

PSYCHOLOGICAL CORRELATES OF SUICIDAL IDEATION AMONG ADOLESCENTS

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Abstract

The relationship of psychological and social-environmental factors with adolescents' suicidal ideation was examined with a sample of 374 college students. Students were assessed with measures of depression, hopelessness, major negative life events, daily hassles, social support, and suicidal ideation. Assessments showed that daily hassles and negative life events for males and social support and depression for females were significant factors related to suicidal ideation. Changes in depression and hopelessness were significantly related to changes in suicidal ideation for males and females. Differences found between males and females in the relationship of psychological and social environmental variables with suicidal ideation support the need to examine gender specific relationships when conducting studies on suicide behaviour in adolescents.

Adolescent suicide continues to be a problem of great concern. Suicide is currently the second leading cause of health among adolescents. Recent survey data indicate that approximately 8.7% of adolescent respondents reported making at least one suicide attempt over a 1-year period (Centres for Disease Control, 2006), suggesting that as many as 1 in 13 adolescent may be at risk of suicidal behaviour (Reynolds & Mazza, 1994). Suicides do not occur in a social vacuum; like all human deeds, they are a product, to a lesser or to a greater extent, of the social world in which they take place. Farber (1968) argues that suicide is a function of two factors: vulnerability and deprivation. He opined that the frequency of suicide is a function of the frequency of individual possessing a certain vulnerability in that population, and of the extent of certain deprivations in that population.

Psychological vulnerability for the individuals sense of competence, a self knowledge that one can (or cannot) cope with the stresses and strains of life. The more vulnerable the individual, the greater the chance of suicide. The individuals' vulnerability affects and is in turn affected by deprivation, which is the diminishing or

disruption of the person's living conditions. When the threat to acceptable life conditions is high, and one's sense of self-competence (the perceived ability to contend with the threat) is low, then there is a greater chance of suicide occurring. On the contrary, when one's self-competence is high (low vulnerability) and the threat of deprivation is low, the chances of suicide diminish.

The increased rates of adolescent suicide and suicidal behaviour are a major concern to the mental health field as to the general population. According to the Centre for Disease Control (CDC, 2005) the rate of suicide in adolescents ages 15 – 19 increased 28.3% from 2002. Although the actual base rate of adolescent suicide is relatively low, approximately 11 per 100,000 (CDC, 2005), it ranks as a leading cause of death for this age group (National Institute for Mental Health, 2002). Data gathered by the CDC, NIHM and others suggests that suicidal behaviours, including suicide attempts and suicidal ideation are relatively common among youths. The extent of adolescent suicidal behaviour supports the need for examining potential process and factors that may affect or exacerbate adolescents' suicidal cognition.

Within the fields of psychology and psychiatry, much of the research on factors considered correlates of adolescents suicide behaviours are focused on variables such as depression (Brent, 1989), hopelessness (Rotheram-Borus & Trautman, 1988, Cole, 1989), social support (Hartson, 1986, Lewinsohn, Rohde, & Seeley, 1993) and social environmental stressor (Lewinsohn 1993, Wager 1995). This research has used non-clinical samples of adolescent, and for the most part, has examined concurrent relationships among these variables. Ruter (1995) noted that psychological variables were previously considered causal factors in the development of psychopathology. The current thought is that psychosocial variables, rather than being the sole cause of change may also interfere or exacerbate preexisting psychological conditions in some youngsters who manifest psychological dysfunction or vulnerability (Caspi & Moffit, 2003; Ruther, 1995). Recent research in developmental psychopathology has focused on depression, and to a lesser extent, suicide behaviour in adolescents (Reynolds & Hohnston 1994). Given that suicidal behaviour may be viewed as a potential outcome of changes in a youngster psychosocial functioning, the examinations of changes in psychosocial factors over time and the relationship of these changes of suicidal behaviour may provide for a better understanding of suicidal behaviours in adolescent.

Psychological Factors Related to Adolescent Suicidal Behaviour

Research on adolescent suicide behaviour has identified numerous psychological factors that demonstrate moderate relationships with suicidal behaviour (King Raskin, Gdowski, Butkus & Oipari, 1990). Depression has been frequently reported in adolescents who exhibit suicidal behaviour (Brand, King, Olson, Ghaziuddin, & Naylor 1996). Research studies examining the relationship between depression and suicidal ideation in adolescent suicide attempters report moderate correlations, ranging from 40 to 60 (Sadowski & Kelley, 1993).

Although depression and suicidal behaviour are related they are not synonymous (Cole, 1989; Reynolds, 1993). Adolescent who exhibit suicidal behaviour are not

necessarily depressed (Raynolds & Mazza 1990), nor are all depressed youngsters contemplating suicide. Hopelessness, conceptualized as a pessimistic perception of the future (Beck, Weissman, Lester & Trexler, 1994), has been studied as it relates to suicidal behaviour in adolescents. In adults, hopelessness has been found to mediate the effects of depression and suicidal behaviour in adolescents have reported mixed results (Lewinsohn, 1993; Rich, Kirkpatrick-Smith, Bonner & Jans, 1992). Lewinsohn and colleagues (1993) found that when depression was statistically controlled, other psychosocial variables including hopelessness was the best predictor of suicidal ideation, accounting for a majority of the explained variance using stepwise regression procedure.

Socio Environmental Factors Related to Adolescent Suicidal Behaviour

Social and environmental variables that have been found to be related to suicide behaviour include stressors (major and minor events) and level of social support (Dewilde, Keinhorst, Diekstra, & Wolters, 2002; Reynolds 1988). Lewinsohn, Rohde & Seeley, (1993) found that the relationship between suicidal behaviour and both major life events and daily hassles was primarily a function of depression. They further found out that when depression was controlled, family support remained a significant predictor of suicide behaviour but peer social support did not. Kandel, Raveis and Davies (1991), examined the relationship of social support and suicidal ideation with 593 high school students, and found out that social support differentiate those males and females with high levels of suicidal ideation compared to some sex peers with low ideation. They further reported that adolescents with high level of suicidal ideation depended on their peers more for social support than their parents.

Reynolds (1986) in a study of 920 adolescents in grades 10, 11 and 12 found zero-order correlation coefficient of 39,48 and -.32 (all $p < .001$), between Suicidal Ideation as measured by the Suicidal Ideation Questionnaire (SIQ) and majors of negative life events, hassles and social support, respectively. A multiple regression analysis with SIQ as dependent variable resulted in a multiple R of .54. ($R^2 = .29$). Standardized beta coefficients of .32 with hassles, -.21 with social support and .18 for major negative life events were found (all $p < .01$) suggesting the relative importance of variables for understanding suicidal behaviour in adolescents. The importance of examining hassles or chronic strains in addition to major negative life events when studying suicidal behaviour in adolescent was demonstrated by (Adams, Overholser and Spirito, 1994). This study also illustrates the importance of gender specific relationships in the study of variables related to suicidal behaviour in adolescents.

The purpose of this study was three fold (1) to examine the relationship of five selected psychological and social-environmental factors thus: depression, hopelessness, social support, daily hassles, and negative life events to suicidal ideation 1 year later. Secondly, how the changes in these psychological variables relate to change in suicidal ideation over 1 year period. Thirdly, to examine gender-specific relationship. Given that gender difference are widely recognized in adolescent suicidal behaviour, this study

examined the relationship between psychological and socio-environment factors and suicidal ideation separately for males and females.

Methods

The participants were 374 college students enrolled in different courses in a college located in a sub-urban town in Akwa Ibom State who were evaluated for potential mental health problems as part of an annual college-mandated screening programme. At the initial assessment at Time 1 there were 655 students who participated in the study, however, due to student dropout, transfers, absenteeism, invalid responses and incomplete data, there were 34 (5.1%) students from Time 1 that completed Time 2 assessment 1 year later and had complete data for both assessment periods. Gender was approximately equal with 172 (46%) males and 202 (54%) females.

The mental health assessment battery completed by participants on both assessments occasions consisted of self report paper-and-pencil measures of daily hassles, major negative life events, social support, depression, hopelessness, and suicidal ideation. The negative life events and daily hassles questionnaires were slightly modified for the Time 2 administration.

Suicidal Ideation Question (SIQ)

The SIQ developed by Reynolds (1988) is a self-report measure of suicidal ideation designed for use by adolescents. The 30 item SIQ assesses specific thoughts and cognitions about suicide and death over the past month. The SIQ uses a 7-point scale, with score points ranging from having the cognition “almost everyday” (6) to “I never had this thought” (0). The psychometric properties of the SIQ are well established. Internal consistency reliability using Cronbach’s coefficient alpha (Cronbach, 1951) of .97 has been reported in school-based (Reynolds, 1988) sample of adolescent.

Construct validity was established through convergent validity, with SIQ scores moderately to strongly correlated (-.52 to .70) with related constructs such as hopelessness and learned helplessness self esteem (Reynolds, 1988). The SIQ has been used in numerous denial and school-based studies of suicidal ideation (e.g, Pinto & Whisman, 1996). The SIQ was the dependent measure of this study.

Assessment of Psychological Factors

Reynolds Adolescent Depression Scale (RADS). The RADS (Reynolds, 1987) was used to assess severity of depressive symptomatology in participants. The RADS was developed for use with adolescents and consist of 30 items utilizing a 4-point (1-4) likert type scale with higher scores indicating greater depressive symptomatology. The psychometric properties of the RADS show strong reliability and validity. Reynolds (1987) reported an internal consistency co-efficient using Cronbach’s alpha (Cronbach, 1951) of .92 concurrent validity was established comparing the RADS to the Hamilton Depression Rating Scale (HDRS, Hamilton, 1960) in a school-based sample, the resulting correlation coefficients were strong, $r = .83$, convergent validity was determined by strong correlation coefficient with other self-report measures of depression (Reynolds 1987).

Hopelessness Scale (HS)

The HS by Beck, Weissman, Lester and Trexler (1974) was used to assess hopelessness. The HS is a 20 – item, true and false measure that assesses the individual's negative expectation for the future (Beck, 1974). Each item is scored as 0 or 1, with a total score ranging from 0 to 20. The first nine items on the HS assess the person's attitude about the future. The remaining 11 items assess the amount of pessimism the individual is currently experiencing. The HS has been extensively used as a measure of hopelessness for adolescents in other suicidal behaviour research (Eggert, Thompson, & Herting, 1994; Rich, 1992). The HS shows high internal consistency with a reliability coefficient of $r = .93$. Concurrent validity was determined through a clinical interview assessing hopelessness and negative expectancies. The resulting concurrent validity coefficient was at an acceptable level of $r = .74$.

Social-Environmental Factors

Life Events List – Revised (LEL – R)

The LEL – R is a revision of Gersten, Langer, Eistenberg, and Orzecks (1974) life events lists developed by Reynolds (1982). The LEL – R consists of 16 items that assess major negative life events (i.e, parental separation or divorce, breaking up with girl friend/boy friend, severe illness of a parent, etc). As revised by Reynolds (1982), the item responses are scored on a 6-point 0-5 likert – type scale based on the recency of the event, with a rating of 5 given to the most recent events and a 0 rating for those events that have not occurred. The revision of this measure is predicted on the assumption that more recent events cause more stress for the individual and, with increased time, the potential effects of the event would decline. The scale was slightly revised at Time 2 to include two additional items. Research with the 18 item LEL – R by Reynolds and Waltz (1986) showed satisfactorily internal consistency at $r_a = .71$ using Cronbach's alpha (Cronbach 1951).

Adolescent Hassle Inventory (AHI)

The AHI (Reynolds & Waltz (1984a) was designed to measure discrete minor events and chronic stressors in adolescents. Discrete minor events are those negative events that, although considered stressful, are not associated with major life changes and may occur either infrequently or on a relatively frequent basis. Chronic stressors are undesirable conditions, difficult relationships, and negative on-going social situations that occur almost everyday Pearlin & Schooler, (1978), but that individually are not significantly less severity than major negative life events. The AHI consist of 32 true – false items at Time 2 with the deletion of an item with very low endorsement proportion. Items were originally selected from the domains of adolescent hassles with school, parent/family, jobs friends and personal matters, and were written to avoid overlap with major negative life events. Research with the 32 items AHI by Reynolds Waltz (1986) showed a reliability coefficient of $r_a = .86$

Adolescent Support Inventory (ASI)

The ASI was developed by Reynolds & Waltz, (1986) to assess adolescent social support. The ASI is composed of 16 true-false items that assess perceived social support for the adolescent. The items on the ASI examine social support provided by peers, teachers, friends, family members, and others who are likely to be in contact with adolescents. The ASI show acceptable internal consistency reliability with an alpha coefficient of $r_a = .81$ (Reynolds & Waltz, 1986).

Procedure

Data were collected through the use of self-report measures completed by participants as part of an annual school wide mental health screening programme. Self report measures were administered by the teachers to the students in their respective classrooms. Teachers were informed of the data collection procedures approximately 2 weeks before the assessment. Assessment occurred during the month of October. Students who did not complete the measures for both years or who had invalid responses during one of the years were not included in this current investigation. Because the primary purpose of the assessment was the identification of at risk school-based adolescent, student names were used on the measures as part of the identification process.

Data Analyses

Data analyses were conducted using version 6 of SPSS for windows (SPSS, 2003). Zero-order correlation coefficients were calculated separately for each gender on the longitudinal and change score analyses to examine the relationship of each predictor to suicide ideation. The residual change score was determined by determining the predictive value of suicidal ideation at Time 1 to the suicidal ideations scores at Time 2, thus accounting for the correlation between Time 1 and Time 2 suicidal ideation scores.

Multiple regression analyses with all independent variables entered simultaneously were conducted to examine the unique contribution of each predictor while controlling for the relationship of the other independent variables. t-test were used to determine if the unique contribution was significant.

For each multiple regression analyses, five directional planned comparisons were conducted. Higher scores on the psychological variables of depression and hopelessness and the social-environmental measures of negative life events and hassles were hypothesized to be significantly related to higher scores on the measures of suicidal ideation. Because the social support was scored in a positive direction it was hypothesized that lower scores on the measure of social support would be significantly related to higher levels of suicidal ideation, resulting in a negative relationship.

Results

Table 1: Male and Female Mean and Standard Deviations of Scores at Time 1, Time 2 and Change Score (T1 – T2)

	Male		Female		T	PR	D
	M	SD	M	SD			
RADS – T 1	55.29	12.01	61.44	14.13	-4.49*	.001	.47
RADS – T 2	51.53	13.29	59.16	14.61	-5.25*	.001	.55
Mean score change	3.76	11.41	2.28	14.06	1.10	.272	.11
AHI - T1	4.29	3.49	4.09	3.81	.52	.606	.05
AHI – T2	3.73	3.56	3.75	3.26	-.06	.955	.01
Mean score change	.56	3.24	.34	3.85	-.58	.561	.06
AHI – T1	42.45	5.97	43.16	5.98	-1.15	.250	.12
AHI – T2	38.10	5.21	40.12	5.39	-3.56*	.001	.37
Mean score change	4.35	4.77	3.04	5.39	2.46	.014	.26
ASI – T1	28.73	2.93	29.04	2.90	-1.03	.303	.11
ASI – T2	29.45	2.60	20.59	2.22	-.56	.573	.06
Mean score change	-.72	2.91	-.55	2.54	-.61	.543	.06
NLE – T1	13.97	10.19	16.96	11.81	-2.60	.010	.27
NLE – T2	12.84	11.80	15.00	11.24	-1.81	.071	.19
Mean score change	1.13	11.62	1.96	11.01	-.71	.477	.07
SIQ – T1	12.72	16.85	21.41	30.48	-3.33*	.001	.35
SIQ – T2	9.50	13.17	16.71	22.65	-3.68*	.001	.38
Mean score change	3.22	17.20	4.70	5.46	-.65	.519	.07

Table 1 shows the means and standard deviations for the dependent and independent variables of suicidal ideation, depression, hopelessness, negative life events, hassles and social support, at Time 1, Time 2, and their change scores (Time 1 – Time 2) for males and females. Gender differences on each variable were examined using independent tests with a corrected alpha level set at .0065 (10/18) for each comparison. The results of the t-test along with respective effect size statistics are also presented. Gender differences were found among three of the six variables: depression, daily hassles and suicidal ideation. At the initial assessment, gender differences were found in depression and suicidal ideation, with females scoring significantly higher. Negative life events at Time 1 showed a trend $t, (372) = .260, p < .01$ with females scoring higher than males,

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although this difference was not statistically significant at the adjusted alpha level of .0056. at Time 2, depression and suicide ideation continued to show significant gender differences as did daily hassles, again with females scoring higher on these measures. None of the variables showed significant gender differences in their change scores, although daily hassles showed a trend, $(372) = .246, p < .014$ with males reporting and somewhat greater reduction in daily hassles compared to females over the 1-year period. The number of participants identified as at risk based on their SIQ scores at Time 1 was 9.4% (35) while 4.8% (18) were identified as-risk at Time 2.

Table II: Summary of Multiple Regression Analyses of Time 1 Psychological Variables as Independent Variables and Suicidal Ideation at Time 2a Dependent Variables for Males and Female Samples.

Variable	R	B	SEB	β	t^b	p <
		Males				
Depression	.37**	.166	.107	.151	1.55*	.062
Hopelessness	.25**	.059	.340	.015	.17*	.432
Daily hassles	.41**	.487	.219	.221	2.23*	.014
Social support	-.09*	.145	.350	.032	.41	.339
Negative life events	.35**	-.2328	.103	-.184	-2.31	.011
Multiple R = .460, F (5,166) = 8.89, p < .0001, R ² = 211.						

		Females				
Depression	.40**	.248	.150	.155	1.65**	.050
Hopelessness	.35**	.382	.520	.064	.73	.232
Daily hassles	.37**	.574	.370	.151	1.55	.061
Social support	-.38**	-1.655	.597	-.212	-2.77**	.003
Negative life events	.25**	.25	.163	.013	.15	.440

Multiple R = .473, F (5,196) = 11.26, p < .0001, R² = 223.

Table II shows the results of the zero-order correlation analyses examining the relationship of the psychological and social variables at Time 1 with suicidal ideation at Time 2 for males and females. For males, four of the five independent variables showed a significant relationship to suicidal ideation scores 1 year later, with correlation coefficient ranging from $r(170) = .25$ to $.41$. Suicidal support was the only variable that was not significant, $r(170) = .09, p < .10$, in its relationship with suicidal ideation. For females, all five psychological and socio-environmental measures completed at Time 1 was significantly ($p < .01$) related to suicidal ideation scores 1 year later with correlation coefficients (absolute value) ranging from $r(200) = .25$ to $.40$. The negative correlation coefficient for social support was a function of the ASI being scored in a positive direction.

Table III: Summary of Multiple Regression Analyses with changes of Psychological Variables as Independent Variables and the Residual Changes in Suicidal Ideation as Dependent Variables for Males and Females Samples

Variable	r	B	SEB	β	t ^b	p <
		Males				
Depression	.38**	.408	.909	.374	4.56*	.001
Hopelessness	.20**	.488	.294	.127	.166*	.050
Daily hassles	.18**	.107	.218	.041	.49	.315
Social support	-.13*	.334	.348	.078	.96	.170
Negative life events	.05	-.028	.081	-.026	-.35	.370

Multiple R = .460, F (5,166) = 6.47, p < .0001, R² = 163.

		Females				
Depression	.45**	.447	.108	.339	4.1	
Hopelessness	.43**	1.290	.383	.268	3.3	
Daily hassles	.20**	-.093	.256	-.027	-.	
Social support	-.16**	.504	.509	.069	!	
Negative life events	.06	-.044	.110	-.026	-.	

Multiple R = .501, F (5,196) = 11.26, p < .0001, R² = 251.

Table III shows the results of the zero-order correlation analyses of the change scores of the psychological and social environmental measures to the residual changes in suicidal ideation for males and females. For males, change scores on depression, hopelessness, daily hassles and social support were significantly related to the residual changes in suicidal ideation scores. The no significant change score variable was on negative life events. Similarity, female change scores on depression, hopelessness, daily hassles, and social support were significantly related to the residual change score in suicide ideation, with the non-significant variable being negative life events.

Regression Analysis

The result of the multiple regression analysis examining the relationship between depression, hopelessness, social support, daily hassles and negative life events at Time 1 and suicidal ideation scores at Time 2 for males and females are found in Table 2. The results show significant overall R's for males R (5, 166 = 460, p < .0001, and females, R (5,196) = 473, p < .001. For males, an examination of the beta coefficients indicated that major negative life events and daily hassles were significantly

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related to suicidal ideation scores 1 year, $B = 18$ $t(166) = -2.31$, $p < .011$ and $\beta = .22$, $t(166) = 2.23$, $P < .014$ respectively. Depression at Time 1 demonstrated a trend, $\beta = .15$, $t(166) = 1.55$, $p < .006$, and approached significant in its relationship with future suicide ideation. In females, social support and depression at Time 1 had significant unique contribution to the prediction of suicidal ideation scores at Time 2, $\beta = .21$, $t(196) = -2.77$, $p < .003$ and $N = 16$, $t(196) = 1.65$, $p < .05$, respectively. Daily hassles at Time 1 showed a trend, $\beta = .15$, $t(196) = -1.55$, $p < .061$ to the prediction of suicidal ideation at Time 2.

The results of the multiple regression analyses examining the change scores for males and females are found in Table 3. The overall R s for males and females were significant $R(5, 166) = .404$, $R^2 = .163$, $p < .001$ and $R(5, 196) = .501$, $R^2 = .251$, $p < .001$, respectively. For males changes in depression and hopelessness showed significant contribution (standardized beta coefficient) to the residual change in suicidal ideation; $\beta = .37$, $t(166) = 4.56$, $p < .001$ and $\beta = .12$, $t(166) = 1.66$, $p < .05$ respectively. Similarly changes in depression and hopelessness for females accounted for significant unique contributions to residual changes in suicidal ideation, $\beta = .34$, $t(196) = -4.15$, $p < .001$ and $\beta = .27$, $t(196) = 3.37$, $p < .001$ respectively.

The unique contribution of the changes in the social environmental variables (negative life events, hassles and social support) in relation to changes in suicide ideation were not significant for males and females. In an attempt to examine the relationship of changes in suicidal ideation for males and females, a test of the beta coefficients was conducted. The result of this test indicated that the contribution of changes in suicidal ideation were not significantly different between males and females, $\beta = .33$, $t(366) = .87$, $p = ns$.

Discussion

Before now a number of studies have been conducted to examine concurrent relationships between suicidal ideation and depression, hopelessness and social support in adolescent. The present study on the relationship of five psychological and social-environmental variables with adolescent suicidal ideation over a 1 year time period is an attempt to unravel interestingly it showed gender-specific relationships of these variables to suicidal ideation in males and females.

The change score analyses provided evidence that in males, changes in depression and hopelessness scores were related to the residual changes in suicidal ideation, even with the contribution of the social-environmental factors removed. Similarly, changes in depression and hopelessness scores for females were also significantly related to the residual changes in suicidal ideation. The results from the study were consistent with that of Cole, (1989), Mazza & Reynolds (1998), in that depression was related to suicidal ideation scores for both males and females when hopelessness was statistically controlled, the study found that changes in hopelessness were related to changes in suicidal ideation for males and females. Although the social-

environmental variables were not significant in the change score analyses, their unique contributions were evident in subsequent suicidal ideation score for males and females.

Though, Lweinsohn (1993) did not find hopelessness to be a significant predictor of suicidal behaviour when controlling for depression, the present study finds that a unique contribution of changes in depression were highest for both males and females in relation to the residual changes of suicidal ideation. In addition, changes in hopelessness were related to changes in suicidal ideation above and beyond that were accounted for by changes in depression. This findings suggest that changes in depression as well as changes in hopelessness are important risk factors for males and females who are experiencing suicidal ideation.

The result also suggest that in adolescents, suicidal ideation 1 year later is relatively difficult to predict from prior levels of depression, hopelessness, major life events, hassles and social support. The results show that the social-environmental variables had the greatest unique relationship to suicidal ideation (zero order – correlation) which is consistent with numerous other studies (Cole, 1989; Lawson 1993; Mazza & Reynolds, 1998) they were relatively weak in the multivariate prediction of future level of suicidal cognition 1 year later when levels of social support and stressors were also examined. Reifman and Windle (1995) had similar findings in their 6-month longitudinal study, where hopelessness did not predict future suicidal ideation and depression showed weak relationship with suicidal ideation.

Although the five psychological and social-environment variables at the initial assessment individually showed significant relationship to suicidal ideation scores 1 year later, their contribution accounted for less than 23% of the explained variance of severity of suicidal ideation for either males or females.

Conclusion

Overall, the results of the current study revealed important gender – specific relationships of psychological and social – environmental factors in the prediction of suicidal ideation in male and female adolescents. The differential predictability of independent variables with suicidal ideation as a function of gender suggest that gender is an important factor in the prediction of suicidal ideation in adolescents. The design for the study was exploratory, examining the unique relationships of the five psychological and socio-environmental factors to suicidal ideation from a developmental psychopathology perspective. The variables examined in this study had two psychological and three socio-environmental factors, have demonstrated consistent relationships with suicidal ideation and behaviour in previous studies. This type of research is important in enhancing our understanding of factors that may contribute to the development of suicidal behaviours in young people

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