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## Influence of Psychological Factors on Suicide Ideation among Malaysian and Indian Adolescent

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### Abstract

Objective of the present study were (i) Differences of psychological factors i.e., academic stress, depression, negative affects, hopelessness and suicide ideation among Malaysian and Indian adolescents and (ii) Influences of psychological factors on suicide ideation among 204 Malaysian and 200 Indian adolescents. The mean age of the participants' was 18. Various measures were used i.e. Scale for Assessing Academic Stress (SAAS), Beck Hopefulness Scale (BHS), Depression Scale (DS), Negative Affect Scale (NAS) and Suicide Behavior Questionnaire (SBQ). ANOVA and coefficients statistics were applied. The results showed significant differences between Malaysian and Indian adolescents on Hopelessness, Negative Affects, Suicide Ideation, Depression and Academic Stress

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*Keywords:* stress, suicide, adolescent

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### 1. Introduction

Suicidal ideation is a common medical term for thoughts about suicide, which may be deliberately constructed to fail or be discovered, or may be fully intended to succeed. However, the incidence of attempted suicide is much more than succeeds suicide (Rohtash & Hardeep, 2008). In India, more than one hundred thousand persons lost their lives by committing suicide in year 2006 (National Crime Record Bureau, India). The bureau found that youths between age ranges of 15 to 19 years old involved the suicide cases in the 1970's to 1990's. Indian Penal Code System (IPCS) claimed that the attempted suicide is also a crime in India. The states and cities associated with higher suicide rates, such as the states of Kerala and Tripura, and cities like Pondicherry and Bangalore. The number of suicides in country during the decade (1995–2005) has recorded an increase of 27.7 percent. The population has

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increased by 20.4 percent during the decade. The 35.3 % of suicide victims were the youths (15-29 years). There has been a slightly increase of 0.1% in suicide in the country in the year 2004 as compared to 2003 (Accidental Deaths and Suicides Deaths, 2005, 2007). National Suicide Registry Malaysia (NSRM) reported in between 2007 until 2009, 731 suicide cases in Malaysia. The NSRM indicated the reason for the suicide may be school problem, intimate problem etc. In 2008, highest number of suicidal was involved those who were in between 20-29 years old. Moreover, in 2009 suicide cases involved those who were in between 25-34 years old. The ratio for these three years in gender facet is 3:1 or 75%:25%. A Chinese Malaysian newspaper Nan yang Siang Pao (2010) reported 445 cases, involved 347 male and 98 female (3:1). Most cases have been linked to suffering from perceived burdensomeness which includes emotion, study and work. The rates for age involved the person who are in 30-39 years old (109 cases) and 20-29 years old (108 cases).

Beck et al. (1985) claimed that hopelessness as an important psychological construct for understanding suicide in last 25 years. Hopelessness can affect to depression and in turn predicting suicide act. Furthermore, hopelessness associated with other psychiatric disorders also predisposes the patient to suicidal behavior (Beck et al., 1985). Wetzel et al., (1980) found that the significant evidence supported the linkage of hopelessness and suicide intent. Besides that Beck et al., (1988) reported that hopelessness was predictive of actual suicide. Minkoff et al., (1973) found that the intensity of suicidal intent was more highly correlated with hopelessness than with depression. However, if depression was controlled, hopelessness does not consistently predicting suicide ideation (Esposito et al. 2003). It has been suggested that hopelessness may place adolescents at risk for suicidal behavior for only a certain times (Dori & Overholser, 1999).

Academic performance as important measure for adolescents to evaluated their self at school. Failure to do the best may affect to adolescents feeling towards themselves. In turn, the effect may cause to suicide attempts. Toero et al. (2001) reported significant relationship between the pressure to excel in school and suicidal behaviors among children and adolescents. The study showed students usually experience the high level of stress during examination periods. Furthermore East Asian researchers indicated that the stress-suicidal ideation almost come from family lifestyle and cultural demands for academic excellence. Parents for example, always put the highest expectations to their children to score in examination. Even Asians give priority to academic achievement since it can bring success in the future (Gloria & Ho, 2003; Sue & Okazaki, 1990). If failed to fulfill the target may be cause to loss of confidence and depression (Yeh & Huang, 1996). Juon et al., (1994) tested amongst Korean adolescents and found that students who reported the high level of academic stress were more likely to have serious thoughts about suicide than those students who did not experience the problem. Thus, academic stress has empirical evidence in contributing to suicidal ideation in adolescents especially in Asia.

Academic failure has consistently been found to be associated with depression (Faubert et al; Kellam et al. 1983). In a longitudinal study, the adolescents may develop the depressed feelings when received negative feedback regarding their academic performance. Depression associated with suicidal ideation and suicidal behavior in adolescents (Brand et al. 1996; Brent et al. 1999). De Man (1999) found reducing of depression effect when received adequate social support for example, will minimize the suicide ideation. Similarly, Stewart et al. (1999) found that both academic stress and depression may predict the suicide ideation. In short, academic stress positively related to depression and in turn to suicide ideation. This study attempts to examine whether academic stress, depression, hopelessness and negative affects predicting suicide ideation among India and Malaysia adolescents.

## 2. Method

### 2.1. Sample

The sample for this study consisted Malaysian students N=204, in which male were 63 and female were N=141 and total Indian students were N=200, in which 100 males and 100 females. Age of the respondents ranged from 15 years to 21 years. Convenient sampling method was used in selecting respondents to participate in this study.

### 2.2. Procedure

The questionnaires were given to students during class hour with sufficient amount of time. Confidentiality and anonymity were ensured. Respondents were asked to read the instructions carefully written on the top of the questionnaires and they are also instructed they should answer the questions as honestly as possibly.

### 2.3. Instruments:

- i. *The Beck Hopelessness Scale (BHS; Beck & Steer, 1988)* self-report instrument that consists of 20 true-false statements designed to assess the extent of positive and negative beliefs about the future experienced during the past week. Each of the 20 statements is scored 0 to 1. A total score is calculated by summing the pessimistic responses

for each of the 20 items. The total BHS score ranges from 0 to 20. The BHS has been found to have high internal reliability across diverse clinical and nonclinical populations with Kuder-Richardson reliabilities ranging from .87 to .93 (Beck & Steer, 1988). It has adequate one week test-retest reliability in a psychiatric outpatient sample ( $r = .69$ ; Beck & Steer, 1988), and moderate to high correlations ( $r.s = .62$  to  $.74$ ) with clinical ratings of hopelessness for patients in primary care practices and for patients who attempted suicide in hospital settings (Beck, Weissman, & Lester, 1974).

- ii. *The Center for Epidemiologic Studies Depression Scale (CES-D)* (Radloff 1977) was developed to measure symptoms of depression in community populations. The scale is a composite of 20 items selected mainly from the following sources: the Zung Self-Rating Depression Scale (Zung SDS), the Beck Depression Inventory (BDI), the Raskin Scale, a depression checklist developed by E. A. Gardner (unpublished manuscript, 1968), and the Minnesota Multiphasic Personality Inventory Depression Scale (MMPI-D). Internal consistency as measured by Cronbach's alpha is high across a variety of populations (generally around 0.85 in community samples and 0.90 in psychiatric samples). Split-half reliability is also high, ranging from 0.77 to 0.92. Test-retest reliability studies ranging over 2–8 weeks show moderate correlations ( $r = 0.51$ – $0.67$ ), which is desirable for a test of symptoms that are expected to show change over time.
- iii. *Scale for Academic Stress (SAS)*: 30-item measuring indicators of academic stress in terms of their presence or absence. These five components of academic stress indicating expression of academic stress through different channels: cognitive, affective, physical, social/interpersonal, and motivational. The subject has to select one out of two alternative responses (yes and no) for each item of the scale. All yes responses are given 1 point and summed-up to get total stress score.
- iv. *Suicide Behavior Questionnaire – Revised (SBQ-R)* Osman et al. (2001) consists 4 items measuring suicide ideation with an alpha reliability ranging from .76 to .88. This questionnaire aims to measure lifetime prevalence of suicidal thoughts and behaviours, recent suicidality and future likelihood of suicide attempt.
- v. *The Negative Affect Schedule (NAS; Watson et al., 1988)*: Five items taken from PANAS (Watson et al., 1988b), respondents are asked to rate the extent to which they have experienced each particular emotion within a specified time period, with reference to a 5-point scale. The scale points are: 1 'very slightly or not at all', 2 'a little', 3 'moderately', 4 'quite a bit' and 5 'very much'.

### 3. Result and Discussion

RQ 1 What is the nature of academic stress, depression, hopelessness, negative effects and suicide ideation among Malaysian N=204 and Indian N=104 samples.

Table 1: Showing Mean, SD and t-test among Indian and Malaysian adolescents

Variable	Nationality	Mean	SD	t-value
Hopelessness	Malaysia	10.39	.87	6.50**
	India	30.98	1.9	
Depression	Malaysia	19.26	8.24	5.02**
	India	31.59	4.65	
Negative Affects	Malaysia	24.38	6.89	4.56**
	India	32.63	3.57	
Academic Stress	Malaysia	48.57	5.99	4.43**
	India	17.46	2.54	
Suicide Ideation	Malaysia	5.08	1.42	3.25**
	India	8.54	1.01	

Table 2 Regression model predicting Suicide Ideation

Predictors	Malaysian Students			Indian Students		
	$\beta$	Std. Error	$R^2$	$\beta$	Std. Error	$R^2$
Gender	.221*	.133				
Religion	.398**					
Socioeconomic Status	.325**					
Academic Stress	.411**	.154	.38	.312**	.132	.42
Depression	.277*	.141		.313*	.113	

Hopelessness	.381**	.131	.294**	.113
Negative Affects	.311*	.152	.325**	.112

\* p<0.05; \*\* p<0.01

There were significant differences existed between Malaysian and Indian samples on hopelessness, negative affects, suicide ideation, depression and academic stress. Indian students were significantly higher on hopelessness, depression, negative affects and suicide ideation and Malaysian students were significantly higher on academic stress and hopelessness. Wetzel et al., (1980) supported the linkage of hopelessness and suicide intent. Beck et al., (1988) also reported that hopelessness was predictive of actual suicide. Minkoff et al., (1973) found intensity of suicidal intent were highly correlated with hopelessness than with depression. However, if depression was controlled, hopelessness does not consistently predicting suicide ideation (Esposito, Johnson, Wolfsdorf & Spirito, 2003). It has been suggested that hopelessness may place adolescents at risk for suicidal behaviour for only a certain times (Dori & Overholser, 1999). Toero et al., (2001) reported strong relationship between the pressure to excel in school and suicidal behaviors among children and adolescents. In same study, Toero et al., showed that the number of suicide cases of children and adolescents yearly happened during examination periods where children and adolescents experienced a high level of stress in school. Also, most college students were under pressure to get good grades to ensure future success; thus, academic pressure was found to be a significant source of academic stress for many college students (Hashim, 2003; Bush et al., 1985). Findings proved that gender, religion and socio-economic status of the participants contribute on suicide ideation among both Indian and Malaysian adolescents. Gender differences endorsed by Kochanek et al. (2004) suggested male adolescent completed suicide at five times higher than female adolescent (Durkheim (1952) believes that suicide is not considered as individual behaviour rather a response of certain cultural and social factor. Demographic characteristics of the country strongly influence suicidal ideation and academic stress, which is consistent with the study of Sakamoto et al. (2006). There is a need to understand local perspectives and factors that influence suicide ideation and coping strategies therefore, it is need for more studies to examine these issues in different culture. Cross-cultural research is essential in developing a better and in-depth understanding for suicide among youth.

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