into two factors: contemplation and reflection. They found that these factors, when harmful, tend to exacerbate suicidal ideation in individuals with low emotional intelligence. Abdollahi⁽¹⁾ investigated the moderating influence of emotional intelligence on the relationship between pleasure deprivation and suicidal ideation among individuals experiencing depression. Their findings uncovered a notable connection between pleasure deprivation and suicidal ideation, especially among individuals with lower emotional intelligence. Depressed adults with higher emotional intelligence displayed lower tendencies towards suicidal ideation, contrasting with those with lower emotional intelligence who showed higher vulnerability. Individuals with elevated levels of pleasure deficit disorder and diminished emotional intelligence exhibited heightened suicidal ideation.

The negative correlation identified between emotional intelligence and suicidal ideation implies that individuals with high emotional intelligence possess the ability to comprehend, endure, regulate, mend, and communicate emotions in a constructive manner. Consequently, this diminishes the probability of experiencing suicidal ideation. Mohamed⁽¹⁷⁾ explored the connection between emotional intelligence, dysphoria, and suicidal ideation among depressed patients. Their findings revealed that dysphoria notably contributed to suicidal ideation, particularly among individuals struggling with recognizing and articulating emotions. Additionally, the majority of depressed patients in their study reported experiencing dysphoria and demonstrated low levels of emotional intelligence, with 89,2 % exhibiting deficiencies in emotional intelligence. This underscores the increased vulnerability to suicidal ideation among depressed individuals with low emotional intelligence.

Research Involving the General Population

In the remaining 13 studies, the population consisted of non-depressed individuals, which encompassed six studies focusing on adolescents,^(4,7,9,14,18,19,20) five studies involving college students,^(3,5,13,16,21) and three studies involving adults.^(10,11,16,18) One of the adult studies specifically targeted unemployed individuals.⁽¹⁰⁾

In studies involving adolescents, all inquiries detected a negative correlation between emotional intelligence and suicidal ideation. Four studies offered correlation coefficients between emotional intelligence and suicidal ideation, with correlation coefficients (r) of -0,177, -0,11, -0,26, and -0,26, all of which were significant at $p \leq 0,01$.^(4,7,14,19,22,23,24) Among the studies focusing on adolescents, two employed the Emotional Intelligence Scale (EIS), which assesses emotional intelligence across four dimensions: emotion cognition, self-emotion regulation, other's emotion regulation, and use of emotion.^(7,14)

The findings from three studies indicate that adolescents with high emotional intelligence exhibit effective understanding and regulation of their emotions, particularly when encountering negative feelings, thereby fostering healthier emotions and thought patterns and reducing suicidal ideation. Conversely, adolescents with low emotional intelligence display less effective emotional regulation and are more susceptible to negative emotions, thereby increasing the likelihood of suicidal ideation.^(4,14,20)

All four Spanish studies that explored emotional intelligence utilized the Wong and Law Emotional Intelligence Scale (WLEIS). Additionally, two studies employed the Future Suicide Ideation Inventory (FSII) and the remaining two used the Suicidal Behaviors Questionnaire-Revised (SBQ-R) to measure suicidal ideation.^(4,9,19,20) In a cross-sectional and prospective investigation,⁽¹⁹⁾ the study evaluated the impact of two adolescent cognitive emotion regulation strategies on the association between emotional intelligence and suicidal ideation, proposing that adolescents with high emotional intelligence may adopt more adaptive strategies to mitigate suicidal ideation. Conversely,⁽⁹⁾ conducted a study to investigate the relationship between self-esteem, emotional intelligence, and suicidal ideation among adolescents who were victims of cyberbullying. Their results suggested that adolescent victims with higher levels of emotional intelligence reported higher self-esteem and lower levels of suicidal ideation.

Emotional intelligence emerged as a notable predictor of suicidal ideation across five studies involving college students.^(3,5,13,16,21) utilized cross-sectional and prospective research designs to explore self-reported emotional intelligence and suicide risk in adult and college student samples, respectively. Their findings indicate that self-reported emotional intelligence functions as a protective factor against suicidal ideation and behaviors. Similarly,⁽²¹⁾ demonstrated that factors such as resilience and interpersonal trait emotional intelligence were significantly lower among college students reporting lifelong suicidal ideation.

In all three studies involving adult samples, individuals with low emotional intelligence exhibited a higher

likelihood of experiencing suicidal ideation compared to those with high emotional intelligence.^(9,16,18) One study focusing on unemployed adults concluded that lower levels of life satisfaction and well-being were associated with increased suicidal behavior, and that emotional intelligence moderated this relationship. The study suggested that interventions aimed at promoting emotional competence to enhance well-being could help prevent suicidal ideation.⁽⁹⁾ Merida⁽¹⁶⁾ discovered a significant negative correlation between self-reported emotional intelligence and suicidal ideation. This negative correlation remained significant even when heartache was taken into account as a mediating factor.

DISCUSSION

This systematic literature review examined the correlation between emotional intelligence and suicidal ideation, covering 16 articles published within the last decade. While there have been previous systematic literature reviews on emotional intelligence and suicidal behavior [8], this paper distinguishes itself by including articles sourced from the Chinese literature database, along with nine more recent articles published within the last five years.

The findings of the review suggest a uniform negative relationship between emotional intelligence and suicidal ideation, regardless of the measurement scales used, including EIS, WLEIS, BSSI, SBQ-R, and others. The WLEIS divides emotional intelligence into self-emotion appraisal (SEA), other-emotion appraisal (OEA), use of emotion (UOE), and regulation of emotion (ROE). Among the six studies employing the WLEIS scale, two studies emphasized ROE as the most strongly linked factor to suicide risk [9,20]. Similarly, the EIS, which is divided into emotional cognition, self-emotion regulation, others' emotion regulation, and use of emotion subscales, displayed consistent trends. All three studies utilizing the EIS indicated that self-emotion regulation was a noteworthy predictor of suicidal ideation, with emotion cognition and others' emotion regulation also strongly associated with suicidal ideation.

The findings of this systematic literature review align with prior research, suggesting that emotional intelligence serves as a substantial predictor of suicidal ideation and exhibits a negative correlation with such ideation. Emotional intelligence predicts suicidal ideation because individuals with elevated emotional intelligence often exhibit advanced emotional cognition, enabling them to interpret negative life events positively. Moreover, their adept self-regulation skills help mitigate suicidal ideation by effectively managing their emotions and cognitions. Conversely, emotional intelligence can enhance an individual's feeling of wellness, bolster self-esteem, and foster psychological resilience.

CONCLUSION

Upon summarizing and reviewing the literature, several limitations emerged. Firstly, the majority of articles relied on cross-sectional research methods, indicating a dearth of longitudinal and in-depth investigations into the relationship between emotional intelligence and suicidal ideation. Secondly, the diverse range of measurement instruments utilized across the cross-sectional studies resulted in inconsistencies regarding what was being measured. Thirdly, studies with a predominant female sample may have inaccuracies in demographic data, potentially biasing test results. Lastly, while some studies explored emotional intelligence as a mediating or moderating variable on suicidal ideation, there was less exploration of potential variables influencing the correlation between emotional intelligence and suicidal ideation.

In future studies, employing longitudinal research methods can offer deeper insights into how changes in an individual's emotional intelligence development influence suicidal ideation over time. Furthermore, researchers can explore variables that might impact the relationship between emotional intelligence and suicidal ideation. Understanding these variables could facilitate the development of effective interventions aimed at preventing the onset and progression of suicidal ideation.

In conclusion, emotional intelligence, as an emerging field in psychology, holds significant promise for the prevention of suicidal ideation. This systematic review has synthesized the research on emotional intelligence and suicidal ideation over the past decade. It is hoped that future studies will address the limitations identified in this review and conduct more in-depth and accurate research on this relationship. Through such efforts, we can enhance comprehension of the significance of emotional intelligence in preventing suicidal ideation and develop more effective interventions in this crucial area of mental health.

REFERENCES

1. Abdollahi A, Hosseinian S, Rasuli R. Emotional intelligence moderates Anhedonia and suicidal ideation in depressed patients. *Psychological Reports*. 2020 Jun; 123(3):660-673. <https://doi.org/10.1177/0033294119833023>
2. Abdollahi A, Talib MA. Emotional intelligence as a mediator between rumination and suicidal ideation among depressed inpatients: The moderating role of suicidal history. *Psychiatry research*. 2015 Aug 30; 228(3): 591-597. <https://doi.org/10.1016/j.psychres.2015.05.046>

3. Aradilla-Herrero A, Tomás-Sábado J, Gómez-Benito J. Associations between emotional intelligence, depression and suicide risk in nursing students. *Nurse education today*. 2014 Apr 1; 34(4): 520-525. <https://doi.org/10.1016/j.nedt.2013.07.001>
4. Arrivillaga C, Rey L, Extremera N. Adolescents' problematic internet and smartphone use is related to suicide ideation: Does emotional intelligence make a difference?. *Computers in human behavior*. 2020 Sep 1; 110: 106375. <https://doi.org/10.1016/j.chb.2020.106375>
5. Bin Chen XL. Correlation analysis of suicidal ideation and mental health family characteristics among college students. *Chin J Sch Health*. 2013; 34(5): 614-616.
6. Chaudhry AK. Relationship Between Cyber Bullying Victimization and Suicidal Ideation: Emotional Intelligence as a Mediator. (Master). Northeast Normal University. 2021.
7. Cheng X, Zhang Y, Hu XB, Gong HL. Characteristics of High School Students Emotional Intelligence and Its Relationship with Suicidal Idea. *Educational Psychology*. 2013; 3: 202-203.
8. Domínguez-García E, Fernández-Berrocal P. The association between emotional intelligence and suicidal behavior: A systematic review. *Frontiers in psychology*. 2018 Nov 30; 9: 360917. <https://doi.org/10.3389/fpsyg.2018.02380>
9. Extremera N, Quintana-Orts C, Mérida-López S, Rey L. Cyberbullying victimization, self-esteem and suicidal ideation in adolescence: Does emotional intelligence play a buffering role?. *Frontiers in psychology*. 2018 Mar 22; 9: 335398. <https://doi.org/10.3389/fpsyg.2018.00367>
10. Extremera N, Rey L. Attenuating the negative impact of unemployment: The interactive effects of perceived emotional intelligence and well-being on suicide risk. *Plos one*. 2016 Sep 29; 11(9): e0163656. <https://doi.org/10.1371/journal.pone.0163656>
11. Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, Cargo M, Vedel I. Mixed Methods Appraisal Tool (MMAT), version 2018. Registration of Copyright (# 1148552), Canadian Intellectual Property Office, Industry Canada. Online]. [Accessed on 30/03/2021] [http://mixed metho dsapp raisa ltool public. pbwor ks. com](http://mixedmetho dsapp raisa ltool public. pbwor ks. com). 2018.
12. Klonsky ED, Saffer BY, Bryan CJ. Ideation-to-action theories of suicide: a conceptual and empirical update. *Current opinion in psychology*. 2018 Aug 1; 22: 38-43. <https://doi.org/10.1016/j.copsyc.2017.07.020>
13. Kwok SY. The moderating role of emotional competence in suicidal ideation among Chinese university students. *Journal of Advanced Nursing*. 2014 Apr; 70(4): 843-854. <https://doi.org/10.1111/jan.12246>
14. Liu ZH, Zhang SS, Wu JY. A study on the relationship between emotional intelligence and suicidal ideation among rural left-behind junior high school students. *Journal of Heilongjiang Institute of Teacher Development*. 2021; 40(3): 112-114.
15. May AM, Klonsky ED. What distinguishes suicide attempters from suicide ideators? A meta-analysis of potential factors. *Clinical Psychology: Science and Practice*. 2016 Mar; 23(1): 5-20.
16. Mérida-López S, Extremera N, Rey L. Understanding the links between self-report emotional intelligence and suicide risk: does psychological distress mediate this relationship across time and samples?. *Frontiers in Psychiatry*. 2018 May 8; 9: 332979.
17. Mohamed BE, Ahmed MG. Emotional intelligence, alexithymia and suicidal ideation among depressive patients. *Archives of Psychiatric Nursing*. 2022 Apr 1; 37: 33-38. <https://doi.org/10.1016/j.apnu.2021.12.002>
18. Obeid S, Haddad C, Fares K, Malaeb D, Sacre H, Akel M, Salameh P, Hallit S. Correlates of emotional intelligence among Lebanese adults: the role of depression, anxiety, suicidal ideation, alcohol use disorder, alexithymia and work fatigue. *BMC psychology*. 2021 Dec; 9: 1-2. <https://doi.org/10.1186/s40359-021-00525-6>
19. Quintana-Orts C, Mérida-López S, Rey L, Neto F, Extremera N. Untangling the emotional intelligence-

suicidal ideation connection: The role of cognitive emotion regulation strategies in adolescents. *Journal of clinical medicine*. 2020 Sep 26; 9(10): 3116. <https://doi.org/10.3390/jcm9103116>

20. Quintana-Orts C, Rey L, Mérida-López S, Extremera N. What bridges the gap between emotional intelligence and suicide risk in victims of bullying? A moderated mediation study. *Journal of Affective Disorders*. 2019; 245: 798-805. <https://doi.org/10.1016/j.jad.2018.11.030>

21. Sojer P, Kainbacher S, Hufner K, Freudenthaler H, Kemmler G, A Deisenhammer E. The association of intrapersonal trait emotional intelligence and resilience with suicidal ideation in university students. *Psychiatria Danubina*. 2021 Nov 22; 33(br 3): 298-305.

22. WHO, WHO. Suicide worldwide in 2019: global health estimates. 2021.

23. Wu R, Zhu H, Wang ZJ, Jiang CL. A large sample survey of suicide risk among university students in China. *BMC psychiatry*. 2021 Dec; 21: 1-9. <https://doi.org/10.1186/s12888-021-03480-z>

24. Zhang J, Wieczorek WF, Conwell Y, Tu XM. Psychological strains and youth suicide in rural China. *Social science & medicine*. 2011 Jun 1; 72(12): 2003-2010. <https://doi.org/10.1016/j.socscimed.2011.03.048>

ACKNOWLEDGEMENT

The assistance provided by Associate Professor Dr. Aqeel Khan in the preparation of this article is greatly appreciated.

Researchers would like to thank to RMC, UTM number: Q.J130000.3053.04M76 for supporting in conducting research.

FINANCING

No financing for the article.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Xiaochang Zho, Aqeel Khan.

Project Management: Aqeel Khan, Ibnatul Jalilah Yusof.

Writing - Original Draft: Xiaochang Zho, Aqeel Khan.

Writing - Proofreading and Editing: Xiaochang Zho, Aqeel Khan.