African Journal of Social and Behavioural Sciences (AJSBS)
Volume 15, Number 3 (2025) ISSN: 2141-209X

COGNITIVE DISTORTIONS, DEPRESSION, AND SOCIAL SUPPORT AS PREDICTORS OF SUICIDE IDEATION AMONG IN-SCHOOL ADOLESCENTS IN MAKURDI

Stephen Akolome Azizi[1]* & Oluwafemi Ebenezer Ayorinde[2]

[1,2]Department of Psychology, Federal University of Lafia, Nigeria

*stephen.azizi@socsci.fulafia.edu.ng

ABSTRACT: This study investigated cognitive distortions, depression, social support and suicide ideation among in-school adolescents in Makurdi metropolis. The cross-sectional survey design was employed where 419 in-school adolescents from Trust Academy Makurdi consisting of 206 (49.2%) males and 213 (50.8%) females. Their ages ranged from 14 to 21 years with a mean age of 18.44 years old (SD = 5.61). Simple random sampling was used to draw samples for the study. Self-Debasing Cognitive Distortion Scale, Beck Depression Inventory, Multidimensional Scale of Perceived Social Support, and Beck Scale for Suicide Ideation were used for data collection. The study found that there was a significant influence of cognitive distortion on suicide ideation among in-school adolescents in Makurdi. Secondly, there was a significant influence of depression on suicide ideation among in-school adolescents. Thirdly, there was a significant influence of social support on suicide ideation among in-school adolescents in Makurdi. Independently, all the dimensions (family, friends, and significant others) significantly predicted suicide ideation. Lastly, the study found that there was a significant joint influence of cognitive distortions, depression, and social support on suicide ideation among in-school adolescents in Makurdi. The researchers recommend that in-school adolescents should avoid the use of distorted and irrational patterns of thinking. Therefore, adolescents should imbibe hope and optimism rather than taking a pessimistic view of the world irrespective of the situation. Furthermore, parents, guardians, and other caregivers are encouraged to support adolescents emotionally and financially to ease their shared vicissitude and avert the ideation of suicide as an escape route.

Keywords: Cognitive Distortions, Depression, Social Support, Suicide Ideation.

INTRODUCTION

Suicide represents a critical global public health challenge, accounting for approximately 800,000 deaths annually and ranking as the second most common cause of mortality worldwide. Research suggests that suicide attempts occur at a rate 25 times greater than completed suicides (WHO, 2014). There is a knowledge gap about the transition from suicide ideation to suicide attempts. Due to this tremendous public health problem, many researchers have focused on suicide and its prevention efforts. The development of more effective prevention and intervention strategies will require a deeper understanding of the fundamental processes that cause suicide ideation, attempts, and deaths (Klonsky & May, 2015). This ideation serves as the basis in which suicide is attempted or committed. The ideation-attempter distinction is critical because most individuals with suicidal ideation do not attempt suicide (Ten-Have et al., 2009). Suicidal ideation with a plan to attempt

suicide is less prevalent than having thoughts of suicide. Studies among adolescents from low- and middle-income countries show a considerable prevalence of suicidal ideation 17.1% in the Philippines (Page, et. al., 2006), in Lebanon 16% (Mahfoud, et al., 2011), and in African countries 19.6% in Uganda, 23.l% in Botswana, 27.9% in Kenya, and 31.9% in Zambia (Page & West, 2011).

African adolescents have one of the highest rates of suicidal ideation and attempts (Page, et al., 2013). However, despite these disturbing statistics, there is still a dearth of research on suicide ideation in Africa (Oppong-Asante et. al., 2017). Many adolescents today are faced with challenges which are often beyond their coping abilities, therefore resorting to thoughts of terminating their lives at the point of hopelessness. A keen look at the common determinants of suicidal ideation among adolescents shows that their distorted patterns of thinking, the existence of mood problems and lack of social support are all-inclusive. The prevalence rates of 11.2% to 31.9% in Low- and Middle-Income Countries (LMICs) are higher than the reported rates of 4.4% to 8.2% in High-Income Countries (HICs), including Canada and the United States of America (Ahmad et. al., 2014)

A Nigerian study reported a prevalence rate of 20% for suicidal ideation and 12% for suicide attempts among adolescents (Omigbodun et al., 2008). Conversely, this study was reported 15 years ago, and the authors did not explicitly report the contributions of cognitive distortions and social support to suicide ideations among Nigerian adolescents. Therefore, this study considered the influence of cognitive distortions, depression and social support on suicide ideation. Suicidal ideation among adolescents is associated with several psychosocial indicators for psychological well-being, including depression, loneliness, anxiety, substance use, poverty, bullying, poor relationship quality with parents, and low social support (Christiansen et al., 2011; Owusu et al., 2011).

Cognitive distortions neutralize conscience, potential empathy, and guilt, preventing damage to the self-image when an individual engages in antisocial behaviour (Barriga et al., 2001). Specifically, negative cognitions about the self and negative views of the world have been associated with greater suicide ideation, and self-blame has been shown to predict suicide ideation (Horwitz et. al., 2018). Horwitz et al. (2018) found that negative cognitions about the self had the strongest association with suicide ideation. These findings point to a possible relationship between cognitive distortions and suicide ideation.

Depression is a common mental disorder that presents itself with moodiness, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Depression often comes with symptoms of anxiety. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide. Almost 1 million lives are lost annually due to suicide, which translates to 3000 suicide deaths every day. For every person who completes suicide, 20 or more may attempt to end his or her life (WHO, 2014). Suicide ideation among young people is associated with a variety of factors, including depression, loneliness and hopelessness.

Social support is the perception or experience that one is loved and cared for by others, esteemed and valued, and part of a social network of mutual assistance and obligations (Taylor & Stanton, 2007). Conceptualizations of social support have also focused on the source of support, which can vary from family, spouse, friend, co-workers, doctor, and community ties/affiliations. According to Cho and Haslam (2010), a lack of perceived social support can predict suicide ideation. This implies that high perceived social support decreases the prevalence of suicide ideation. Several studies reported that social support perceptions of individuals who attempted suicide were lower, and lack of social support is one of the major risk factors for suicidal behaviours (Ozguven et al., 2003).

Studies indicate that perceived social support, particularly from family and friends, is an important predictor of suicide risk. They reported that perceived social support from family was lower than the perceived social support from both friends and significant others in individuals who attempted suicide (Ozguven et al., 2003). Social support may act as a universal protective factor, decreasing the risk of suicide regardless of individual risk factors. Social support also acts as a moderating protective factor, mitigating the effect of other risk factors for suicide (Harrison et al., 2010).

Theoretical Framework

The Three-Step Theory (3ST)

The Three-Step Theory (3ST) is embedded in the "ideation-to-action" framework. Inspired by Joiner's work, an "ideation-to-action" framework should guide *all* suicide theory and research. That is, the (a) development of suicide ideation and (b) progression from suicide ideation to suicide attempts should be viewed as distinct processes with distinct explanations. A concise, evidence-based theory of suicide can help identify key treatment and prevention targets across populations and levels of intervention (Klonsky et al., 2020; Klonsky, 2020). The theory is explained in terms of four factors: psychological pain, hopelessness, connectedness, and suicide capacity. The theory states that suicide ideation results from the combination of psychological pain and hopelessness. Among those experiencing both pain and hopelessness, connectedness (social support) is a key protective factor against escalating ideation. The theory views the progression from ideation to attempts as facilitated by dispositional, acquired, and practical contributors to the capacity to attempt suicide.

Step 1: Development of Suicidal Ideation

Fundamentally, Individuals are shaped by behavioural conditioning. We perform behaviours that are rewarded and avoid behaviours that are punished. If someone's day-to-day experience of living is characterized by pain, He/she may decrease the desire to live and, in turn, initiate thoughts about suicide. However, pain alone is not sufficient to produce suicidal ideation. If an individual living in pain has hope that the situation can improve, the individual is likely to focus on obtaining a future with diminished pain rather than on the possibility of ending his or her life. Therefore, hopelessness is also required for the development of suicidal ideation. When someone's day-to-day experience is characterized by pain, and the person feels hopeless that the pain will improve, he or she will consider suicide. The combination of pain and hopelessness causes suicide ideation

to develop. Pain and hopelessness are the two most common motivations for suicide attempts (May & Klonsky, 2013).

Similarly, someone who feels hopeless about the future but without day-to-day pain will not consider suicide. For example. A recent university graduate moved back in with his parents. If this young adult lacks a marketable degree, good grades, and a sense of his career interests, he may very well feel hopeless about the future. However, as long as his day-to-day experience remains comfortable with little or no pain such that his food and shelter are provided, he has free time to spend with friends, and he enjoys participating in activities of his choice, he is unlikely to consider suicide.

Step 2: Strong Versus Moderate Ideation

The second step toward a potential suicidal behaviour involves connectedness. Although broadly used in this context, connectedness refers to one's attachment to a job, project, role, interest, or any sense of perceived purpose or meaning that keeps one invested in living. Connectedness matters because even if someone feels pain and hopelessness and considers suicide, the suicidal ideation will remain moderate as long as one's connectedness to life is greater than one's pain. For example, if a parent experiences daily pain and hopelessness but is invested in or connected to his or her children. If the parent's connectedness is greater than the parent's pain, this individual may still have passive ideation but will not progress to an active desire for suicide. However, if both pain and hopelessness are present, and connectedness is absent or less than the pain, the individual will have strong suicidal ideation and a strong desire to end his or her life.

Emphasis on pain, hopelessness, and connectedness in explaining suicidal ideation is not meant to suggest that other traditional risk factors for suicide are irrelevant. Indeed, we believe that numerous disorders (e.g., depression), personality traits (e.g., borderline personality), temperaments/dispositions, and experiences (interpersonal loss) are highly relevant to suicidal ideation. However, we believe that they are relevant through their effects on pain, hopelessness, and/or connectedness. For example, we would expect depression to relate to suicidal ideation to the extent that it influences pain, hopelessness, and/or connectedness, but not beyond.

Step 3: Progression from Ideation to Attempts

Once an individual develops a desire to end his or her life, the next question is whether the individual has the capability to make a suicide attempt (Joiner, 2005). As Joiner argues, people are biologically and evolutionarily wired to avoid pain, injury, and death. Therefore, it is very difficult for people to attempt suicide, even in the presence of strong suicidal ideation. Joiner emphasizes acquired capability, which refers to an individual's habituation to pain, fear, and death through exposure to life experiences such as physical abuse, non-suicidal self-injury, the suicide of a family member or friend, combat training, or any other experience that subjects someone to painful and provocative events. However, the 3ST proposed three variables that contribute to suicide capacity: dispositional, acquired, and practical.

Dispositional: These variables are driven largely by genetics, such as pain sensitivity and blood phobia (Young, Lariviere, & Belfer, 2012; Czajkowski et al., 2011). For example, someone born with low pain sensitivity will have a higher capacity to carry out a suicide attempt. In contrast, someone born with a squeamishness or even phobia of blood will have a lower capacity.

Acquired: Refers to the same construct Joiner describes, that habituation to experiences associated with pain, injury, fear, and death can lead over time to a higher capacity for a suicide attempt.

Practical: Refers to factors that make a suicide attempt easier. An individual with knowledge of and access to lethal means will be more able to act on suicidal thoughts than someone who lacks knowledge of and access to lethal means, such as a firearm, an anaesthesiologist and other medical professionals whose suicide rates are elevated (Betz & Anestis, 2020). Suicide rates are elevated because these individuals have both extensive knowledge of how to end one's life painlessly and easy access to the necessary drugs. In summary, dispositional, acquired, and practical factors contribute to the capacity for attempted suicide, and an individual with strong suicidal ideation will only make a suicide attempt if and when they have the capacity to do so.

Hypotheses

The following hypotheses are tested in this study;

1. Cognitive distortions will significantly influence suicidal ideation among in-school adolescents in Makurdi.
2. Depression will significantly influence suicidal ideation among in-school adolescents in Makurdi.
3. Social support will significantly influence suicidal ideation among in-school adolescents in Makurdi.
4. Cognitive distortions, depression, and social support will jointly influence suicidal ideation among in-school adolescents in Makurdi.

METHOD

Design

This study employed the Cross-sectional Survey design because the opinions of the respondents were gathered from in-school adolescents with diverse parameters. The independent variables in the study are Cognitive Distortions, Depression, and Social Support, while the dependent variable is Suicide Ideation.

Participants

The participants for this study were 419 in-school adolescents from Trust Academy Makurdi, which has a diverse adolescent population, making Trust Academy a suitable setting for studying in-school youth. The school reflects the socio-cultural and ethnic diversity of the state. The Yamane formula was used to determine the sample size of the participants for the study. Their

ages ranged from 14-21 years, with a mean age of 18.44 (SD=5.61). They comprised of 206 (49.2%) male and 213 (50.8%) female students. 365 (87.1%) were Christians, while 54 (12.9%) were Muslims. 181 (43.2%) were Tiv, 119 (28.4%) were Idoma, while the remaining 119 (28.4%) were from other ethnic groups. 140 (33.4%) were in SSI, 140 (33.4%) were in SS2, while 139 (33.2%) were in SS3.

Instruments

Socio-demographic variables, the Self-Debasing Cognitive Distortions Scale, the Beck Depression Inventory, the Multidimensional Scale of Perceived Social Support, and the Beck Scale for Suicide Ideation were used.

Cognitive Distortion was measured using the Self-Debasing Cognitive Distortion Scale developed by Ara (2016). The 16-item scale is based on a 5-point Likert format of 1 (never) to 5 (most often). The author reported an alpha coefficient of .73, while the present study obtained an alpha of .70.

For construct validity, the primary dimension accounted for 22% of the common variance, with subsequent factors accounting for 8%, 7% and 6%, respectively. The eigenvalues for the first four factors were 3.57, 1.40, 1.24, and 1.02. All the 16 items loaded > .35 (range .36–.58) on the primary factor. Convergent validity has a moderate correlation with DAS (r = 0.30). Predictive validity has significant predictions of BDI R^2 = 17%, BAI R^2 =18%.

Depression was measured using the Beck Depression Inventory, developed by Beck et al. (1961). The unidimensional scale has 21 items, and a score of 1–10 indicates a normal state. 11–16 indicates mild mood disturbances, 17–20 indicates borderline clinical depression, 21–30 indicates moderate depression, 31–40 indicates severe depression, and a score above 40 indicates extreme depression. The present study obtained an alpha coefficient of .76 and a validity coefficient of r = 0.71.

Social support was measured using the Multidimentional Scale of Perceived Social Support developed by Zimet et al. (1988). This 12-item scale is measured on a 7-point format of 1-very strongly disagree to 7-very strongly agree. The scale is made up of 3 subscales: significant others (items 1, 2, 5, 10), family (items 3, 4, 8, 11) and Friends (items 6, 7, 9, 12). The author obtained an alpha coefficient of .87. The present study obtained an overall alpha coefficient of .75 and .68, .80, and .69 for the subscales, respectively. The construct validity obtained is r⁎0.50- 0.70

Suicide Ideation was measured using the Becks Scale for Suicide Ideation (BSS) originally developed by Beck, Kovacs and Weissman (1979). It consists of 19 items and each item consists of three alternative statements graded in intensity from 0 to 2. The total scores, ranging from 0 to 38 are obtained by adding the item values. The scale has reliability (Cronbach alpha) of 0.89 and validity coefficient of 0.41, respectively. The present study obtained a Cronbach's alpha coefficient of .72.

Procedure

This study was conducted among in-school adolescents in Makurdi metropolis. Permission was obtained from the school authorities to administer the questionnaires. Consent was sought and obtained from the participants before administration. Participants were given assurance of full confidentiality and anonymity of their identities and responses. They were also informed that participation was purely voluntary and that they were free to stop whenever they felt uncomfortable to continue the research. The researcher prepared a total of 430 copies of the questionnaire. After administration, a total of 419 copies, representing a return rate of 97.4%, was achieved and considered for analysis.

Sampling

This study adopted the simple random sampling method. This form of probability sampling gives every potential participant a chance of being selected for the study.

Data Analysis

The researcher employed descriptive and inferential statistics. Descriptive statistics such as mean, standard deviation, frequencies, and simple percentages were used to describe the respondents. Inferential statistics, such as simple linear regression, multiple linear regression, and Standard Multiple Regression, were used to test the study's hypotheses.

RESULTS

Table 1: Simple Linear Regression showing the influence of Cognitive Distortion on Suicide Ideation among In-school Adolescents in Makurdi metropolis.

Variables	R	R^2	F	df	β	t	Sig
Constant	.555	.308	78.387	1,417		13.449	.000
Cognitive Distortion					.555	17.727	.000

The result presented in Table 1 shows that there is a significant influence of cognitive distortion on suicide ideation among in-school adolescents in Makurdi metropolis r^2=.308, F (1,417) =78.39, p < .001. This implies that cognitive distortion accounted for 30.8% of the variance in suicide ideation. Therefore, Hypothesis 1 is supported.

Table 2: Simple Linear Regression showing the influence of Depression on Suicide Ideation among In-School Adolescents in Makurdi metropolis.

Variables	R	R^2	F	df	β	t	Sig
Constant	.414	.171	82.740	1,417		11.199	.000
Depression					.414	16.113	.000

The result presented in Table 2 reveals that there is a significant influence of depression on suicide ideation among in-school adolescents in Makurdi metropolis r^2=.171, F (1,417) = 82.74, p < .001. This implies that depression accounted for 17.1% of the variance in suicide ideation. Therefore, Hypothesis 2 is supported.

Table 3: Multiple Linear Regression showing the influence of Social Support on Suicide Ideation among In-School Adolescents in Makurdi metropolis.

Variables	R	r^2	F	df	β	t	Sig
Constant	.709	.503	54.775	3,415		17.383	.000
Family					.503	11.655	.000
Friends					.448	10.198	.000
Significant Others					.353	12.047	.000

The result presented in Table 3 demonstrates that there is a significant influence of social support on suicide ideation among in-school adolescents in Makurdi metropolis R^2=.503, F (3,415) = 54.78, p < .001. This implies that the three dimensions of social support accounted for 50.3% of the variance in suicide ideation. On independent basis, all the dimensions; Family (β=.503, t=11.655, p<.001), Friends (β=.448, t=10.198, p<.001) and Significant Others (β=.353, t=12.047, p<.001) significantly predicted suicide ideation. Therefore, Hypothesis 3 is supported.

Table 4: Multiple Regression showing the joint influence of Cognitive Distortion, Depression and Social Support on Suicide Ideation among In-School Adolescents in Makurdi Metropolis.

Variables	R	r^2	F	df	β	t	Sig
Constant	.779	.607	75.509	3,415		14.183	.000
Cognitive Distortion					.403	13.605	.000
Depression					.348	11.218	.000
Social Support					.331	12.114	.000

The result presented in Table 4 reveal that there is a significant joint influence of cognitive distortion, depression and social support on suicide ideation among in-school adolescents in Makurdi metropolis R^2=.6O7, F (3,415) =75.509, p<.001. This implies that cognitive distortion, depression and social support jointly accounted for 60.7% of the variance in suicide ideation.

DISCUSSION

Hypothesis one, which states that cognitive distortions will significantly influence suicidal ideation among in-school adolescents in Makurdi metropolis, was strongly supported. The result is in line with Whiteman et al. (2019), in which negative cognitions about the world, the self and self-blame fully mediated the effect of trauma type on suicide ideation. Similarly, Fazakas et al. (2017) indicated that only distortions have a direct effect on suicidal ideation, whereas cognitive deficit may exert their effects on suicide ideation via their reciprocal relation with distortions. In addition,

Gaweda et. al. (2020) revealed that depression and cognitive biases are significant mediators of the relationship between trauma and suicidal behaviours.

Hypothesis two states that depression will significantly influence suicidal ideation among in-school adolescents in Makurdi metropolis. The finding indicated that depression significantly influences suicidal ideation. This finding tallies with the assertion of Farabaugh et al. (2012) that students with greater depression severity are more likely to have suicide ideation. Also, Chang et al. (2016) and Anastasiades et al. (2016) have shown that suicidal ideation is positively correlated with depression.

Hypothesis three, which states that social support will significantly influence suicidal ideation among in-school adolescents in Makurdi metropolis, was supported. This finding confirms the assertion of Naila and Takwin (2018), who demonstrated that perceived social support contributes to the decrease in suicide. Endo et al. (2014) pointed out that people who had suicidal ideation reported receiving significantly less social support from their families and had greater feelings of dissatisfaction. Miller et al. (2015) revealed that perceptions of lower school support independently predicted greater severity of suicidal ideation. Ibrahim et al. (2019) confirmed that support from family and friends has a negative correlation with suicidal ideation.

Hypothesis Four, which states that cognitive distortion, depression and social support will jointly influence suicide ideation among in-school adolescents in Makurdi metropolis, was supported. This finding tallies with Ibrahim et al. (2019), which demonstrated that support from family and friends showed a negative correlation with suicidal ideation.

Conclusion

Firstly, In-school adolescents' thoughts of engaging in suicidal behaviour are determined by their distorted pattern of cognition. Secondly, the ideation of suicide is preceded by a depressed mood. Thirdly, social support (family, friends and significant others) is a determinant of suicide ideation. Finally, suicide ideation is jointly influenced by cognitive distortion, depression and social support.

Recommendations

Schools should implement cognitive-behavioural therapy (CBT) programs to help students reframe negative thought patterns. Therefore, imbibe hope and optimism rather than taking a pessimistic view of the world irrespective of the situation. In addition, mental health screenings in schools could identify at-risk students early, in which immediate clinical attention should be sought to aid adolescents in effectively managing the cause of their depression. This will avert the consolidation of the irrationality that accompanies depressive episodes from culminating into suicide ideation. Schools should foster inclusive environments where students feel valued and connected.

Furthermore, parents, guardians, and other caregivers need to consistently support adolescents emotionally to ease their shared vicissitude and avert the ideation of suicide as an escape route. Psychologists should endeavour to assess students using an eclectic method because predictors of

suicide ideation are diverse; hence, there is a need to incorporate a wide scope of possible predictors. Educators and parents should be trained to recognize warning signs of depression and suicidal thoughts. Also, workshops on active listening and emotional support could improve adolescents' coping mechanisms.

Limitations

Despite the percentage of variance in suicide ideation explained by the predictor variables, it can only be said of how well these variables predict suicide ideation. No causal inferences can be made from this study.

Furthermore, previous trauma such as abuse or bullying could exacerbate suicidal thoughts but were not assessed. Also, academic stress and exam pressure may have contributed to depression but was not included in the studies.

Suggestions for Future Studies

1. Longitudinal research to track changes in suicide ideation over time.
2. Inclusion of moderators (e.g., resilience, coping strategies) to understand protective factors.
3. Qualitative interviews to explore personal experiences behind statistical trends.

REFERENCES

Ahmad, N., Cheong, S. M., Ibrahim, N., & Rosman, A. (2014). Suicide ideation among Malaysian adolescents. *Asia Pacific Journal of Public Health, 26*(5), 63-69.

Anastasiades, M., Kapoor, S., Wotten, J., & Lamis, D. (2016). Perceived stress, depressive symptoms, and suicidal ideation in undergraduate women with varying levels of mindfulness. *Archives of women's Mental Health, 20,*

Ara, E. (2016). Measuring self-debasing cognitive distortions in youth. *International Journal of Asian Social Science, 6*(12), 705-712.

Barriga, A.Q., Gibbs, J.C., Potter, G.B., & Liau, A.K. (2001). How I Think (HIT) Questionnaire Manual. Champaign, IL: Research Press.

Beck, A. T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The scale for suicidal ideation. *Journal of Consulting and Clinical Psychology, 47,* 343-352.

Beck, A. T., Ward, C. T., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 561-571.

Betz, M.E., Anestis, M.D. (2020). Firearms, pesticides, and suicide: a look back for a way forward. *Prev. Med. 138,* 106-144.

Chang, E., Chen, W., Nielsen, A., Yu, T., Du, Y., Chang, O., & Hirshi, J. (2016). Understanding the association between negative life events and suicidal risk in college students: Examining self? Compassion as a potential mediator. *Journal of Clinical Psychology, 73*.

Chang, E., Chen, W., Nielsen, A., Yu, T., Du, Y., Chang, O., & Hirshi, J. (2016). Understanding the association between negative life events and suicidal risk in college students: Examining self? Compassion as a potential mediator. *Journal of Clinical Psychology, 73.*

Cho, Y., & Haslam, N. (2010). Suicidal ideation and distress among immigrant adolescents: The role of acculturation, life stress, and social support. *Journal of youth and adolescence, 39,* 370-379.

Christiansen, E., Goldney, R. D., Beautrai, A. L., & Agerbo, E. (2011). Youth suicide attempts and the dose-response relationship to parental risk factors: A population-based study. *Psychological Medicine, 41,* 313-319.

Czajkowski, N., Kendler, K. S., Tambs, K., Røysamb, E., & Reichborn-Kjennerud, T. (2011). The structure of genetic and environmental risk factors for phobias in women. *Psychological Medicine, 41,* 1987–1995. doi:10.1017/S0033291710002436.

Endo, G., Tachikawa, H., Fukuoka, Y., Aiba, M., Nemoto, K., Shiratori, Y., Matsui, Y., Doi, N., & Asada, T. (2014). How perceived social support relates to suicidal ideation: A Japanese social resident survey. *International Journal of Social Psychiatry, 60*(3), 290-298.

Farabaugh, A., Bitran, S., Nyer, M., Holt, F., Pedrelli, P., Shyu, I., Hollon, S., Zisook, S., Baer, L., Busse, W., Petersen, T., Pender, M., Tucker, D., & Fava, M. (2012). Depression and suicidal ideation in college students. *Psychopathology, 45*(4), 228-234.

Fazakas-DeHoog, L. L., Rnic, K., & Dozois, D. A. (2017). A cognitive distortions and deficit model of suicide ideation. *European Journal of Psychology, 13*(2), 178-193.

Gaweda, L., Pionke, R., Krezolek, M., Frydecka, D., Nelson, B., & Cechnicki, A. (2020). The interplay between childhood trauma, cognitive biases, psychotic-like experiences and depression and their additive impact on predicting lifetime suicidal behaviour in young adults. *Psychological Medicine, 50*(1), 116-124. https://doi.org/10.1017/S0033291718004026

Harrison, K. E., Dombrovski, A. Y., Morse, J. Q., Houck, P., Schlemitzauer, M., Reynolds,C. F., & Szanto, K. (2010). Alone? Perceived social support and chronic interpersonal difficulties in suicidal elders. *International Psychogeriatric, 22*(3), 445-454.

Horwitz, A. G., Held, P., Klassen, B. J., Kamik, N. S., Pollack, M. H., & Zalta, A. (2018). Posttraumatic cognitions and suicidal ideation among veterans receiving PTSD treatment. *Cognitive Therapy and Research, 42,* 711-719.

Ibrahim, N., Normah, C. D., Ahmad, M., Amit, N., Ghalazi, S. E., Wahab, S., Abdulkadir, N., Halim, F. W., & Halim, M. R. (2019). The role of social support and spiritual wellbeing in predicting suicidal ideation among marginalized adolescents in Malaysia. *BMC Public health, 19(4),*

Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

Klonsky, E. D., & May, A. M. (2015). The Three-Step Theory (3ST): A New Theory of Suicide Rooted in the "Ideation-to-Action" Framework. *International Journal of Cognitive Therapy, 8*(2), 114–129.

Klonsky, E. D., Pachkowski, M. C., & Shahnaz, A. (2020). Understanding suicide to prevent suicide. *Behaviour Therapy. 43,* 339–343.

Klonsky, E.D. (2020). The role of theory for understanding and preventing suicide (but not predicting it): a commentary on Hjelmeland and Knizek. *Death Study. 44,* 459–452.

Mahfoud, Z. R., Afifi, R. A., Haddad, P. H., & Dejong, J. (2011). Prevalence and determinants of suicide ideation among Lebanese adolescents: Results of the GSHS Lebanon 2005. *Journal of Adolescence, 34,* 379-384.

May, A.M., & Klonsky, E.D. (2013). Assessing motivations for suicide attempts: development and psychometric properties of the inventory of motivations for suicide attempts. *Suicide and LifeThreatening Behaviour. 43*(5), 532–546. https://doi.org/10.1111/sltb.12037

Miller, A. B., Esposito-Smythers, C., & Leichtweis, R. N. (2015). Role of social support in adolescent suicidal ideation and suicide attempts. *Journal of Adolescent Health, 56*(3), 286-292.

Naila, S., & Odesanmi, W. (2018). Perceived social support as predictor of suicide ideation in Gunung Kidul High Scchool students. https://doi.org/10.2991/uipsur-17.2018.8

Omigbodun, O., Dogra, N., Esan, O. & Adedokun, B. (2008). Prevalence and correlates of suicidal behavior among adolescents in southwest Nigeria. *International Journal of Social Psychiatry, 54,* 34-46.

Oppong-Asante, K., Kugbey, N., Osafo, J., Quarshie, E. N., & Sarfo, J. O. (2017). The prevalence and correlates of suicidal behaviours (ideation, plan, and attempt) among adolescents in senior high schools in Ghana. *SSM Population health, 3,* 427-434.

Owusu, A., Hart, P., Oliver, B., & Kang, M. (2011). The association between bullying and psychological health among senior high school students in Ghana, West Africa. *Journal of School Health, 81,* 231-238.

Ozguven, H. D., Soykan, C., Haran, S., & Gencoz, T. (2003). Importance of problem-solving skills, perceived social support, and depression and anxiety symptoms on suicide attempts. *Turkish Journal of Psychology, 18*(52), 13-15.

Page, R. M., & West, J. H. (2011). Suicide ideation and psychosocial distress in Sub-Saharan African youth. *American Journal of Health Behaviour, 35,* 129-141.

Page, R. M., Saumweber, J., Hall, P. C., Crookston, B. T., & West, J. H. (2013). Multi-country, cross-national comparison of youth suicide ideation: Findings from Global School-based Health Surveys. *School Psychology International, 34,* (5), 540-555.

Page, R. M., Yanagishita, J., Suwanteerangkul, J., Zarco, E. P., Mei-Leein, C. & Miao, N. F. (2006). Hopelessness and loneliness among suicide attempters in school-based samples of Taiwanese, Philippine, and Thai adolescents. *School Psychology International, 27,* 583-598.

Taylor, S. E., & Stanton, A. L. (2007). Coping resources, coping processes, and mental health. *Annual Review of Clinical Psychology, 3,* 377-401.

Ten-Have, M., De-Graaf, R., Van-Dorsselaer, S., Verdurmen, J., Van't-Land, H., Vollebergh, W., & Beekman, A. (2009). Incidence and course of suicidal ideation and suicide attempts in the general population. *The Canadian Psychiatric Association Journal, 54*(12), 824-33.

Whiteman, S. E., Kramer, L. B., Petri, J. M., & Weathers, F. W. (2019). Trauma type and suicidal ideation: The mediating effect of cognitive distortions. *Traumatology, 25(4),* 262-268.

World Health Organization. (2014). *Mental health–Suicide prevention*. Geneva, Switzerland. http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

Young, E. E., Lariviere, W. R., & Belfer, I. (2012). Genetic basis of pain variability: Recent advances. *Journal of Medical Genetics, 49,* 1–9.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 54*(1), 30-41.