

# Relationship between Self-Esteem, Perceived Social Support and Suicidal Ideation among Undergraduates in Malaysia

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## ABSTRACT

According to the Ministry of Health Malaysia (2018), the average suicidal rate in Malaysia was the sixth highest among the South East Asia countries. Suicidal ideation in Malaysia has been growing in numbers and becoming an important developmental issue, especially among undergraduates who study in Malaysia. The purpose of this study was to examine the relationships between self-esteem, perceived social support and suicidal ideation among undergraduates in Malaysia. A total number of 159 valid responses were collected through a purposive sampling method. The participants recruited in the current study were undergraduates aged between 18 to 25 years old ( $M = 21.72$ ) and pursuing their study in universities or university colleges. The Rosenberg Self-Esteem Scale, Suicidal Ideation Attributes Scales, and Multidimensional Scale of Perceived Social Support were used to assess self-esteem, suicidal ideation and perceived social support respectively. The results showed that participants with higher self-esteem reported higher suicidal ideation. The present study also found that there was a non-significant relationship between perceived social support and suicidal ideation. Moreover, self-esteem significantly predicted suicidal ideation. The finding of this study fills up the literature gap and provides references for future research, as well as contributes useful information for the relevant authorities to decrease the number of suicidal cases and promote positive mental health among undergraduates in Malaysia.

**Key Words:** Suicidal Ideation, Self-Esteem, Perceived Social Support, Malaysia, Undergraduates

## 1. INTRODUCTION

In the worldwide, undergraduates who aged between 17 to 25-year-old are a specific group who reported high levels of suicidal ideation, planning and attempts (Eskin et al., 2016; Miletic et al., 2015). A data presented by Nair et al. (2013), also showed that the rate of suicidal ideation among undergraduates is 2-4 times higher than the rate of non-undergraduates of the same age. The high rate of suicidal ideation among the young population, suggesting important developmental issues. Thus, it is critical to find out the possible factors that caused suicidal ideation so that it could lead to a decrease in suicidal ideation.

Positive self-esteem plays an important role that contributes to a better health condition and positive social behaviour as it acts as a buffer against negative forces. Individuals with high levels of self-esteem have a higher tendency to be satisfied with their own lives and have a positive attitude towards themselves (Overholser et al., 1995). The most serious consequence of having extremely low self-esteem is suicide. A considerable research found out that there is an inverse relationship between self-esteem and suicidal ideation in which individuals with high self-esteem will have lower suicidal ideation (Manani & Sharma, 2013; Wani & Sankar, 2017). Besides, the previous study has suggested that self-esteem is one of the resiliency factors that have an impact on suicidal ideation (Johnson et al., 2011). An individual with lower suicidal ideation will have a higher level of self-esteem. The study also found that self-esteem plays the greatest influence among campus life stress, stress coping type, and maladjustment perfectionism (Park & Kim, 2018).

Perceived social support refers to the perception of an individual on the availability of supportive relationships of an individual who could provide psychological comfort when they need it and protect them from the risk of mental illness or stressful events through social interaction (Ioannou et al., 2019; Kleiman & Riskind 2012). According to Li et al. (2014), most of the students consider college/university life as part of their major life event, thus, undergraduates will be our main focus in this study. Perceived social support plays the roles as supportive relationships to the students which would reduce the negative feelings such as anxiety and depression faced due to low level of adaptability to new environments, and indirectly, reduce the suicidal ideation of one's.

### 1.1. Research Questions

1. Is there any significant relationship between self-esteem and suicidal ideation among undergraduates in Malaysia?
2. Is there any significant relationship between perceived social support and suicidal ideation among undergraduates in Malaysia?
3. What are the unique predictors (self-esteem and perceived social support) of suicidal ideation among undergraduates in Malaysia?

## 2. LITERATURE REVIEW

Self-esteem play an important role in suicidal ideation in an individual's life. There were several factors which will influence self-esteem such as cyberbullying (Palermi et al., 2017; Patchin & Hinduja, 2010) and depression (McGee & Williams, 2000) which will lead to suicidal ideation. Researchers found out that undergraduates in Malaysia were facing cyberbullying issues (Rashid & Azman, 2017) and depression (Radeef & Faisal, 2020; Teh et al., 2015) which bring negative impact on individuals' self-esteem. The researchers were concerned that individuals with low self-esteem cause severe consequences to the individuals' well-being and increases the risk of suicidal ideation (Extremera et al., 2018).

High self-esteem can serve as a coping method and protective variable for the individuals as they are assumed to have greater positive coping skills and better self-adjustment in relation to unfavourable life events such as family members passing away and failure in examinations (Moksnes & Espnes, 2013). In addition, they will interpret the event in a more positive method. It will help to promote individuals' health and well-being, conversely, individuals with low self-esteem tend to be more vulnerable to this effect.

A study conducted by Overholser et al. (1995) found that self-esteem was closely associated with depression, hopelessness and suicidality among adolescents. The individuals with low self-esteem will face difficulties in provoking positive feedback to their own action and they are prone to accept negative feedback easily which will further induce suicidal ideation and contribute to suicidality.

Dueñas et al. (2019) suggested that one of the significant predictors to one's suicidal ideation is perceived social support. Meanwhile, numerous studies showed that social support of one's perceived is a buffering aspect which acts to protect against suicidal ideation (Dueñas et al., 2019; Ioannou et al., 2019; Kleiman & Riskind, 2012). According to Naila and Takwin (2017), social support may help in alternating the meaning of life stressor into more positive thus indirectly modified the negative thoughts of individuals who are experiencing suicidal ideation.

Li et al. (2014) explained that transition to the higher education sector will be a stressful event to students because they need to adapt to the anxiety and unfamiliar environment. Ergo, in this study, perceived social support will be determined among the undergraduates as research studies showed that undergraduates who transitioned into higher education institution will be required more social support such as family support (Ioannou et al., 2019) to have a better psychological adjustment in their higher educational institution life (Alorani & Alradaydeh, 2018; Li et al., 2014). Thus, how well the student perceives their social support is very important.

### 3. METHODOLOGY

#### 3.1. Research Design and Participants

A cross-sectional design was applied in this study. A survey with questionnaires was distributed by the researchers to targeted participants. The undergraduates in Malaysia higher education institutions aged between 18 to 25 years old were the targeted participants in this study. The sample size was calculated using G\*power. Based on the G\*power analysis, the minimum sample size needed in this study was 129 participants. Moreover, 20% of the calculated sample size was added to prevent non return response. Thus, 155 participants were the finalized sample size that was required for this study. In this present study, there was a total of 194 responses collected. However, a total of 35 responses was removed after the data cleaning process, as the participants failed to meet the inclusion criteria of the study. Therefore, there were only 159 responses retained as the finalized sample for later data analysis, with 61 male participants (38.4%) and 98 female participants (61.6%).

#### 3.2. Instrumentation

Suicidal Ideation Attributes Scale (SIDAS) developed by Van Spijker et al. (2014) was used to identify whether an individual has any suicidal thoughts and examine how severe the suicidal ideation is. This scale consisted of five items, each of them focused on different attributes of suicidal ideation: frequency, controllability, closeness to attempt, level of distress associated with the thoughts, and impact on daily functioning. The higher the total score, the more is the reflection on severe suicidal thoughts. The SIDAS in the original study was found to have a high internal consistency with Cronbach's alpha ( $\alpha$ ) of .91. According to Van Spijker et al. (2014), this scale found to have good convergent validity with Columbia-Suicide Severity Rating Scales (C-SSRS).

The Rosenberg Self-Esteem Scale was a self-report instrument that was developed and widely used to evaluate individual self-esteem by measuring the positive and negative feelings about oneself. There was a total of 10 items in this scale. The higher the scores of the individual, the greater self-esteem of the individual. A Cronbach's alpha ( $\alpha$ ) of .80 which indicated a high internal consistency was found in a past study (Jamil, 2006). According to Robins et al. (2001), the study was found that the Rosenberg Self-esteem Scale showed a strong convergent validity with the Single-Item Self-Esteem Scale.

The Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1998) was used to measure the respondents' multidimensionality perceptions of social support from three specific origins: family, friends, and significant others. A good internal consistency of the total scale was reported to have a Cronbach's alpha ( $\alpha$ ) of .88 from the original study. Moreover, a statistically significant, weak, and negative correlation was found between MSPSS and Depression and Anxiety subscales under the Hopkins Symptom Checklist (HSCL), revealing a satisfactory concurrent validity (Zimet et al., 1988).

#### 3.3. Data Analysis

Descriptive statistics were conducted to examine the demographic background information and key variables of this study. Meanwhile, inferential statistics such as Pearson's correlation statistical technique was used to examine the correlation among self-esteem, perceived social support, and suicidal ideation. Moreover, the multiple linear regression was used to determine the prediction effect of self-esteem and perceived social support toward suicidal ideation. Prior to conducting statistical analysis, normality test and some assumptions such as multicollinearity, independent errors and homoscedasticity were conducted.

### 4. RESULTS AND DISCUSSION

Reliability analysis was conducted for the Rosenberg Self-esteem Scale, Multidimensional Scale of Perceived Social Support and Suicidal Ideation Attributes Scale. According to Table 1, the result showed that the instrument has a good internal consistency.

Table 1 Reliability

Instruments	Cronbach's Alpha
Rosenberg Self-Esteem	.81
Multidimensional Scale of Perceived Social Support	.91
Suicidal Ideation Attributes Scale	.74

Table 2 showed that there was a significant and positive correlation between self-esteem and suicidal ideation ( $r=.419, p<.05$ ); and a non-significant correlation between perceived social support and suicidal ideation ( $r=-.082, p>.05$ ). In the current study, it found that there was a significant positive relationship between self-esteem and suicidal ideation. This result was congruent with some past studies (Duprey et al, 2019; Jang et al., 2014; Nguyen et al., 2019). The possible explanation is that individual with high-esteem will perceive themselves as superior, thus they will be unable to face their failure which in turn increases the suicidal ideation (Creemers et al., 2013).

The perceived social support and suicidal ideation were found to have a statistically insignificant result. The result of this study revealed contradiction to most of the research studies (Dueñas et al., 2019; Kleiman & Riskind, 2012; Li et al., 2014; Moller et al., 2021; Naila & Takwin, 2017). However, several past studies were found to have a similar result with the present study (Hedley et al., 2017; MacKinnon & Colman, 2016; Mazza & Reynolds, 1998). A possible interpretation for the insignificant result will be due to the need for perceived social support has been overestimated. As studied by Hedley et al. (2017), it is important to put yourself into the other's shoes, as what we consider as the best interest for the person, may not necessarily be the same with that person. The perceived social support will be beneficial only when it matches what the individual requires in that particular situation (Siedlecki et al., 2013). Additionally, cultural belief plays a role, especially in Asian culture. It is believed to be better not to seek help from others or share their personal issues with others for the reason of worrying about receiving negative criticism and the "saving face" effect (Kim et al., 2008). Therefore, the insignificant result can be presumed as the role of one's cultural belief.

Table 2 Correlation between Self-Esteem, Perceived Social Support and Suicidal Ideation

		Self-Esteem	Perceived Social Support
Suicidal Ideation	Pearson Correlation	.419	-.082
	Sig. (2-tailed)	.000	.305
	N	159	159

Multiple regression analysis was conducted to examine if self-esteem and perceived social support significantly predicted undergraduates' suicidal ideation. According to Table 3 and Table 4, it showed that the model of this study was statistically significant,  $F(2,156) = 17.4, p < .001$  and accounted for 17.4% of the variance. Self-esteem was significantly predicted suicidal ideation ( $\beta = .452, p < .001$ ). However, it found that perceived social support insignificantly predicted suicidal ideation ( $\beta = .087, p > .05$ ). Therefore, the current study has revealed that self-esteem significantly and positively predicts suicidal ideation among undergraduates in Malaysia. This result is supported by the previous study (Wan et al., 2019). However, the present result reveals that the perceived social support has failed to predict suicidal ideation. The study of China's adolescents showed a similar result to this study. The study had indicated self-esteem positively predicted suicidal ideation which individuals with high self-esteem will have a higher risk of suicidal ideation in relation to negative life events, compared with individuals with low self-esteem (Wan et al., 2019). The possible explanation for this would be individuals with greater levels of self-esteem will interact more effectively with the environment, but less likely to experience a high level of a negative life event (Orth & Luciano, 2015). Besides, individuals with high self-esteem have the perception that they are incapable of failing and prone to be a perfectionist, which their beliefs will prompt suicidal thought (Creemers et al., 2013). Moreover, another study has the same justification in which the individuals with high self-esteem prone to have suicidal ideation as they were incapable to accept the truth of being a failure (O'Connor, 2007).

Table 3 Regression Model

	df	F	p	R <sup>2</sup>
Regression	2	17.400	.000	.174
Residual	156			
Total	158			

Table 4 Self-Esteem and perceived Social Support as Predictors

	t	Std. $\beta$	p
Self-Esteem	5.79	.452	.000
Perceived Social Support	1.114	.087	.267

## 5. CONCLUSION AND RECOMMENDATION

The result of the present study stated that self-esteem have a significant relationship with suicidal ideation, while perceived social support has no significant relationship with suicidal ideation, and self-esteem can significantly predict suicidal ideation, whereas, perceived social support does not significantly predict suicidal ideation. The findings showed that undergraduates with higher levels of self-esteem will have greater suicidal thoughts. The issues of suicidal ideation among undergraduates in Malaysia has been underestimated, there is a lack of studies regarding this issue in the Malaysian context.

The present study could fill the gap in the literature, as there is lacking of similar past studies that explore the correlation between perceived social support, self-esteem and suicidal ideation among undergraduates in the Malaysian context. Most findings found are from Western countries, which are having very distinct cultures and practices with Malaysian, hence there might be differences in results due to different social contexts. The present study shows some contradiction in findings as compared to most of the previous studies from Western countries. Thus, the findings can be considered as valuable information that offers future researchers with some references.

This present study has provided pragmatic contributions to the society. Professionals or other relevant personnel could have a better understanding and generate a useful treatment and intervention on helping those who are suffering from suicidal thought, by knowing that self-esteem might be the possible cause of suicidal ideation, they can target vulnerable populations and provide them counselling sessions to regulate their self-esteem before any tragedy happens. The government, school teachers, lecturers, and mental health centres might put more effort on promoting relevant mental health knowledge through different platforms such as social media and seminars to increase social awareness among Malaysians.

## REFERENCES

- Alorani, O. I., & Alradaydeh, M. F. (2018). Spiritual well-being, perceived social support, and life satisfaction among university students. *International Journal of Adolescence and Youth*, 23(3), 291-298. <https://doi.org/10.1080/02673843.2017.1352522>
- Creemers, D. H. M., Scholte, R. H. J., Engels, R. C. M. E., Prinstein, M. J., & Wiers, R. W. (2013). Damaged self-esteem is associated with internalizing problems. *Frontiers in Psychology*, 4, 152. <https://doi.org/10.3389/fpsyg.2013.00152>
- Dueñas, J. M., Fernández, M., & Morales-Vives, F. (2019). What is the protective role of perceived social support and religiosity in suicidal ideation in young adults? *The Journal of General Psychology*, 147(4), 432-447. <https://doi.org/10.1080/00221309.2019.1697638>
- Duprey, E. B., Oshri, A., & Liu, S. (2019). Childhood maltreatment, self-esteem, and suicidal ideation in a low-SES emerging adult sample: The moderating role of heart rate variability. *Archives of Suicide Research*, 23(2), 333-352. <https://doi.org/10.1080/13811118.2018.1430640>
- Eskin, M., Sun, J-M., Abuidhail, J., Yoshimasu, K., Kujan, O., Janghorbani, M., Flood, C., Carta, M. G., Tran, U. S., Mechri, A., Hamdan, M., Poyrazli, S., Aidoudi, K., Bakhshi, S., Harlak, H., Moro, M. F., Nawafleh, H., Phillips, L., Shaheen, A., ... Voracek, M. (2016). Suicidal behavior and psychological distress in university students: A 12-nation study. *Archives of Suicide Research*, 20(3), 369-388. <http://doi.org/10.1080/13811118.2015.1054055>

- Extremera, N., Quintana-Orts, C., Mérida-López, S., & Rey, L. (2018). Cyberbullying victimization, self-esteem and suicidal ideation in adolescence: Does emotional intelligence play a buffering role? *Frontiers in Psychology*, 9, 367. <https://doi.org/10.3389/fpsyg.2018.00367>
- Hedley, D., Uljarević, M., Wilmot, M., Richdale, A., & Dissanayake, C. (2017). Brief report: Social support, depression and suicidal ideation in adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 47, 3669-3677. <https://doi.org/10.1007/s10803-017-3274-2>
- Ioannou, M., Kassianos, A. P., & Symeou, M. (2019). Coping with depressive symptoms in young adults: Perceived social support protects against depressive symptoms only under moderate levels of stress. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02780>
- Jamil, M. B. H. Y. (2006). Validity and reliability study of Rosenberg Self-esteem Scale in Seremban school children. *Malaysia Journal of Psychiatry*, 15(2), 1-12. [https://www.researchgate.net/publication/266041969\\_Validity\\_and\\_reliability\\_study\\_of\\_Rosenberg\\_Self-esteem\\_Scale\\_in\\_Seremban\\_school\\_children](https://www.researchgate.net/publication/266041969_Validity_and_reliability_study_of_Rosenberg_Self-esteem_Scale_in_Seremban_school_children)
- Jang, J. M., Park, J. I., Oh, K. Y., Lee, K. H., Kim, M. S., Yoon, M. S., Ko, S. H., Cho, H. C., & Chung, Y. C. (2014). Predictors of suicidal ideation in a community sample: Roles of anger, self-esteem, and depression. *Psychiatry Research*, 216(1), 74-81. <https://doi.org/10.1016/j.psychres.2013.12.054>
- Johnson, J., Wood, A. M., Gooding, P., Taylor, P. J., & Tarrier, N. (2011). Resilience to suicidality: The buffering hypothesis. *Clinical Psychology Review*, 31(4), 563-591. <https://doi.org/10.1016/j.cpr.2010.12.007>
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist*, 63(6), 518-526. <https://doi.org/10.1037/0003-066X>
- Kleiman, E. M., & Riskind, J. H. (2012). Utilized social support and self-esteem mediate the relationship between perceived social support and suicide ideation: A test of a multiple mediator model. *Crisis*, 34(1), 42-49. <https://doi.org/10.1027/0227-5910/a000159>
- Li, S. T., Albert, A. B., & Dwelle, D. G. (2014). Parental and peer support as predictors of depression and self-esteem among college students. *Journal of College Student Development*, 55(2), 120-138. <https://doi.org/10.1353/csd.2014.0015>
- MacKinnon, N., & Colman, I. (2016). Factors associated with suicidal thought and help seeking behaviour in transition-aged youth versus adults. *The Canadian Journal of Psychiatry*, 61(12), 789-796. <https://doi.org/10.1177/0706743716667417>
- Manani, P., & Sharma, S. (2013). Self-esteem and suicidal ideation: A correlational study. *MIER Journal of Educational Studies*, 3(1), 75-83.
- Mazza, J. J., & Reynolds, W. M. (1998). A longitudinal investigation of depression, hopelessness, social support, and major and minor life events and their relation to suicidal ideation in adolescents. *Suicide and Life-Threatening Behavior*, 28(4), 358-374. <https://doi.org/10.1111/j.1943-278X.1998.tb00972.x>
- McGee, R. O. B., & Williams, S. (2000). Does low self-esteem predict health compromising behaviours among adolescents? *Journal of Adolescence*, 23(5), 569-582. <https://doi.org/10.1006/jado.2000.0344>
- Miletic, V., Lukovic, J. A., Ratkovic, N., Aleksic, D., & Grgurevic, A. (2015). Demographic risk factors for suicide and depression among Serbian medical school students. *Social Psychiatry and Psychiatric Epidemiology*, 50(4), 633-638. <http://doi.org/10.1007/s00127-014-0950-9>
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents-gender and age as potential moderators. *Quality of Life Research*, 22(10), 2921-2928. <https://doi.org/10.1007/s11136-013-0427-4>
- Moller, C. I., Cotton, S. M., Badcock, P. B., Hetrick, S. E., Berk, M., Dean, O. M., Chanen, A. M., & Davey, C. G. (2021). Relationships between different dimensions of social support and suicidal ideation in young people with major depressive disorder. *Journal of Affective Disorders*, 281, 714-720. <https://doi.org/10.1016/j.jad.2020.11.085>
- Naila, S. & Takwin, B. (2018). Perceived social support as predictor of suicide ideation in Gunung Kidul high school students. *Advances in Social Science, Education and Humanities Research*, 139(1), 47-52. <https://dx.doi.org/10.2991/uipsur-17.2018.8>
- Nair, M. K. C., Russell, P. S. S., Shankar, S. R., Subramaniam, V. S., Nazeema, S., Mammen, P., & Chembagam, N. (2013). Adolescent suicide: Characterizing the need and identifying the predictive factors for preventive consultation or hospitalization in a rural community setting. *International Journal of Adolescent Medicine and Health*, 25(1), 81-86. <http://doi.org/10.1515/ijamh-2013-0011>
- Nguyen, D. T., Dedding, C., Pham, T. T., & Bunders, J. (2013). Perspectives of pupils, parents, and teachers on mental health problems among Vietnamese secondary school pupils. *BMC Public Health*, 13(1), 1-10. <https://doi.org/10.1186/1471-2458-13-1046>
- Nguyen, D. T., Wright, E. P., Dedding, C., Pham, T. T., & Bunders, J. (2019). Low self-esteem and its association with anxiety, depression, and suicidal ideation in Vietnamese secondary school students: A cross-sectional study. *Frontiers in Psychiatry*, 10, 698. <https://doi.org/10.3389/fpsyg.2019.00698>
- O'Connor, R. C. (2007). The relations between perfectionism and suicidality: A systematic review. *Suicide and Life-Threatening Behavior*, 37(6), 698-714. <https://doi.org/10.1521/suli.2007.37.6.698>
- Orth, U., & Luciano, E. C. (2015). Self-esteem, narcissism, and stressful life events: Testing for selection and socialization. *Journal of Personality and Social Psychology*, 109(4), 707-721. <https://doi.org/10.1037/pspp0000049>

- Overholser, J. C., Adams, D. M., Lehnert, K. L., & Brinkman, D. C. (1995). Self-esteem deficits and suicidal tendencies among adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(7), 919–928. <https://doi.org/10.1097/00004583-199507000-00016>
- Palermi, A. L., Servidio, R., Bartolo, M. G., & Costabile, A. (2017). Cyberbullying and self-esteem: An Italian study. *Computers in Human Behavior*, 69, 136–141. <https://doi.org/10.1016/j.chb.2016.12.026>
- Park, S. U., & Kim, M. K. (2018). Effects of campus life stress, stress coping type, self-esteem, and maladjustment perfectionism on suicide ideation among college students. *The Korean Journal of Clinical Laboratory Science*, 50, 63-70. <https://doi.org/10.15324/kjcls.2018.50.1.63>
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, 80(12), 614-621. <https://doi.org/10.1111/j.1746-1561.2010.00548.x>
- Radeef, A. S., & Faisal, G. G. (2020). Depression, anxiety and stress among pharmacy students in Malaysia. *Journal of International Dental and Medical Research*, 13(2), 628-632. [http://www.jidmr.com/journal/wp-content/uploads/2020/06/39-D20\\_1091\\_Ghassak\\_Ghazi\\_Faisal\\_Malaysia.pdf](http://www.jidmr.com/journal/wp-content/uploads/2020/06/39-D20_1091_Ghassak_Ghazi_Faisal_Malaysia.pdf)
- Rashid, M. S. B. A., & Azman, T. A. T. M. (2017). Predicting the intention to cyberbully and cyberbullying behaviour among the undergraduate students at the International Islamic University Malaysia. *International Journal of Education*, 2(5), 257-270. <http://irep.iium.edu.my/59020/1/IJEP-2017-05-09-20.pdf>
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg self-esteem scale. *Personality and Social Psychology Bulletin*, 27(2), 151–161. <http://doi.org/10.1177/0146167201272002>
- Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. *Social Indicators Research*, 117(2), 561–576. <https://doi.org/10.1007/s11205-013-0361-4>
- Teh, C. K., Ngo, C. W., Zulkifli, R. A., Vellasamy, R., & Suresh, K. (2015). Depression, anxiety and stress among undergraduate students: A cross sectional study. *Open Journal of Epidemiology*, 5(4), 260. <http://dx.doi.org/10.4236/ojepi.2015.54030>
- Van Spijker, B. A. J., Batterham, P. J., Calear, A. L., Farrer, L., Christensen, H., Reynolds, J., & Kerkhof, A. J. F. M. (2014). The suicidal ideation attributes scale (SIDAS): Community-based validation study of a new scale for the measurement of suicidal ideation. *Suicide and Life-Threatening Behavior*, 44(4), 408–419. <https://doi.org/10.1111/sltb.12084>
- Wan, Y., Chen, R., Wang, S., Orton, S., Wang, D., Zhang, S., Sun, Y., & Tao, F. (2019). Effects of self-esteem on the association between negative life events and suicidal ideation in adolescents. *International Journal of Environmental Research and Public Health*, 16(16), 1-10. <https://doi.org/10.3390/ijerph16162846>
- Wani, M. A., & Sankar, R. (2017). Social support, self-esteem and suicidal ideation among HIV/AIDS patients in Jammu and Kashmir state. *Indian Journal of Health and Wellbeing*, 8, 944-949. <https://bit.ly/36Z4a3F>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30-41. [https://doi.org/10.1207/s15327752jpa5201\\_2](https://doi.org/10.1207/s15327752jpa5201_2)