



Research Article

# Development of the Indonesian Suicidal Behavior Scale

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## Abstract

Suicide is a mental health phenomenon throughout the world. Measuring suicidal behavior requires instruments with strong psychometric properties. There are limitations to the scale of suicidal behavior for the Indonesian context. Therefore, this research was conducted to develop the Indonesian Suicidal Behavior Scale (ISBS), a valid and reliable scale to measure the suicidal behavior of Indonesian adults. The development of the scale uses 3 dimensions of suicidal behavior, namely depression, hopelessness, and the capability to attempt suicide. 27 items were developed based on these three dimensions. A total of 764 respondents participated in this study. Evidence of internal structure validity, as conducted by confirmatory factor analysis, confirmed three factors that fit the data. Evidence of the association's validity was supported by the correlation between the ISBS score and the PHQ-9. Cronbach's Alpha reliability for the three dimensions ranged from .897- .944. Based on the results of this study, the ISBS can be considered a valid instrument for measuring suicidal behavior tendencies for Indonesian adults.

*Keywords:* suicidal behavior; scale; development; validation; reliability.

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Suicide is a mental health problem throughout the world. [World Health Organization \(2023\)](#) reveals that more than 700,000 people die by suicide every day. According to the Indonesian Suicide Prevention Association, in 2018 there were 6,000 cases reported suicide attempts. Survey conducted by [Onie et al., \(2022\)](#) shows that the rate of unreported suicide cases in Indonesia is 859,10%. There are various factors that influence the underreporting of suicide data. Suicide is still considered a taboo topic, such as the stigma towards people who die by suicide and the bereaved families due to suicide ([Kurihara et al., 2009](#); [Valentina & Nurcahyo, 2023](#)), so that people concealed the cause of death of their family members.

[Crosby et all \(2011\)](#) defined suicide as self-directed violence, which is carried out intentionally against oneself. Many studies agree that the majority of people who conduct suicide experience mental illness, especially depression ([Brådvik, 2018](#); [Orsolini et al., 2020](#)). However, very few people with depressive disorders receive mental health services in Indonesia. Likewise, many people with suicidal behavior do not seek help because of the stigma ([Kučukalić & Kučukalić, 2017](#); [Prawira & Sukmaningrum, 2020](#); [Sheehan et al., 2018](#)). Consequently, people with depressive disorders, hopelessness or at risk of suicidal behavior are more likely to show recurrence suicidal behavior or repeated suicide attempts ([Bostwick et al., 2016](#); [Sher et al., 2017](#)). Therefore, it is very important to detect or measure suicidal behavior in the community to be able to find solutions to prevent the increase of suicidal behavior cases in society.

The tendency for suicidal behavior can be measured using a psychological scale. There are several scales that measure suicide that are widely used today such as The Columbia–Suicide Severity Rating Scale (C-SSRS) ([Posner et al., 2011](#)), the Suicidal Behaviors Questionnaire-Revised (SBQ-R) ([Osman et al., 2001](#)), and Scale for Suicide Ideation (SSI) developed by [Beck et all \(1979\)](#). When we searched study on suicidal behavior in Indonesia, there are still limited measuring tools for detecting suicidal behavior, which explored in the context of Indonesian adults. Several studies on suicidal behavior in Indonesia generally use measuring instruments adapted to Indonesian, such as Suicidal Ideation Questionnaire

(Adinda & Prastuti, 2021), The Suicidal Behaviors Questionnaire-Revised (Idham et al., 2019), and Scale of Public Attitude about Suicide (Purwaningsih et al., 2022). However, those studies did not report in detail the adaptation process and the psychometric properties of this measurement instrument in the context of Indonesian people.

The context of suicide can differ depending on culture (Colucci, 2013), so measurement tools need to be culturally appropriate. Research on suicidal behavior in the context of Indonesian society has been conducted by (Valentina, 2020, 2021) which found three dimensions that influence suicidal behavior, namely depression (characterized by withdrawal from social relations, thoughts of death, prolonged sadness, and loss of motivation to do activities that are usually enjoyed), hopelessness (which means negative statements of suicidal individuals about themselves, the world around them and the future), and the capability of lethal suicide attempt (which means that the individual is aware that one has knowledge about how to and the ability to conduct suicide). These findings underlined the research of the development of the Indonesian Suicide Behavior Scale. Therefore, our research aims to develop a valid and reliable suicidal behavior scale for Indonesians, which we named Indonesian Suicidal Behavior Scale (ISBS).

## Method

### Respondents

The number of the respondents who participated in this research was 764 adults from various regions in Indonesia. The criteria of the respondents were Indonesian citizens, at least 16 years old and were able to access Google forms. Table 1 shows the demographic characteristic of the respondents.

This research was an online survey using Google Form which is distributed through various platforms, such as WhatsApp groups, Facebook, Instagram, in the period November to December 2022. In this study, researchers gave a reward of IDR 20,000 in the form of credit vouchers to 250 participants using a drawing system.

**Table 1.***Demographic of the respondents (N= 64; M<sub>age</sub>= 22.7; SD<sub>age</sub>= 8.9)*

Variable	Category	Frequency (%)
Gender	Male	203 (27%)
	Female	561 (73%)
Level of education	High school students	52 (7%)
	College students	491 (64%)
	Bachelor degree	169 (22%)
	Post-graduate degree	52 (7%)
Marital status	Not married	612 (80%)
	Married	145 (19%)
	Widow/Widower	7 (1%)

## Measures

### The Indonesian Suicidal Behavior Scale (ISBS)

The development of the Indonesian Suicidal Behavior Scale follows the stages of test development in accordance with international guidelines for test development (Irwing & Hughes, 2018). The test development stages applied in this research include construct definition, planning, item development, scale construction, reliability, and validation.

At the item development stage, we develop items based on theoretical constructs that have been studied previously (Valentina, 2020, 2021). We developed a 27-item suicidal behavior scale consisting of 8 items for the depression dimension, 10 items for the hopelessness dimension, and 9 items for the capability of lethal suicide attempt dimension. The items of the ISBS describe situations experienced by individuals in the last 1 (one) month. The range of answer choices is from 0 to 3 which describes: 0 = never; 1 = sometimes (only a few days); 2 = often (experienced more than (1) week; 3 = always (experienced almost every day).

Reliability of the suicidal behavior scale was performed using internal consistency, based on the Cronbach Alpha coefficient. Meanwhile, the evidence of validity was obtained from internal structure validity and association validity with other measuring instruments.

### Patient Health Questionnaire (PHQ-9)

Patient Health Questionnaire-9 (PHQ-9) is a diagnostic instrument for measuring the severity of depression. Dian (2020) found the Cronbach's Alpha reliability of the PHQ-9 in Indonesian respondents was .885.

### Analysis

Confirmatory Factor Analysis (CFA) was performed to obtain the evidence of the internal structure validity of the ISBS. CFA was conducted to confirm that ISBS consists of 3 dimensions. The good fit model indicated by CFI, GFI, and TLI values more than .9, while the RMSEA value is close to .08 and SRMR is close to .06 (Hu & Bentler, 1999).

Pearson correlation was performed to determine the correlation between the suicidal behavior scale and the PHQ-9. We hypothesized that the ISBS scores would have a positive correlation with the PHQ-9 scores.

Reliability was performed using Cronbach Alpha coefficient. The expected reliability of the ISBS is .8. Statistical analysis was performed using SPSS and Amos version 24.

## Results

### Confirmatory Factor Analysis

The factor structure of the ISBS was tested to confirm the three dimensions. The model produced CFI=.931, TLI=.903, while RMSEA=.078 and SRMR=.047. The result confirm that the model fits the data. The factor loadings for the items of the ISBS ranged from .617 to .868. All of the factor loadings were significant at  $p < .01$ .

### Correlation Analysis

We conducted a correlation test between the PHQ-9 and each dimension of the ISBS. The results showed a positive correlation between each dimension of the ISBS and the PHQ-9. The correlation ranged from .844 to .802, all correlation coefficients were significant at  $p < .01$  (see Table 2).

### Reliability

The reliability analysis was performed based on Cronbach Alpha for each dimension of ISBS. The Cronbach's Alpha coefficient for the depression, hopelessness, and the capability of lethal suicide attempt dimension were .897, .944, .924 respectively (see Table 2).

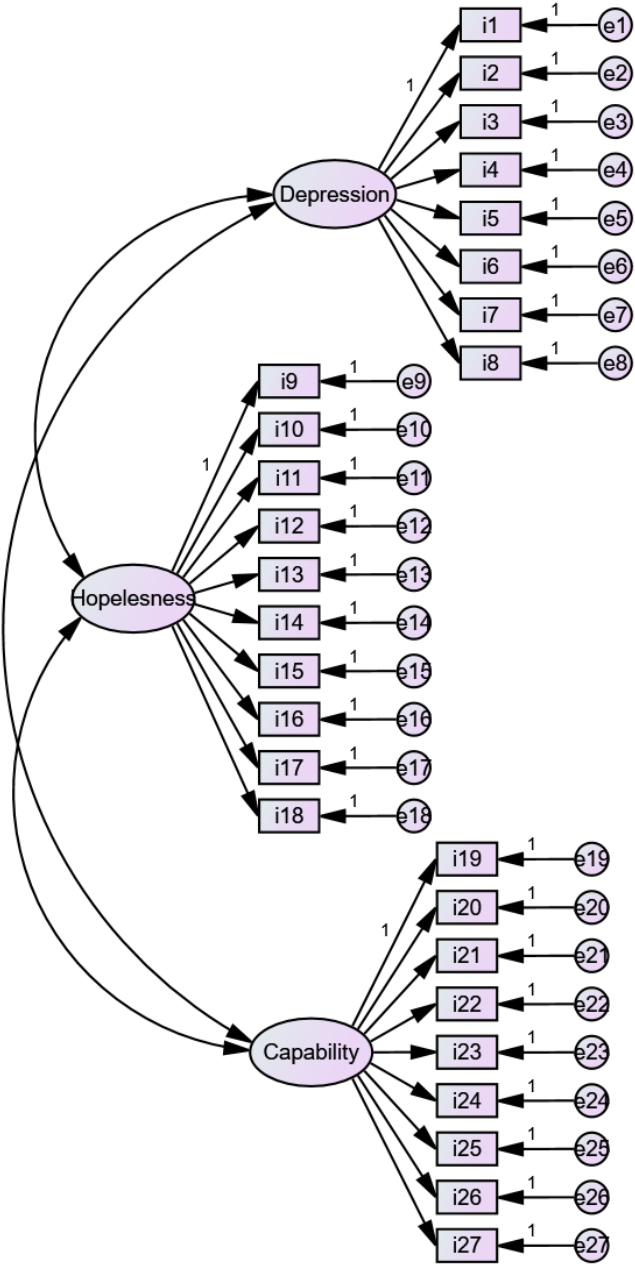


Figure 1. The CFA model

**Table 2.***The items of the ISBS, reliability, and correlation with PHQ-9.*

Dimension of the Suicidal Behavior	Items	Standardized Loading Factor	Cronbach's Alpha	Correlation with PHQ-9
Depression	Feeling sad and hopeless	.809	.897	.844**
	Feeling frustrated even over small things	.759		
	Feeling anxious for no apparent reason	.758		
	Difficulty concentrating and making decisions	.692		
	I blame myself	.803		
	Avoid meeting other people, including those closest to me	.619		
	Losing interest in activities I usually enjoy	.635		
	I want to sleep and never have to wake up again	.726		
Hopelessness	I hate myself	.862	.944	.802**
	I feel like there is nothing valuable in my life	.868		
	My life is useless	.863		
	I consider myself a failure	.840		
	Nobody loves me	.755		
	No one cares about my problems	.714		
	I feel blamed for the bad situation that happened	.727		
	Whatever I do in the future will fail	.734		
	I will not be able to overcome various problems in my life in the future	.724		
	There is nothing pleasant that I can dream of in my future	.778		
The capability of lethal suicide attempt	I am able to end my life whenever I want	.686	.924	.811**
	I can hurt myself in any way I want	.766		
	Painful experiences in the past made me want to end my life	.779		
	I don't have anyone to share my story with	.617		
	I feel like my existence is not important to other people, even when I am among people I know	.810		
	I feel that my presence is not accepted by the people around me	.761		
	I consider myself a burden to my family and friends	.799		
	I have no reason to live	.809		
	My death is more valuable to others than my life	.768		

\*\* p&lt;.01

## Discussion

Various efforts made to prevent suicide can begin by identify individuals who are at risk of suicidal behavior in society. To develop a suicide prevention intervention program, a standardized instrument is needed. Therefore, we develop the ISBS as an instrument to measure suicidal tendency for Indonesian people.

The psychometric properties that are important to investigate in developing psychological instruments are validity and reliability. Validity refers to the availability of evidence that supports the interpretation of scores obtained from a psychological instrument ([American Educational Research Association et al., 2014](#)). The validity evidence obtained in this research was the internal structure validity. Evidence of internal structural validity shows the structure underlying the constructs of a psychological instrument. The results of the CFA confirmed that the ISBS consisted of three dimensions. The model fit supported the existence of three dimensions, which were depression, hopelessness and the capability of lethal suicide attempt, that construct the suicidal behavior.

Research conducted by [Bronisch \(2003\)](#) emphasized that depression is the only aspect of the development of suicidal behavior. Various research findings also consistently show that depression is a factor that is closely related to suicidal ideation and behavior, in both young and elderly people ([Alexopoulos et al., 1999](#); [Chomon, 2022](#); [Mojs et al., 2012](#)). In addition, our model is also consistent with previous research that hopelessness is correlated with suicidal behavior. Historically, research has found a correlation between hopelessness and suicidal behavior ([Beck, 1975](#); [Beck et al., 1990](#)). According to a stress-diathesis model revealed by [van Heeringen \(2000\)](#) that people with suicidal thoughts have the characteristics of considering themselves unworthy and feeling trapped when facing stressful situations that cause hopelessness, because they feel unable to show positive events in the future. In addition to depression and helplessness, the capability for lethal suicide attempts also indicates a strong correlation with suicidal behavior ([Ribeiro et al., 2015](#); [Tsai et al., 2021](#)).

The second evidence of validity obtained in this research was the association of the ISBS scores with the PHQ-9 that measure individual depression severity. The results of the correlation analysis showed that each dimension of the ISBS has a correlation with the PHQ-9. The highest correlation was found between PHQ-9 scores and depression dimensions of ISBS. These results indicate that individuals with suicidal behavior tendencies also show mental disorders such as depression. This finding also supported [Milette et al., \(2010\)](#) which found a correlation between the PHQ-9 and CES-D, an instrument that also measure depression, with a correlation of .77.



Reliability is an important psychometric property of a psychological scale because it indicates the consistency of an instrument in measuring a psychological construct. We found that the Cronbach's Alpha reliability of the dimensions of the ISBS ranged from .897 to .944. [Tavakol and Dennick \(2011\)](#) recommended a reliability coefficient of .9 as good reliability; therefore we conclude that the ISBS has good reliability.

### **Limitation**

We realize that, despite all the advantages of this research finding, it cannot be denied that online data collection has weaknesses. We target the population aged 16 years and over from urban and rural areas, but internet users are mostly young people and live in urban areas. This meant that the numbers of participants who were older or lived in areas where the internet was not accessible or who were not used to using the internet were not involved in this research. The data collection procedure and sampling methods in the further research needs to consider the variation of the participants to ensure that the sample represents the actual population.

### **Conclusion**

As a conclusion, the results of this study indicate that the ISBS has good psychometric properties, which include validity and reliability. Therefore, the ISBS can be considered as a valid instrument for measuring suicidal behavior tendencies for Indonesian adults.

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### **Competing Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## References

- Adinda, S. T., & Prastuti, E. (2021). Regulasi emosi dan dukungan sosial: Sebagai prediktor ide bunuh diri mahasiswa [Emotion regulation and social support: As predictors of college students' suicidal ideation]. *Journal An-Nafs: Kajian Penelitian Psikologi*, 6(1), Article 1. <https://doi.org/10.33367/psi.v6i1.1520>
- Alexopoulos, G. S., Bruce, M. L., Hull, J., Sirey, J. A., & Kakuma, T. (1999). Clinical determinants of suicidal ideation and behavior in geriatric depression. *Archives of General Psychiatry*, 56(11), 1048–1053. <https://doi.org/10.1001/archpsyc.56.11.1048>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- Beck, A. T. (1975). Hopelessness and suicidal behavior: An overview. *JAMA*, 234(11), 1146. <https://doi.org/10.1001/jama.1975.03260240050026>
- Beck, A. T., Brown, G., Berchick, R. J., Stewart, B. L., & Steer, R. A. (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients. *The American Journal of Psychiatry*, 147(2), Article 2. <https://doi.org/10.1176/ajp.147.2.190>
- Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47(2), Article 2. <https://doi.org/10.1037//0022-006X.47.2.343>
- Bostwick, J. M., Pabbati, C., Geske, J. R., & McKean, A. J. (2016). Suicide attempt as a risk factor for completed suicide: Even more lethal than we knew. *American Journal of Psychiatry*, 173(11), 1094–1100. <https://doi.org/10.1176/appi.ajp.2016.15070854>
- Brådvik, L. (2018). Suicide risk and mental disorders. *International Journal of Environmental Research and Public Health*, 15(9), 2028. <https://doi.org/10.3390/ijerph15092028>
- Bronisch, T. (2003). Depression and suicidal behavior. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 24, 179–180. <https://doi.org/10.1027/0227-5910.24.4.179>
- Chomon, R. J. (2022). Depression and suicidal ideation among medical students in a private medical college of Bangladesh. A cross sectional web based survey. *PLOS ONE*, 17(4), e0265367. <https://doi.org/10.1371/journal.pone.0265367>
- Colucci, E. (2013). Culture, cultural meaning(s), and suicide. In E. Colucci & D. Lester (Eds.), *Suicide and culture. Understanding the context*. (pp. 25–46). Hogrefe Publishing.

- Crosby, A. E., Ortega, L., & Melanson, C. (2011). Self directed violence surveillance: Uniform definitions and recommended data elements, Version 1.0. *National Center for Injury Prevention and Control, Atlanta (GA): Centers for Disease Control and Prevention*, 1–96.
- Dian, C. N. (2020). *Validitas dan reliabilitas The Patient Health Questionnaire ( PHQ-9 ) versi Bahasa Indonesia [Validity and reliability of the Indonesian version of the Patient Health Questionnaire (PHQ-9)]* [Thesis, Universitas Sumatera Utara]. <https://repositori.usu.ac.id/handle/123456789/29791>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Idham, A. F., Sumantri, M. A., & Rahayu, P. (2019). Ide dan upaya bunuh diri pada mahasiswa [Suicidal ideation and attempts in college students]. *Intuisi: Jurnal Psikologi Ilmiah*, 11(3), Article 3. <https://doi.org/10.15294/intuisi.v11i3.20705>
- Irwing, P., & Hughes, D. (2018). Test development. In P. Irwing, T. Booth, & D. J. Hughes (Eds.), *The Wiley handbook of psychometric testing: A multidisciplinary reference on survey, scale and test development*. John Wiley & Sons Ltd.
- Kučukalić, S., & Kučukalić, A. (2017). Stigma and suicide. *Psychiatria Danubina*, 29(Suppl 5), 895–899.
- Kurihara, T., Kato, M., Reverger, R., & Tirta, I. G. R. (2009). Risk factors for suicide in Bali: A psychological autopsy study. *BMC Public Health*, 9, 327. <https://doi.org/10.1186/1471-2458-9-327>
- Milette, K., Hudson, M., Baron, M., Thombs, B. D., & Canadian Scleroderma Research Group. (2010). Comparison of the PHQ-9 and CES-D depression scales in systemic sclerosis: Internal consistency reliability, convergent validity and clinical correlates. *Rheumatology (Oxford, England)*, 49(4), 789–796. <https://doi.org/10.1093/rheumatology/kep443>
- Mojs, E., Warchol-Biederman, K., & Samborski, W. (2012). Prevalence of depression and suicidal thoughts amongst university students in Poznan, Poland, preliminary report. *Psychology*, 3(2), Article 2. <https://doi.org/10.4236/psych.2012.32020>
- Onie, S., Usman, Y., Widyastuti, R., Lusiana, M., Angkasawati, T. J., Musadad, D. A., Nilam, J., Vina, A., Batterham, P., Arya, V., Pirkis, J., & Larsen, M. (2022). *Indonesia's first suicide statistics profile: An analysis of suicide and attempt rates, underreporting, geographic distribution, gender, method, and rurality*. PsyArXiv. <https://doi.org/10.31234/osf.io/amnhw>

- Orsolini, L., Latini, R., Pompili, M., Serafini, G., Volpe, U., Vellante, F., Fornaro, M., Valchera, A., Tomasetti, C., Fraticelli, S., Alessandrini, M., La Rovere, R., Trotta, S., Martinotti, G., Di Giannantonio, M., & De Berardis, D. (2020). Understanding the complex of suicide in depression: From research to clinics. *Psychiatry Investigation*, *17*(3), 207–221. <https://doi.org/10.30773/pi.2019.0171>
- Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviors Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment*, *8*(4), 443–454. <https://doi.org/10.1177/107319110100800409>
- Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., Currier, G. W., Melvin, G. A., Greenhill, L., Shen, S., & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American Journal of Psychiatry*, *168*(12), 1266–1277. <https://doi.org/10.1176/appi.ajp.2011.10111704>
- Prawira, B., & Sukmaningrum, E. (2020). Suicide stigma as a predictor of help-seeking intention among undergraduate students in Jakarta. *Makara Human Behavior Studies in Asia*, *24*(1), 24–36. <https://doi.org/10.7454/hubs.asia.1200120>
- Purwaningsih, I. E., Sugiarto, R., & Budiarto, S. (2022). Sikap masyarakat Gunungkidul terhadap perilaku bunuh diri ditinjau dari jenis kelamin dan tingkat pendidikan [The attitude of the Gunungkidul community towards suicidal behavior in terms of gender and level of education]. *SOSIOHUMANIORA: Jurnal Ilmiah Ilmu Sosial Dan Humaniora*, *8*(2), Article 2. <https://doi.org/10.30738/sosio.v8i2.12440>
- Ribeiro, J. D., Yen, S., Joiner, T., & Siegler, I. C. (2015). Capability for suicide interacts with states of heightened arousal to predict death by suicide beyond the effects of depression and hopelessness. *Journal of Affective Disorders*, *188*, 53–59. <https://doi.org/10.1016/j.jad.2015.07.037>
- Sheehan, L., Corrigan, P. W., Al-Khouja, M. A., Lewy, S. A., Major, D. R., Mead, J., Redmon, M., Rubey, C. T., & Weber, S. (2018). Behind closed doors: The stigma of suicide loss survivors. *OMEGA - Journal of Death and Dying*, *77*(4), 330–349. <https://doi.org/10.1177/0030222816674215>
- Sher, L., Grunebaum, M. F., Burke, A. K., Chaudhury, S., Mann, J. J., & Oquendo, M. A. (2017). Depressed multiple-suicide attempters—A high-risk phenotype. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *38*(6), 367–375. <https://doi.org/10.1027/0227-5910/a000475>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>



- Tsai, M., Lari, H., Saffy, S., & Klonsky, E. D. (2021). Examining the Three-Step Theory (3ST) of suicide in a prospective study of adult psychiatric inpatients. *Behavior Therapy*, 52(3), 673–685. <https://doi.org/10.1016/j.beth.2020.08.007>
- Valentina, T. D. (2020). *Dinamika dan dimensi kesejahteraan psikologis keluarga dengan remaja riwayat perilaku bunuh diri [Dynamics and dimensions of family psychological well-being with adolescents with a history of suicidal behavior]* [Disertasi. Tidak dipublikasikan.]. Universitas Gadjah Mada.
- Valentina, T. D. (2021). *Memahami perilaku bunuh diri remaja [Understanding adolescents suicidal behavior]*. Diandra Kreatif.
- Valentina, T. D., & Nurcahyo, F. A. (2023). Stigma and suicide from the perspective of Balinese adults. *OMEGA - Journal of Death and Dying*, 00302228231170675. <https://doi.org/10.1177/00302228231170675>
- van Heeringen, K. (2000). A stress-diathesis model of suicidal behavior. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 21(4), 192–192. <https://doi.org/10.1027/0227-5910.21.4.189f>
- World Health Organization. (2023). *Suicide*. WHO Newsroom. <http://www.who.int/mediacentre/factsheets/fs398/en/>

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