

RISK TAKING BEHAVIOR AND DEPRESSION AMONG SCHOOL BASED YOUTHS IN MALAYSIA

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ABSTRACT

Several studies have proved that engaging in risky behaviors significantly associated with the onset of depressive symptoms. The present study emphasized on the relationship between risk taking behaviors (health risk & exploratory risk) and depression among school youths across Malaysia. The study also examines the differences between both male and female youths in risk taking participation (health risk & exploratory risk) and depression. A multistage cluster sampling was utilized to recruit youths from five (5) different regions across Malaysia. A total of 1441 youths voluntarily participated in the study. Results showed that there are significant gender difference in both risk taking participation and depression. Results from Pearson correlation analysis showed that risk taking participation and depression is significantly associated. The importance of intervention is discussed.

Keywords: *Depression, Risk Taking, Health Risk, Exploratory Risk, Youths*

ABSTRAK

Beberapa kajian telah membuktikan bahawa penglibatan dalam tingkah laku berisiko adalah berkaitan dengan gejala kemurungan. Kajian ini memberi penekanan kepada hubungan antara tingkahlaku mengambil risiko (risiko kesihatan & risiko penerokaan) dan kemurungan dalam kalangan belia sekolah di seluruh Malaysia. Kajian ini mengkaji perbezaan di antara kedua-dua belia lelaki dan perempuan dalam pengambilan risiko (risiko kesihatan & risiko penerokaan) dan kemurungan. Persampelan 'multistage cluster' telah digunakan bagi melibatkan belia daripada lima (5) kawasan yang berbeza di seluruh Malaysia. Seramai 1441 belia secara sukarela mengambil bahagian dalam kajian ini. Hasil kajian menunjukkan bahawa terdapat perbezaan jantina yang signifikan dalam kedua-dua kesihatan dan penerokaan risiko dan kemurungan. Hasil daripada analisis korelasi Pearson menunjukkan bahawa mengambil risiko secara keseluruhan dan kemurungan adalah berkaitan. Kepentingan intervensi juga dibincangkan.

Kata Kunci: *Kemurungan, Pengambilan Risiko, Risiko Kesihatan, Risiko Penerokaan, Remaja*

INTRODUCTION

Depression is a common mental disorder which affects nearly 350 million people across the globe (Marcus, Yasamy, Ommeren, Chisholm, & Saxena, 2012). In Malaysia, records indicated that 9% of Malaysians suffer from major depression which placed depression as the fourth most disabling disease in Malaysia (Malaysian Psychiatric Association, 2010). Depression is commonly known to present depressed mood, loss of interest in social activities, feeling of worthlessness or guilt, deterioration of attention, and suicide (National Institute of Mental Health [NIMH], 2012). The prevalence of depression is found to be higher in females than in males, causing it to become a concern to medical practitioners (Malaysian Psychiatric Association, 2010). The impact of depression eventually harms the well being of people including youths, which will bring adverse effects to our country's development.

Youth or adolescence is a developmental or transition period from childhood to adulthood when one experiences various physical, emotional and even cognitive changes. During the course of puberty, these rapid changes have challenged them to adapt while at the same time, expected them to turn out well. Upon adaptation, youth seek novelty and stimulations through a course of risk taking behaviors (Huang, Lanza, Murphy, & Hser, 2012). Specifically, in the social neuroscience perspective, Steinberg (2008) elucidated an increase of risk taking participation between childhood and adolescence (puberty stage) in which the brain's social-emotional system lead to an increase in reward-seeking sensation. In contrast, risk taking declines between adolescence and adulthood due to the alteration and enhancement of the capacity for self-regulation (Steinberg, 2008). No doubt, youths are prone to substance abuse, smoking, alcohol consumption, and even engage in self harm and suicide (Agrawal, 2005; Lee, Paul, Kam, & Jagmohani, 2005; Ortin, Lake, Kleinman, & Gould, 2012; Wolff et al., 2013). Such risky behaviors concomitantly lead to motorcycle street racing particularly among youths in Malaysia (Wong, 2011) which in turn exacerbate the situation.

Apparently, various studies have asserted that taking risks among youths and adolescents predict the onset of depressive symptomatology. Specifically, Huang et al. (2012) postulated that adolescents who engaged in alcohol abuse, marijuana use, sex, delinquent behaviour and even tattooing (Yen et al., 2012) have higher propensity to suffer from depression. Similarly, Needham (2007) postulated both male and female youths who have higher initial levels of substance use report higher levels of depressive symptoms. A number of local studies conducted in which adolescents engaging in the act of stealing and abusing alcohol suffers from depression (Ramli et al., 2008) while youths who engaged in physical fights were positively associated with feeling sad and hopeless (Lee, Chen, Lee, & Kaur, 2007). However, several studies reported that the association between risk taking behaviours and depression is bidirectional (Hooshmand, Willoughby, & Good, 2011; McGovern, Rodriguez, & Kassel, 2009).

Specifically, Hooshmand et al. (2011) successfully tested an acting-out hypothesis (i.e. early depression predict an increase in health-risk behaviours) in which it was supported, while the failure hypothesis (i.e. early participation in health-risk behaviours predict an increase in depression) was not supported in a longitudinal study. Parallel to the idea, McGovern et al. (2009) demonstrated that an increase in depression leads to smoking progression in mid adolescence through an increase in peer smoking which in turn, as these adolescents progressively smoke, deceleration of depression was identified in late adolescence through decreased number of peer smokers. The reciprocal relationship between risk taking behaviour and depression is observed and warrant study in the local context.

The present study emphasized on the differences between gender on risk participations and depression. Furthermore, the study focused on the association between youths' overall risk participation, health risk participation and exploratory risk participation with depression.

METHODOLOGY

Research Designs, Procedures, Participants, and Location

The present research utilized a quantitative research approach with cross-sectional survey method. Self-administered questionnaires were distributed across study samples in Malaysia. A multistage cluster sampling was utilized in which the researchers successfully collected questionnaires randomly across twenty (20) local secondary schools across five (5) different states (Pulau Pinang, Terengganu, Selangor, Johor, and Sarawak) in Malaysia. Random selection of the classes (clusters) was made during data collection. Permission was obtained initially from the Ministry of Education Malaysia, followed by respective State Department of Education and lastly the principal of respective schools. Upon receiving the approval letter, briefing and instructions were given by the researchers on the purpose of the study before distributing the questionnaires to the targeted samples. Subsequently, a total number of 1441 school-based youths participated in the present research.

Measures

Centre for Epidemiologic Studies Depression Scale (CES-D)

The CES-D (Radloff, 1977) measures individuals' depressive symptoms using 20 items with a Likert scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time). Higher scores represent higher depressive symptoms. CES-D demonstrated a rather high internal consistency together with concurrent and construct validity (Lewinsohn, Rohde, & Seeley, 1998; Radloff, 1977). The initial measure was pilot studied in similar sample unit which resulted in an acceptable reliability score. Meanwhile, Cronbach's alpha reliability obtained for the present study was .79.

Adolescent Exploratory and Risk Behavior Rating Scale (AERRS)

The original 43 items AERRS (Skaar, 2009) measures the participation of risky behaviors in both health risks and exploratory risks on a Likert scale ranging from 1 (Never) to 4 (Often). Health risks comprise risks with negative consequences while exploratory risks include educational outcome with positive consequences. Higher total scores represent greater participation in overall risky behaviors while higher scores in both health risks and exploratory risks indicate higher participation in both specific risks. Example of health risks include, “I cheat on my school work/tests” and “I drink alcohol” while exploratory risks include, “I enter competitions” and “I volunteer my time in the community”. Pilot study was initially conducted which resulted in a relatively high reliability score. Cronbach’s alpha reliability obtained for total risk participation for the present study was .78.

RESULT

Descriptive statistic

Figure 1 illustrated the frequency distribution of age across gender among youths. As illustrated, a total amount of 1441 youths participated in the study. Young adolescents (13-14 years old) constituted a total of 352 with both male (46%) and female (54%). Middle-aged adolescents comprised of 498 males (47.2%) and 557 females (52.8%) summing up to 1055. Lastly, only 34 older adolescents were recorded in the study with 20 males (58.8%) and 14 females (41.2%).

Figure 1: Frequency Distribution of Age Across Gender

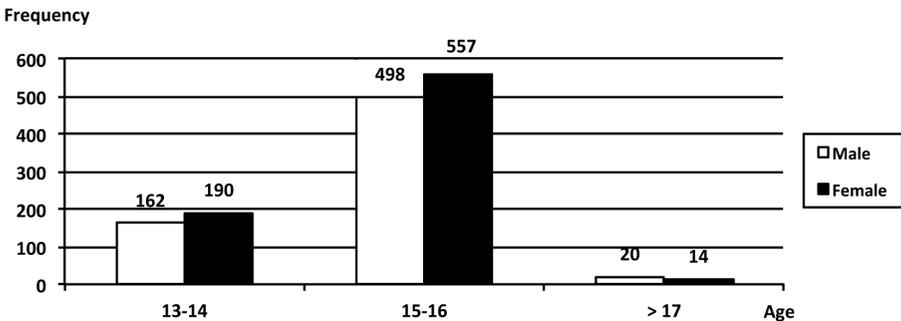


Figure 2 illustrated the distribution of race among youths who participated in the study. Approximately 62.5% Malay adolescents (n = 900) followed by 30.3% Chinese (n = 436), 4.5% Indians (n = 65), and 2.7% Others (n = 40) were voluntarily participated in the mentioned study.

Figure 2: Frequency Distribution of Race

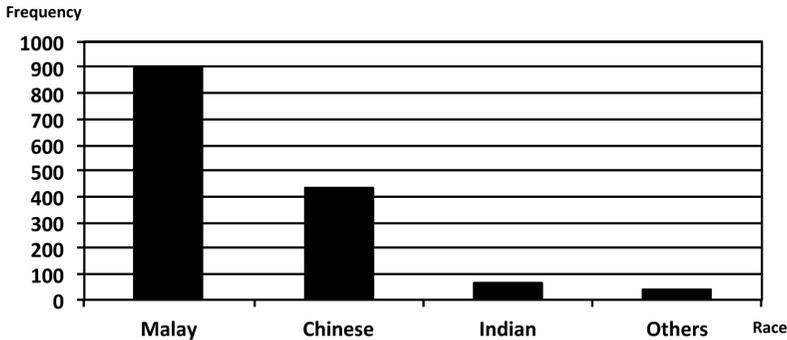


Table 1 shows the comparison between male and female youths on risk taking participation, health risk participation, exploratory risk participation, and depression. As illustrated, female youths ($M = 15.04$, $SD = 7.78$) were significantly different from male youths ($M = 13.02$, $SD = 7.05$) in suffering from depressive symptoms, ($p < .001$). The result suggests that female youths suffer from depressive symptoms more than their male counterpart. Male youths ($M = 39.95$, $SD = 8.07$) however, differ significantly from female youths ($M = 36.66$, $SD = 6.64$) in participation of risk taking behaviors, ($p < .001$). Specifically, male youths ($M = 15.34$, $SD = 4.40$; $M = 24.61$, $SD = 5.75$) differ significantly in both health risk participation, ($p < .001$) and exploratory risk participation, ($p < .001$) as compared to their female counterparts ($M = 13.05$, $SD = 2.91$; $M = 23.61$, $SD = 5.24$) for both risk participations respectively, ($p < .001$). These results suggest that male youths engaged in more risk taking behaviors (both health and exploratory risks) as compared to female youths.

Table 1: Comparison of Male and Female Youths on Risk Taking Participation, Health Risk Participation, Exploratory Risk Participation, and Depression

| Variable | <i>M</i> | <i>SD</i> | <i>t</i> | <i>df</i> | <i>p</i> |
|--------------------------------|----------|-----------|----------|-----------|----------|
| Depression | | | -5.17 | 1438.7 | 0.001 |
| Male | 13.02 | 7.05 | | | |
| Female | 15.04 | 7.78 | | | |
| Risk taking participation | | | 8.40 | 1317.2 | 0.001 |
| Male | 39.95 | 8.07 | | | |
| Female | 36.66 | 6.64 | | | |
| Health risk participation | | | 11.50 | 1157.4 | 0.001 |
| Male | 15.34 | 4.40 | | | |
| Female | 13.05 | 2.91 | | | |
| Exploratory risk participation | | | 3.46 | 1380.8 | 0.001 |
| Male | 24.61 | 5.75 | | | |
| Female | 23.61 | 5.24 | | | |

Furthermore, a Pearson correlation analysis was performed to test the relationship between risk taking participation and depression (refer to Table 2). The result of the correlation showed that there is a positive significant relationship between risk taking participation and depression, $r(1441) = .078, p < .001$. Specifically, health risk participation correlated positively with depression, $r(1441) = .170, p < .001$ while exploratory risk participation had no significant relationship with depression even though negatively correlated, $r(1441) = -.13, p > .05$. These results suggest that youths who engaged in risky behaviors especially with a negative outcome to their health have a higher propensity of suffering from depressive symptoms.

Table 2: Inter correlations, Means and Standard Deviations for All Study Variables

| Variable | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 |
|-----------------------------------|----------|-----------|---------|---------|---------|---|
| 1. Depression | 14.08 | 7.50 | - | | | |
| 2. Risk Taking Participation | 38.2 | 7.52 | .078*** | - | | |
| 3. Health Risk Participation | 14.13 | 3.86 | .170*** | .710*** | - | |
| 4. Exploratory Risk Participation | 24.08 | 5.50 | -.13 | .870*** | .270*** | - |

Note: ** $p < .01$, *** $p < .001$

DISCUSSION AND CONCLUSION

Similar with other findings, female youth experienced higher depressive symptoms as compared to male youth (Chong, Vaingankar, Abdin, & Subramaniam, 2011; Needham, 2007; Overbeek et al., 2006). Meanwhile, the prevalence of male youth who participated in overall risky behaviors is higher than their female counterpart which is consistent with Agrawal's (2005) study. Male youth take more risks in both health (negative effect) and exploratory risks (positive effect). Examples of health risks are driving without a valid license cheat in school tests, smokes and consume alcohol. However, male youths too engaged in exploratory risks more than female youths. Examples of exploratory risks are trying sports or games which are never tried before, entering school competitions, participate in extreme sports and volunteer in community works. From the findings, we can conclude that male youth engaged more in both risky behaviors (health risk and exploratory risk) as compared to their female counterpart.

Furthermore, findings suggest that overall risk taking participation is associated with depression among youth. Adolescent or youth who engaged in risky behaviors are prone to suffer from depressive symptoms. However, the strength of the relationship between risk taking participation and depression is relatively weak in the present finding. One possible explanation is that risk taking participation might be an overt behavior which is difficult in predicting an emotional state such as depression. In addition, risk taking participation might be a distal factor in discussing depression

in which factors such as self and emotional regulation could be temporal factors of such association with depression. Evidently, Steinberg (2008) has postulated that adolescent who engaged in risk taking behavior are lacked in self regulation. Specifically, adolescent or youth who are likely to use hard drugs, having more sexual partners, and are associated with greater adjustment problems suffers from poor emotional awareness and regulation (Hessler & Katz, 2010). As such, depression might be one of the manifestations of such poor regulation. Hence, future studies should emphasized the role of self and emotional regulation as potential mediators or moderators in predicting the association between risk taking behavior and depression. Furthermore, in specific, only health risk participation showed a significant positive relationship with depression. Health risk with negative outcomes such as bringing weapons to school or using tobacco products are associated with increased risk of suffering from depression. Similar to Huang et al.'s (2012) findings, health risk (negative effect) participation is associated with adolescents' depressive symptoms. An increase in participation of such risky behaviors increases the chances of adolescents to suffer from depression. Hence, relevant agencies especially schools and family members should encourage their youth to participate in activities that bring positive outcome such as participating in sports competition, engage in community works, and practice active learning in order to minimize the onset of depression among youth. However, such conclusion should be made clear in future studies specifically conducting a longitudinal study to provide causal relations.

One of the limitation warrant discuss is the type of samples used in the present study. The use of only school based youth's limits the exploration of the relationship between risk taking and depression among dropped out or working youth. Future studies should focus on a diverse range of youth in order to generalize to a larger population. Furthermore, the risk taking measure used in the present study only measures risk taking behavior as a whole instead of specific behaviors for example, substance use intensity, frequency and others. Specific measures are required in future studies in order to identify specific risk taking behavior that associates with depressive symptoms.

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