

Prevalence of Suicidal Ideation and Hopelessness among Students at a State University in Zimbabwe

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Abstract

This study aimed at exploring suicide ideation and its relationship to hopelessness in university students in Zimbabwe. The study was quantitative utilising the cross sectional design. Questionnaires were distributed to a convenient sample of 102 final year students. These were drawn from three departments in the Faculty of Social Sciences (62.7% females, 37.3% males) with a mean age of 22.05 years. Hopelessness was measured using items extracted from the 39 item Depression Hopelessness and Suicide (DHS) Screening Form. Suicidal ideation was measured by items extracted from the DHS and a few that were derived from literature. Both instruments had Cronbach alpha above 0.7. Forty three percent of the study participants said things did not go their way, 35.3% said life was hard for them and 16.7% thought their situation was hopeless as measured by the hopelessness scale. In terms of suicidal ideation 15.7% indicated that they had told someone that they wanted to die, 14.7% had thought of killing themselves and 13.7% had a plan to kill themselves but did not follow it through. Hopelessness was found to be related to total suicidal ideation scores. Knowledge and awareness about the prevalence of and factors associated with suicidality among young people at university is important for institutions of higher learning in order to offer adequate suicide prevention programs for their students.

Key words: Suicide, Hopelessness, University Students, Mental health, Zimbabwe

Introduction

Mental health issues among university students are of concern especially in developing countries like Zimbabwe. College students are often viewed as a privileged population, but they face suffering and disability associated with mental illness (Hunt & Eisenberg, 2010). Suicide is one of the outcomes of the mental health challenges faced by college students. The process resulting in suicide is complex and starts with ideation, to attempted suicide and eventually completed suicide (Abdollahi & Talib, 2015; Cole et al., 1992; Elliot, Colangelo, & Gelles, 2005, Khan, 2011). Suicide ideation refers to thoughts and imaginations about one's suicide, open verbal threats to kill oneself, helplessness, lack of direction and

significance in life, and hopelessness (Ron, 2004). Suicide thoughts may vary from brief thoughts that life is not worth living to well organised and laid out plan for killing oneself, to an intense obsession with self-destruction (Khan, 2011, Levi; Horesh, Fischel, 2012; Rutter, 1995). Self-damaging and self-destructive acts are also part of suicidal behaviours whether these acts are planned or not. The individuals engaging in these acts may or may not be aware of the outcomes. College students face a myriad of problems that are difficult to cope with and some end up engaging in suicide.

Suicide rates among the general population are increasing in Zimbabwe. In 2012 the country was ranked among those with the highest (number 19 worldwide) suicide rates with 18 people dying from suicide per 100 000 people per year (World Health Organisation, 2012). This is more than double the 2006 statistics which showed that an average of 8 people per 100 000 were dying from suicide (WHO, 2006). The peak age for suicide among males was found to be the 65+ and for females the 15-24 years age group (WHO, 2006). In a 2007 study the prevalence of suicide among school-going adolescents in Harare, Zimbabwe was found to be 21.6% (19.4% among males and 23.7% among females) (Rudatsikira, Siziya & Muula, 2007). Young people especially college students are at an increasing risk of committing suicide with the rates being higher in females compared to males (Canetto, 2008).

Suicide has been reported as the second leading cause of death among college students (Schwartz, 2006) and about 1,350 college students die as a result of suicide each year in USA (Silverman, 2008). Some of the reasons for the high rates of suicide among college students are, identity issues, academic problems, social isolation, depression (Suicide Prevention Resource Center, 2004) and psychiatric disorders (Beautrais, Collings, Ehrhardt & Henare, 2005). Family violence (Resnick, Ireland, & Borowsky, 2004), child abuse (Fergusson & Horwood, 2001), and sexual abuse (Andover, Zlotnick, & Miller, 2007; Fergusson & Horwood, 2001;) have also been reported as significant risk factors for a suicide attempt as well as having a friend or family member who has committed suicide (Beautrais et al., 2005). Highest rates of suicide have also been found among individuals who had feelings of failure and lack of support (Boldero & Fallon, 1995, Dykstra, 1995) and those with lower intentions to seek help for suicidal problems (Deane et al, 2001, Deane & Todd, 1996, Rickwood & Braithwaite, 1994). Suicide imposes mental, physical and emotional stress on the family in addition to the loss of life (Gvion, Apter, 2012; Khan, 2011). It is a complex phenomenon that results from an interaction of a myriad of factors for example cultural (Colucci, 2006; Mayer & Ziaian, 2002), biological, genetic, environmental, cultural, religious and sociopolitical factors (Abdollahi & Talib, 2015; Gvion, Apter, 2012).

Despite the above mentioned risk factors for suicide there are several protective factors that reduce the incidence of suicide. Those who do not belong to any religion have been found to have higher suicidal rates (Madu & Matla, 2003) compared to those who are religious (Abdollahi & Talib, 2015). Spirituality and religion provide hope and are important in coping with stress therefore help in reducing suicide (Cotton et al., 2009; Vaughan, 1991; Schneidman, 1981). Marriage and motherhood are protective factors against suicide for women living in western countries but risk factors for women living in rural areas of developing countries (Vijayakumar et al., 2005). Higher levels of education have been found to be protective against suicide however pressures of young adulthood and college life may overwhelm and deplete students' coping resources resulting in reduced psychological wellness and suicidal behaviours (Vredenburg, O'Brien, & Krames, 1988). Studies have found that family connection acts as a protective factor and moderates suicide risk (Pettingell, 2008). However at colleges most students feel isolated as they will be staying away from their family networks.

This study is guided by the cognitive theory of suicide. According to this theory, suicide is thought to be an exit of hopelessness and despair and if a person is full of hopelessness, suicidal risks increase significantly (Minkoff, Bergman, Beck, Beck, 1973). Hopelessness has been found to be a strong predictor of suicidal ideation (Beck, Steer, Kovacs & Garrison, 1985; Abramson et al, 2000; Levy, Jurkovic, & Spirito, 1995; Klonsky, Kotov, Bakst, Rabinowitz, & Bromet, 2012) especially among multiple suicide attempters (Eposito, Spirito, Boergers, & Donaldson, 2003). Hopelessness refers to situations where individuals systematically misconstrue their life experiences in a negative way and anticipate dire outcomes for their problems (Deane, Wilson & Ciarrochi, 2001; Klonsky et al, 2012; McGinn, 2000). Hopeless people believe that their situation will not change for the better (Abramson et al., 2000; Khan, 2011). Suicidal individuals are more likely to experience hopelessness than non-suicidal individuals (Hovey & King, 2002; Jager-Hyman et al., 2014; Polanco-Roman & Miranda, 2013).

Little if any research on hopelessness and suicide ideation among university students has been done in Zimbabwe. Knowledge on hopelessness and suicidal ideation may help university counselling departments to screen for those students scoring high on the two constructs and to immediately offer psychotherapy to alleviate the negative consequences of suicide.

Purpose of the study

This study aimed to explore the prevalence of hopelessness and suicidal ideation among university students in Zimbabwe. The study was premised on the following research questions. What is the prevalence of suicidal ideation among university

students? What is the prevalence of hopelessness among university students? What is the relationship between ideation, hopelessness and demographic characteristics?

Methodology

The study was quantitative utilising the cross sectional design. Convenience sampling was used to select students from three departments in the faculty of Social Sciences at a State University in Zimbabwe. In convenience samples, subjects more readily accessible to the researcher are more likely to be included but opportunity to participate is not equal for all qualified individuals (Zhi, 2004). The study participants were approached after their lectures. Students who were willing to take part in the study signed individual consent forms after the purpose of the study was explained by the researcher. Prior to completing the questionnaire students were informed that they were free to withdraw from the study at any given time. Permission to conduct the study at the University was sought from the registrar of students.

The study sample consisted of 112 students (37.3% males and 62.7% females). Students were drawn from three departments in the faculty of Social Sciences. There was equal representation of students from the three departments with each department having 33.3% of students who participated in the study. Twenty eight percent of the participants were below 21 years, 44% were between the age range 22-25 and 28% were above 25 years. The participants' marital status were as follows: 82.4% were single, 13.7% were married and 3.9% indicated that they were divorced. Forty six percent were resident on campus and 54% stayed off campus. Thirty five percent of the students were from the Ndebele origin and sixty five percent were Shona (encompassed Manyika, Zezuru and Karanga). Eighty nine percent were Christians, 6% were Muslims and 5% indicated Traditional African religion.

The students completed a questionnaire that had three sections. Section A covered demographic information probing on the participants' age, marital status, religion, guardian's education, department, gender and ethnicity. Section B of the questionnaire consisted of 10 items that measured hopelessness. These items were derived from the 39 item Depression Hopelessness and Suicide Screening Form (DHS, Mills & Kroner, 2002). The DHS is a 39-item instrument developed to screen for depression, hopelessness, and suicide risk factors. Two of the items on the questionnaire (My future will be mostly happy and I am certain I can make something of myself) were reverse coded when total scores were computed. The Cronbach's Alpha of .753 showed that the instrument was reliable in measuring hopelessness. Section C consisted of Questions probing on suicidal ideation among the university students. Items were also extracted from the DHS with the addition of a few items that were not covered by the DHS. The questionnaire had ten items and were scored on a Likert scale. One item (Do you think life is worth living?) was reverse coded when total scores were computed. The Cronbach's Alpha for the

questionnaire after reverse coding the above item was found to .758. This showed that the instrument was reliable in measuring suicidal ideation.

Data was analysed with SPSS (version 19). Frequencies showing the prevalence of hopelessness and suicidal ideation among the study participants were computed. The chi-square test was used to find the relationship between demographic characteristics and hopelessness and suicidal ideation. The independent samples t-test was used to measure gender differences in hopelessness and suicidal ideation. The 5% ($p < 0.05$) was applied. It was hypothesised that females would attain higher scores in suicidal ideation and hopelessness.

Results and Discussion

Prevalence of hopelessness among university students

As shown on Table 1.1 below 18.6% of the students said their lives were seemed bleak. 35.3% said life was hard for them. 23.5% said no matter what they did things did not seem to get better. 43.1% said things did not go their way. 16.7% and 14.7% respectively said their situations were hopeless and they felt they did not amount to anything respectively.

		FREQUENCY	PERCENT
My future seems bleak	True	19	18.6
	False	83	81.4
My circumstances will not get better	True	13	12.7
	False	89	87.3
Life is hard for me right now	True	36	35.3
	False	66	64.7
My future will be mostly happy	True	88	86.3
	false	14	13.7
No matter what I do things don't get better	True	24	23.5
	False	78	76.5
I am certain I can make something of myself	True	86	84.3
	False	16	15.7
Most things don't seem to go my way	True	44	43.1
	False	58	56.9
Its hard to see myself happy	True	22	21.6
	False	80	78.4
I feel my situation is hopeless	True	17	16.7
	False	85	83.3
I don't think I amount to anything	True	15	14.7
	False	87	85.3

Table1.1 Prevalence of hopelessness among university students

Total scores on the hopelessness scale ranged from 10-20 with low scores showing severe hopelessness and high scores depicting hope. Nineteen (18.6%) scored between 10-12 points, 13(12.7%) in the 13-15 range and 79(77.4%) in the 16-20 range. The following demographic and background characteristics were found to be related to hopelessness- residence during the semester ($F=19.5$, $df=18$, $p=0.03$), department ($F=41.8$, $df=18$, $p=0.01$) and age ($F=32.6$, $df=18$, $p=0.02$). The following factors were found to be unrelated to hopelessness- marital status ($F=29.6$, $df=18$, $p=0.41$); male guardian's level of education ($F=55.9$, $df=36$, $p=0.18$); female guardian's level of education ($F=56.9$, $df=26$, $p=0.15$); ethnicity ($F=10.4$, $df=9$, $p=0.31$) and Religion ($F=22.7$, $df=18$, $p=0.2$). In trying to find out the relationship between gender and hopelessness an equal variance t-test failed to reveal a statistically difference between the mean number of males ($m=1.69$ $s=0.18$) and girls ($m=1.62$ $s=0.213$) $t(100)=1,368$, $p=1,75$ alpha 0,05. No gender differences in hopelessness were found as given by the above statistics. Gibb, Andover, & Beach (2006) found that levels of hopelessness among men were only related to suicidal ideation among those with positive attitudes toward suicide. In contrast, among women attitudes toward suicide had a stronger effect upon suicidal ideation at lower, compared to higher, levels of depressive symptoms.

Prevalence of suicidal ideation

Four percent of the study participants felt that they were better off dead and 14.7% sometimes had this feeling. 9.8% of the students reported that they had tried to commit suicide. This is lower than the 21% who reported having attempted taking their lives in a study that was done among secondary school students in South Africa (Madu & Matla, 2003). Forty one percent of the participants had thought of their own death and 4.9% said if things got worse they would consider killing themselves. 13.7% of the study participants had made plans to end their lives, this is slightly less than findings from Madu & Matla (2003) were 16% had made plans to end their lives. Eisenberg (2009) surveyed 8,590 students across 15 campuses. Results indicate that 7% of students reported having "Seriously thought about suicide" in the past year. Two percent report having had a plan for suicide and 1% reported having made a suicide attempt in the past year.

Four percent of the participants and 15.7% had had a plan to kill themselves and had told someone that they wanted to kill themselves respectively. This is almost similar to findings by Madu & Matla (2003) in their study of secondary school adolescents, they found that 17% had informed others of their plans to end their lives. About a quarter (23%) of students in the Faculty of Medicine, University of Zimbabwe stated that they had entertained thoughts of killing

themselves (Williams, 1984). Some of the suicidal ideation frequencies are shown in table 1.2 below.

	Definitely no	Sometimes/ Maybe	Yes
Do you think you are better off dead	83(81.4%)	15(14.7%)	4(3.9%)
Have you ever tried to commit suicide	92(90.2)	0(0.0%)	9(9.8%)
Have you ever had a plan to kill self but did not follow it through	81(79.4%)	6(5.9%)	14(13.7%)
Have you ever told anyone you wanted to kill yourself	83(81.4%)	1(1.0%)	16(15.7%)
Would you consider killing yourself	86(84.3%)	14(13.7%)	2(2.0%)
Have you ever thought of killing yourself	74(72.5)	13(12.7%)	15(14.7)
If you don't get a job in the next two years would you kill yourself	93(91.2%)	7(6.9%)	2(2.0%)
If things get worse would you consider killing yourself	78(76.5%)	19(18.6%)	5(4.9%)
Do you think life is worth living	7(6.9%)	17(16.9%)	78(76.5%)
have you ever thought of your own death	25(24.5%)	35(34.3%)	42(41.2%)

Table 1.2 Prevalence of suicidal ideation

Total scores on the suicidal ideation scale ranged from 10-30 with highest scores showing severe suicidal ideation. Seventy five percent (75%) scored in the 12-17 range and 25% in the 23-30 of severe suicidal ideation.

Significant relationships were found between suicidal ideation and the following demographic characteristics- marital status ($\chi^2=69.2$, $df=28$, $p<0.001$); female guardian's education ($\chi^2=104.65$, $df=56$, $p<0.001$); residence during the semester ($\chi^2=29.4$, $df=28$, $p=0.035$) and religion ($\chi^2=77.2$, $df=28$, $p<0.001$). The current study revealed that female guardian's level of education were related to suicidal ideation. Similarly in a study of suicide and depression among university students Korb & Plattner (2014) found that students whose mothers/female guardians had a tertiary education were less likely to have engaged in suicide ideation.

In trying to find out the relationship between gender and suicidal ideation an equal variance t-test revealed a statistically significant difference between the mean number of males ($m=1.4$ $s=1.8$) and girls ($m=1.6$ $s=0.39$) $t(100)=2.5$; $p=0.12$ alpha 0,05. The study therefore revealed gender differences in suicidal ideation with females reporting higher scores on suicidal ideation compared to males. In line with this finding Simon et al (2001) noted that males are five times more likely

to die of a suicide attempt and are more prone to attempting suicide impulsively. Other studies found that the rates of completed suicides are higher among males than females, whereas attempted suicides and threats to commit suicide are higher among females (Madu & Matla, 2003; Zimmerman & Asnis, 1995). However a study focusing on suicide ideation and its relationship to depression in university students in Botswana did not find any gender differences in suicidal ideation (Korb & Plattner, 2014). The study found no significant relationship between suicidal ideation and the following demographic characteristics: Male guardian's education ($\chi^2=74.1$, $df=56$, $p=0.53$); Department ($\chi^2=30.5$, $df=28$, $p=0.34$) and ethnicity ($\chi^2=23.7$, $df=28$, $p=0.50$).

The Spearman correlation coefficient was used to find the relationship between hopelessness and suicidal ideation. The Hopelessness scores negatively correlated with total suicidal ideation scores ($r=-0.367$, $r=0.0001$). This means that low hopelessness scores (people who were severely hopeless) were related to high suicidal ideation scores. The study therefore found out that there was a relationship between hopelessness and suicidal ideation among university students. Many studies have also found the same (Horesh, Orbach, Gothelf, Efrati & Apter, 2003; Tompson, Mazza, et al., 2005). Khan (2011) in a study of adolescents got correlations between suicide and hopelessness that were significant at .001 suggesting that suicide ideation was associated markedly with depression and hopelessness. This finding also aligns with the cognitive theory of depression that suggests that helplessness is a key factor in depression (Minkoff, et al, 1973).

Conclusions

The current study thus found that hopelessness was related to residence during the semester, department and age. There were no notable relationships between gender and hopelessness. The following factors were found to be related to suicidal ideation - marital status, female guardian's education, residence during the semester, religion and gender. It is imperative for counselling departments in Universities to screen for hopelessness and suicidal ideation among their students so as to offer appropriate interventions. This study found that there was a relationship between residence during the semester and suicidal ideation. With off campus residence being related more to suicidal ideation compared to campus residence. Thus it is important to further research on vulnerabilities of off campus students so as to find out the factors associated with off campus residence that could predispose them to suicidal ideation.

Limitations of the study

This study relied exclusively on a self-report method of data collection, which is subject to intentional distortion. Suicide is a relatively sensitive subject that is regarded

as taboo by different cultural, ethnic and religious populations, therefore participants could have given socially desirable responses in an attempt to present a favourable.

The sample was relatively homogeneous in terms of age and schooling (i.e. they were all university students from the faculty of social sciences), as well as religious and ethnic affiliation. Furthermore, in terms of gender and place of residence, groups were not proportionally represented. Use of a convenient sample may make the results not to be generalized to students in universities elsewhere.

References

Andover, M., Zlotnick, C., & Miller, I. (2007). Childhood physical and sexual abuse in depressed patients with single and multiple suicide attempts. *Suicide and Life-Threatening Behavior*, 37(4), 467-474.

Abdollahi, A. & Talib, M. A. (2015). Spirituality Moderates Hopelessness, and Suicidal Ideation among Iranian Depressed Adolescents. *Death Studies*, DOI: 10.1080/07481187.2015.1013163

Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Gibb, B. E., Hankin, B. L., & Cornette, M. M. (2000). The hopelessness theory of suicidality. In T. Joiner & M. D. Rudd (Eds.),

Suicide science: Expanding the boundaries (pp. 17-32). Dordrecht: Kluwer.

Beautrais, A., Collings, S. C. D., Ehrhardt, P., & Henare, K. (2005). *Suicide prevention: A review of evidence of risk and protective factors, and points of effective intervention*. Wellington, New Zealand: Ministry of Health.

Beck, A. T., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A 10-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry*, 142,559-563.

Boldero, J., & Fallon, B. (1995). Adolescent help-seeking: What do they get help for and from whom? *Journal of Adolescence*, 18, 193-209.

Canetto, S. S. (2008). Women and suicidal behaviour: A cultural analysis. *American Journal of Orthopsychiatry*, 78,259-266.

Centers for Disease Control and Prevention. (2013). Web-based Injury Statistics Query and Reporting System (WISQUARS) [Online]. Atlanta, Georgia: National

Center for Injury Prevention and Control. Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>

Cole, D. E., Protinsky, H. O., & Cross, L.H. (1992). An empirical investigation of adolescent suicidal ideation. *Adolescence*, 27(108), 813-818.

Colucci, E. (2006). The cultural facet of suicidal behaviour: Its importance and neglect. *Australian e-Journal for the Advancement of Mental Health*, 5(3), www.auseinet.com/journal/vol5iss3/colucci.pdf

Cotton, S., Kudel, I., Roberts, Y. H., Pallerla, H., Tsevat, J., Succop, P., & Yi, M. S. (2009). Spiritual well-being and mental health outcomes in adolescents with or without inflammatory bowel disease. *Journal of Adolescent Health*, 44(5), 485-492. doi:<http://dx.doi.org/10.1016/j.jadohealth.2008.09.013>

Deane, F. P., & Todd, D. M. (1996). Attitudes and intentions to seek professional psychological help for personal problems or suicidal thinking. *Journal of College Student Psychotherapy*, 10, 45-59.

Deane, F., Wilson, C., & Ciarrochi, J. (2001). Suicidal ideation and help-negation: It's not just hopelessness or prior help. *Journal of Clinical Psychology*, 57, 901-914.

Eisenberg, D. (2009). *Report on The Healthy Minds Study for 2009*. The Center for Student Studies at the Survey Sciences Group, on behalf of the University of Michigan's School of Public Health.

Elliot, G. C., Colangelo, M. F., & Gelles, R. (2005). Mattering and suicide ideation: Establishing and elaborating a relationship. *Social Psychology Quarterly*, 68, 223-238.

Esposito, C., Spirito, A., Boergers, J., & Donaldson, D. (2003). Affective, behavioral, and cognitive functioning in adolescents with multiple suicide attempts. *Suicide and Life Threatening Behavior*, 33, 389-399.

Gibb, B. E., Andover, M. S. & Beach, S. R. H. (2006). Suicidal Ideation and Attitudes Toward Suicide. *Suicide and Life-Threatening Behavior* 36(1). DOI: 10.1521/suli.2006.36.1.12.

Gvion, Y., Apter, A. (2012). Suicide and suicidal behavior. *Public Health Reviews*, 34(2), 1-20.

Fergusson, D. M., & Horwood, L. J. (2001). The Christ church Health and Development Study: Review of findings on child and adolescent mental health. *Australian and New Zealand Journal of Psychiatry*, 35(3), 287-296.

- Horesh, N., Orbach, I., Gothelf, D., Efrati, M., & Apter, A. (2003). Comparison of the Suicidal Behavior of Adolescent Inpatients with Borderline Personality Disorder and Major Depression. *Journal of Nervous and Mental Disease*, 191, 582-588.
- Hovey, J. D., & King, C. A. (2002). The spectrum of suicidal behavior. *Handbook of Serious Emotional Disturbance in Children and Adolescents*, 4, 284-303.
- Hunt, J., Eisenberg, D. (2010). Mental Health Problems and Help-Seeking Behavior Among College Students. *Journal of Adolescent Health* 46, 3-10.
- Jager-Hyman, S., Cunningham, A., Wenzel, A., Mattei, S., Brown, G. K., & Beck, A. T. (2014). Cognitive distortions and suicide attempts. *Cognitive Therapy and Research*, 38(4), 369-374. doi:10.1007/s10608-014-9613-0
- Khan, I. (2011). Relationship of suicide ideation with depression and hopelessness. *Indian Journal of Psychological Science*, December, 2(2), 126-133.
- Klonsky, E. D., Kotov, R., Bakst, S., Rabinowitz, J., & Bromet, E. J., (2012). Hopelessness as a predictor of attempted suicide among first admission patients with psychosis: A 10-year cohort study. *Suicide and Life-Threatening Behavior*, 42(1), 1-10.
- Korb, I. & Plattner, I. E. (2014) Suicide ideation and depression in university students in Botswana. *Journal of Psychology in Africa*, 24(5), 420-426. DOI <http://dx.doi.org/10.1080/14330237.2014.997010>
- Levi, Y., Horesh, N., & Fischel, T., (2012). Clinical aspects of suicidal behavior relevant to genetics. *Eur Psychiatry*, 25, 257-259.
- Madu, S. N. & Matla, M. P. (2003). The prevalence of suicidal behaviours among secondary school adolescents in the Limpopo Province, South Africa. *South African Journal of Psychology*, 33 (2), 126-132.
- Mayer, P. & Ziaian, T. (2002). Suicide, gender, and age variations in India. Are women in Indian society protected from suicide? *Crisis*, 23(3), 98-103.
- McGinn, L. (2000). Cognitive behavioral therapy of depression: Theory, treatment and empirical status. *American Journal of Psychotherapy*, 54, 254-260.
- Mills, J. F., & Kroner, D. G. (2002). *Depression, hopelessness and suicide screening form (DHS): User guide*.

- Minkoff, K., Bergman, E., Beck A. T., Beck, R. (1973). Hopelessness, depression, and attempted suicide. *The American Journal of Psychiatry*, 130(4), 455-459.
- Pettingell, S., Bearinger, L., Skay, C., Resnick, M., Potthoff, S., & Eichhorn, J. (2008). Protecting urban American Indian young people from suicide. *American Journal of Health Behaviors*, 32(5) 465-476.
- Polanco-Roman, L., & Miranda, R. (2013). Culturally Related Stress, Hopelessness, and Vulnerability to Depressive Symptoms and Suicidal Ideation in Emerging Adulthood. *Behavior Therapy*, 44(10), 75-87. doi:10.1016/j.beth.2012.07.002
- Resnick, M., Ireland, M., & Borowsky, I. (2004). Youth violence perpetration: What protects? What predicts? Findings from the national longitudinal study of adolescent health. *Journal of Adolescent Health*, 35(5), 424. e1-10.
- Rickwood, D. J., & Braithwaite, V. A. (1994). Social-psychological factors affecting seeking help for emotional problems. *Social Science and Medicine*, 39(4), 563-572.
- Ron, P. (2004) Depression, Hopelessness, and Suicidal Ideation Among the Elderly. *Journal of Gerontological Social Work*, 43, 97-116, DOI: 10.1300/J083v43n02_07
- Rudatsikira, E., Siziya, S. & Muula, A. S. (2007). Suicidal ideation and associated factors among school-going adolescents in Harare, Zimbabwe. *Journal of Psychology in Africa*, 17, 93-97.
- Rutter, M. (1995). *Psycho-social disturbances in young people: Challenges for prevention*. Cambridge: Cambridge University Press.
- Schneidman, E. S. (1981). *Suicide thoughts and reflections, 1960 -1980: A special issue of suicide and life threatening behaviour*. New York: Human Sciences Press.
- Schwartz, A. J. (2006). College student suicide in the United States: 1990-91 through 2003-04. *Journal of American College Health*, 54, 327-337.
- Silverman, M. M. (2008). Turning Violence Inward: Understanding and Preventing Campus Suicide. Presented to Violence on Campus: Prediction, Prevention, and Response, Columbia University Law School, New York, NY, April 4, 2008
- Simon, T. R., Swann, A., Powell, K. E , Potter, L. B., Kresnow, M. O'Caroll P. W., (2001). Characteristics of impulsive suicidal attempts and attempters. *Suicide and life threatening behaviours*, 32, 49-59.

Suicide Prevention Resource Center. (2004). *Promoting Mental Health and Preventing Suicide in College and University Settings*. Newton, MA: Education Development Center, Inc.

Thompson, E. A., Mazza, J. J., Herting, J. R., Randell, B. P., & Eggert, L. L. (2005). The Mediating Roles of Anxiety, Depression, and Hopelessness on Adolescent Suicidal Behaviors. *Suicide and Life Threatening Behavior*, 35, 14-34.

Vaughan, F. (1991). Spiritual issues in psychotherapy. *Journal of Transpersonal Psychology*, 23(2), 105-119.

Vijayakumar, L., John, S., Pirkis, J., & Whiteford, H. (2005). Suicide in developing countries. *Crisis*, 26, 112-119.

Vredenburg, K., O'Brien, E., & Krames, L. (1988). Depression in college students: Personality and experiential factors. *Journal of Counseling Psychology*, 35, 419-425

WHO. (2006). *Suicide rates in countries throughout the world*. Retrieved on June 20, 2015 from http://fathersforlife.org/health/who_suicide_rates.htm

World Health Organisation (2012). Retrieved from <http://www.worldlifeexpectancy.com/cause-of-death/suicide/by-country/>

Williams, H. (1984). Suicidal behaviour: Some views of staff and students, Faculty of Medicine, University of Zimbabwe. *Central African Journal of Medicine*, 30, 227-229

Zhi, H. L. Z. (2014). A comparison of convenience sampling and purposive sampling. doi: 10.6224/JN.61.3.105.