

**Athens Institute for Education and Research
ATINER**



**ATINER's Conference Paper Series
PSY2012-0085**

**Mental Health Problems on
Secondary School Students:
A Multiethnic Study in Sabah,
Malaysia**

**Balan Rathakrishnan,
Associate Professor
Universiti Malaysia Sabah,
Malaysia**

**Balakrishnan Parasuraman,
Universiti Malaysia Sabah,
Malaysia**

**Joki Perdani Sawai
Universiti Malaysia Sabah,
Malaysia**

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209
Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm

Printed in Athens, Greece by the Athens Institute for Education and Research.
All rights reserved. Reproduction is allowed for non-commercial purposes if the source is
fully acknowledged.

ISSN 2241-2891
4/09/2012

An Introduction to ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. The papers published in the series have not been refereed and are published as they were submitted by the author. The series serves two purposes. First, we want to disseminate the information as fast as possible. Second, by doing so, the authors can receive comments useful to revise their papers before they are considered for publication in one of ATINER's books, following our standard procedures of a blind review.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Rathakrishnan, B., Parasuraman, B. and Sawai, J. P. (2012) "Mental Health Problems on Secondary School Students: A Multiethnic Study in Sabah, Malaysia"
Athens: ATINER'S Conference Paper Series, No: PSY2012-0085.

**Mental Health Problems on Secondary School Students:
A Multiethnic Study in Sabah, Malaysia**

**Balan Rathakrishnan,
Associate Professor
Universiti Malaysia Sabah,
Malaysia**

**Balakrishnan Parasuraman,
Universiti Malaysia Sabah,
Malaysia**

**Joki Perdani Sawai
Universiti Malaysia Sabah,
Malaysia**

Abstract

Several studies have proved that there is a significant relationship between depression, prolonged stress and mental health. The purpose of this study is to find out the relationship between stress and addiction to alcohol to mental health among multi-ethnic secondary school students in Sabah. About 500 secondary school students, of mean age 16.06 from Sabah, Malaysia participated in the survey. The survey design was adopted using validated instruments including Symptom Checklist-90 (SCL-90), Depression Anxiety Stress Scale (DASS), Adolescent Alcohol and Drug Involvement Scale (AADIS). The findings of the survey indicate that there is a positive significance correlation between stress and mental health ($r = .731, p < .001$). The results also show that addiction to alcohol is not correlated with mental health ($r = .071, p > .05$) and there is a significant difference among ethnic groups in Sabah ($F_{(9,490)} = 3.671, p < .05$). Intervention and the importance of mental health issues are also discussed.

Keywords: mental health problems, stress, alcohol addiction

Contact Information of Corresponding author:

Introduction

Mental health is an individual's well-being which is categorized as self-acceptance and the feeling of secure emotion (Strickland, 2001). In the present study mental health has been defined based on the three components such as anxiety, depression and emotional problems. Among youths, mental health may deteriorate and negatively influence on their studies if it is not controlled (Thorne, 1995). A study revealed that approximately 1.4 million children in Malaysia have mental health difficulties that interfere with their normal functioning and development (Malaysian Psychiatric Association, 2006). Recently, the Health Minister of Malaysia, Datuk Seri Chua Soi Lek affirmed that 13.7 percent of adolescents in Malaysia, especially secondary school students are facing mental health issues (Malaysian Psychiatric Association, 2006). Some are even resorting to suicide and the numbers are increasing. Pressures of love affairs, stress, loneliness, anxiety, and insomnia are among the significant factors contributed to mental health problems and resulted in suicide (Malaysian Psychiatric Association, 2008). The decline of mental health among secondary school students is also affected by the individuals' characteristics; self-esteem, habits and coping skills, environmental factors such as socioeconomic status, social support and the locality of residence (Peters, 2011). As many literatures are available on mental health with many variables such as stress, gender and age group but there is no studies on the alcoholism, sexual behaviour and ethnicity on mental health among secondary school students. Further, a thorough literature review and discussion with the principals and the senior teachers of secondary schools (through a Delphi technique) and by considering the ethnicity, culture and geographical location of the study, the present study considered four significant variables which lead to mental health among secondary school students in Sabah. The significant independent variables such as stress, alcoholism, sexual behaviour and ethnicity of secondary school students are discussed further.

The most significant variable related to mental health is stress among secondary school students. Stress refers to a situation of tension that affects emotions, thinking processes and conditions of students. High level of stress will affect students' ability to face problems. Thus stress has the potential to either induce or interfere with the studies, depending on the level of stress experienced by the students (Handoko, 2003). Excessive stress can also affect student's resilience (Lazarus 1966) invoking a feeling of sadness, regret, fear, excessive anxiety, eating and sleep problems, anti-social behavior and deviant sexual practices (Atkinson et al, 1992; Kimble, Garmezy & Zigler, 1980; Kyriacou & Sutcliffe, 1978). Women and the younger generation (students) easily get depressed and under pressure when studying for long periods under pressure (Gruen, 1993). In addition, studies revealed that stress leads to depression, and the primary manifestation of depression is a feeling of sadness and guilty and a failure to attain achievement in studies (Tahir Mehood Khan, Syed Azhar Syed Sulaman and Mohamed Azmi Hassali, 2009).

The second important variable which affects mental health is alcoholism. Alcoholism is a situation where a person cannot survive without alcohol. In other words, the person is unable to control drinking until intoxicated (Atkinson et al., 1992). Alcoholism can be interpreted as a personality disorder in which damage is caused by the desire to drink alcohol compulsively, excessively and formulating it into a habit (Chaplin, 1995). Numerous studies are revealed that alcohol dependency leads to many mental health problems such as higher levels of depressive and affective problems, schizophrenia and other personality disorders (Head J et al, 2004).

In Malaysia, especially in Sabah, during festive seasons and gatherings, the consummation of alcohol (especially *Tapai*) is a traditional culture among Kadazan-Dusun-Murut (KDM) ethnic group of Sabah (Chiang Y W et al, 2006). As alcoholism and other drug addiction have genetic and environmental causes, both these causes have serious consequences on adolescents (Kumpfer K L, 1999, Goodwin, 1985). In addition, National Institute on Alcohol Abuse and Alcoholism study found that children of parents who have favourable attitudes towards drinking alcohol are more likely to initiate and continue drink (NIAAA, 1997). This may be the reason for having huge number of alcoholic adolescents in Sabah. Interestingly, a study says that misuse of alcohol often results in an earlier onset of sexual activity (Fergusson and Lynskey, 1996). Hence, this study focuses on the relationship between alcoholism and mental health of secondary school students in Sabah.

Besides that, numerous studies aimed to study ethnic differences on mental health among adolescents (Kamaldeep Bhui et al., 2005). However, there are no studies related to ethnicity and mental health problems in Sabah, hence the present study aimed to find out the differences among ethnicities in Sabah.

Casual survey of literature and also interactions with some principals and senior teachers in the secondary schools in Sabah revealed that hardly any study has been conducted on mental health considering the independent variables such as stress, alcoholism, sexual behavior and ethnicity.

Henceforth, the central research problem of this study is to find out the relationship between stress and alcoholism and ethnicity with mental health of secondary school students in Sabah. Based on the research objectives, the following research hypotheses are framed to examine the relationship between stress, alcoholism and ethnicity and mental health of secondary school students in Sabah.

H₀₁ There is no relationship between stress and the mental health problems among secondary school students in Sabah

H₀₂ There is no relationship between alcoholism and mental health problems among secondary school students in Sabah

H₀₄ There is no difference of mental health problems between different ethnic groups in Sabah

Methodology

The research design of the present study is a statistical hypothesis testing and utilized both descriptive and inferential statistics. It is a mixed method research and data is collected through survey with a structured questionnaire by using purposive sampling. Study population consists of secondary school students from both urban and rural areas. The study sample is drawn from 13 secondary schools around Kota Kinabalu, Sabah, from urban and rural areas, where the students are at mean age of 16.06. A total of approximately 40 students are drawn from each secondary school located in Kota Kinabalu, Tawau and Sandakan in Sabah. The respondents who are having mental and emotional problems in school, were identified by the school's counsellors. The samples size consists of 500 secondary schools students with voluntary participation.

The questionnaire consisted of five parts, such as demographic description of respondents, followed by scales of mental health problems, stress, alcohol addiction, and sexual behaviour.

a) Symptom Checklist-90 (SCL-90)

Symptom Checklist-90 (SCL-90) is aimed to measure mental health problem. It was created by Derogatis (1973) with 90 items. However, according to the Malaysian context, the present research only used 77 items and the remaining 13 items were deemed unsuitable for the local cultures. A five-point Likert scale was used (1=no, 2=little, 3=rarely, 4=often, 5=always). It was found that the reliability was high in the present research, (Alpha Cronbach = .957).

b) Depression Anxiety Stress Scale (DASS)

The Depression Anxiety Stress Scale developed by Lovinbond and Lovinbond (1996) consisted of 42 items. However, the present research used only 12 items which are related to stress. A four-point Likert scale was used (0=never, 1=rarely, 2=often, 3=always). The reliability for the 12 items was good with a Croanbach Alpha value of 0.860.

c) Adolescent Alcohol and Drug Involvement Scale (AADIS)

Adolescent Alcohol and Drug Involvement Scale is aimed to measure adolescents' consumption of alcohol. It was created by Moberg (2001) (in. Moberg, 2003) and combined two measurements (*Adolescent Alcohol Involvement, Mayer & Filstead, (1979)*); to test the involvement of students on alcohol. The reason to use this measurement was to see how far the adolescents were involved in alcohol and to identify the individual's level of consumption of alcohol. The measurement consisted of 13 multiple choice items (Alpha Cronbach = .970).

Results

Table 1 shows the descriptive data of the respondents. According to ethnicity, Bugis were the most recruited sample (n=112) followed by Bajau (n=103). Among the respondents, 290 (58%) were males and 199(42%) were females with a mean age of the respondents of 16.06 years.

Table 1. Descriptive Statistic of the Demographic (N=500)

		Frequency	Percent	Cumulative Percent
Age	Male	290	58	58
	Female	210	42	100
Ethnicity	Bugis	112	22.4	22.4
	Sungai	12	2.4	24.8
	Suluk	50	10	34.8
	Kadazan	21	4.2	39
	Dusun	11	2.2	41.2
	Bajau	103	20.6	61.8
	Malay	26	5.2	67
	Chinese	61	12.2	79.2
	Indian	2	0.4	79.6
	Others	102	20.4	100

Table 2. Correlation of Dependent and Independent Variables

		Mental Health	Stress	Alcohol Abuse	Sexual Behavior
Mental Health	Pearson	1.000		0.159	0.646
	Correlation		0.774		
	Sig. (2-tailed)		0.000	0.042	0.004
Stress	Pearson	0.774		0.108	0.170
	Correlation		1.000		
	Sig. (2-tailed)	0.000		0.152	0.001
Alcohol addiction	Pearson	0.159		1.000	0.021
	Correlation		0.108		
	Sig. (2-tailed)	0.042	0.152		0.787

Table 2 shows that there is a correlation between stress and mental health problems among secondary school students. It is clearly indicated that there is a significant relationship between stress and mental health ($r = 0.774$, $p < .001$). Since, there is a significant relationship between stress and mental health among secondary school students, the null hypothesis 1 was rejected.

Results also show that there is no significant relationship between alcohol addiction with mental health ($r = 0.159$, $p > .05$). Therefore, null hypothesis 2 was accepted.

Table 3. The Differences Between Mental Health and Ethnic Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	67527.423	9	7503.047	4.295	0.000
Within Groups	856019.849	490	1746.979		
Total	923547.272	499			

Table 3 shows that the difference between mental health and ethnicity by using One-Way-ANOVA. The result shows that there is a significant difference between mental health ($F_{(9, 490)} = 4.295$, $p < 0.01$) and the ethnic groups. Based on these findings, null hypothesis 4 was rejected. In addition, the post hoc test revealed that Chinese students ($n=61$) are significantly different in mental health compared to other ethnic groups ($p < 0.05$).

Discussion

Based on the results, stress is correlated with mental health problems among secondary school students in Sabah. High level of stress will affect a student's ability to face problems such as facing exams, completing their assignments or projects. These findings are also supported by Atkinson et al (1990). The WHO report also supported by suggesting that the mental health issues are expected to increase by 15% by the year 2020. Besides that, stress is also associated with greater depression, hopelessness and suicidal ideation among people who are high in emotional perception (Ciarrochi, Deane & Anderson, 2002; Nasrin Izadinia et al., 2010). There is no doubt that stress is the significant predictor to mental health and is also related to depression, anxiety, loneliness (Goede et al., 1999; Siti Nor Yacoob et al., 2009).

The findings revealed that there is no relationship between alcohol addiction and mental health problems. The results of this study indicate that addiction to alcohol is not associated with mental health. However, the research findings suggested that alcohol consumption in early secondary school and their relationship with others may

continue to affect the moods of students and increase their tendency on drug use or abuse in later years (Bond et al, 2007). In other words, the behavior of consuming alcohol from an early age, unconsciously affects the rest of their lives. In this study, alcohol addiction does not show any relationship on mental health. This may be due to students know their limits of consumption and they may be consuming occasionally or only during festive seasons along with their family. Studies revealed that moderate levels of alcohol use are related to the lowest levels of depression symptoms (Alati et al, 2005; Caldwell et al, 2002). In addition to this, the high depression scores were significantly greater in those who did not consume alcohol (O' Donnell et al, 2006; Rodgers et al, 2000). Moreover, it is thought that moderate drinkers may have better social relationships that bolster mental health status, and abstainers may have been problem drinkers at other times and are still facing mental health challenges (Alati et al., 2005).

Sabah has more than 32 ethnicities and different cultures for each ethnic group. Therefore, there are different perceptions on mental health problems among secondary school students and mental health is different in terms of ethnicity (Noradilah Md Nordin et al., 2010). In this study, Chinese students are significant in terms of mental health problems and the researchers believe that there is a need for consultation by doctors or counsellors to overcome the problems among these respondents (Yeap & Low, 2009). Researchers also believe that other ethnic group may not have a significant knowledge on mental health compared to Chinese students. A study indicates that majority of the respondents did not have good knowledge of mental health especially Malay, Indians and others compared to Chinese students (Yeap & Low, 2009). Hence, the researchers strongly believe that there is a need for more studies in this field.

Implications

Researchers recommend that there is a need for more mental health services and education in secondary schools to reduce depression and stress faced by secondary school students. As suggested by Tahir Mehmood Khan, Syed Azhar Syed Sulaiman and Mohamed Azmi Hassali (2009), the main causes of depression are educational and relationship problems. Therefore, mental health policy and the methodologies need to be reviewed. Researchers also recommend that there is a need for further attention in the development of empathic communication skills by health professionals to face trauma of mental health problems (Buston, 2002). Lastly, researchers also propose to enhance the understanding of mental health problems among entry-level university students in public and private universities.

References

- Alati, R., Lawlor, D. A., Najman, J. M., Williams, G. M., Bor, W. & O'Callaghan M. (2005). Is there really a "J-shaped" curve in the association between alcohol consumption and symptoms of depression and anxiety? Finding from the Mater-University study of pregnancy and its outcomes. *Addiction*, 100:643–651.
- Atkinson, R. M., Ganzini, L. & Bernstein, M. J. (1992). *Alcohol and substance-use disorders in the elderly*. In: Birren, J.E.; Sloane, R.B.; and Cohen, G.D., eds. *Handbook of Mental Health and Aging*, 2nd ed. San Diego, CA: Academic Press

- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictor's of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, 40:357.e9-357.e18.
- Buston, K. (2002). Adolescents with mental health problems: What do they say about health services? *Journal of Adolescence*, 25:231-242.
- Caldwell, T. M., Rodgers, B., Jorm, A. F., Christensen, H., Jacomb, P. A., Korten, A. E. & Lynskey, M. T. (2002) Patterns of association between alcohol consumption and symptoms of depression and anxiety in young adults. *Addiction*. 97:583–594.
- Chaplin, J. P. (1995). *Dictionary of Psychology*. NY: Dell Publishing Group, Inc.
- Chiang, Y. W., Chye, F. Y. & Mohd Ismail, A. (2006). Microbial diversity and proximate composition of Tapai, A Sabah's fermented beverage. *Malaysian Journal of Microbiology*. 12(1):1-6.
- Ciarrochi, J., Deane, F. P., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality and Individual Difference*, 32:197-209.
- Derogatis, L.R., Lipman, R.S., & Covi, L. (1973). SCL-90: An outpatient psychiatric rating scale—Preliminary Report. *Psychopharmacol. Bull.* 9:13–28
- Desmita. 2005. *Psikologi Perkembangan*. Bandung: PT Remaja Rosdakarya.
- Fergusson, D. M. & Lynskey, M. T. (1996). Alcohol misuse and adolescent sexual behaviors and risk taking. *Pediatrics*. 98(1): 91-96.
- Ghifari Al Abu. (2003). *Gelombang Kejahatan Seks Remaja Modern*. Bandung: Mujahid Press.
- Goede, M. D., Spruijt, E., Iedema, J., & Meeus, W. (1999). How do vocational and relationship stressors and identity formation affect adolescent mental health? *Journal of Adolescent Health*. 25:14-20.
- Goodwin, D.W. (1985). Alcoholism and genetics. *Archives of General Psychiatry*. 42:171-174.
- Gruen, D. S. (1993). A Group Psychotherapy Approach To Postpartum Depression. *International Journal of Group Psychotherapy*. 43:191-203.
- Handoko, H.Y., Nancarrow, D.J., Hayward, N. K., Ohaeri, J. U., Aghanwa, H., McGrath, J. J., Levinson, D.F., Johns, C., Walters, M. K., Nertney, D. A., Srinivasan, T. N., Thara, R. & Mowry, B. J. (2003). Tumor necrosis factor haplotype analysis amongst schizophrenia probands from four distinct populations in the Asia-Pacific region. *Am J Med Genet B Neuropsychiatr Genet*. 121B:1-6.
- Head, J., Stansfeld, S. A. & Siegrist, J. The psychosocial work environment and alcohol dependence: a prospective study. *Occup Environ Med*. 6(3):29-224.
- Kamaldeep Bhui., Stephanie, J. C.. Taylor., Viner, R., Booy, R., Head, J., Tate, H., Brentnall, S. L., Haines, M., Hillier, S. & Stansfeld, S. (2005). Ethnicity, socio-economic status, overweight and underweight in East London adolescents. *Ethnicity & Health*. 10(2):113-28.
- Kimble, G.A., Garmezy, N., & Zigler, E. (1980) *Principles of general psychiatry*. New York: Wiley.
- Kite, M. E. (1990). Defining normal sexual behavior: A classroom exercise, Teaching of Psychology. 17:118-119.
- Kumpfer, K. L. (1999). Outcome measures of interventions in the study of children of substance-abusing parents. *Pediatrics. Supplement*. 103(5):1128-1144.
- Kyriacou, C. & Sutcliffe, J. (1978). Teacher stress: prevalence, sources and symptoms. *British Journal of Educational Psychology*. 48:159-167.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lovibond, H.S. & Lovibond, P.F. (1995). *Manual for Depression Anxiety Stress Scale*. Sydney: Psychology Foundation.
- Malaysian Psychiatric Association. (2006). Living Dangerously.
from. <http://www.psychiatry-malaysia.org/article.php?aid=496>

- Malaysian Psychiatric Association. (2008). Suicide Diaries.
from. <http://www.psychiatry-malaysia.org/article.php?aid=981>
- Mayer, J. E. & Filstead, W. J. (1979). The Adolescent Alcohol Involvement Scale: An instrument for measuring adolescent's use and misuse of alcohol. *Journal of Studies on Alcohol*. 40:291-300.
- Moberg, D. P. (2003). *Screening for Alcohol and Other Drug Problems Using The Adolescent Alcohol and Drugs Involment Scale (AADIS)*. Madison: Center for Health Policy and Program Evaluation, University of Wisconsin.
- Nasrin Izadinia, Mohsen Amiri, Reza Ghorban Jahromi, & Shabnam Hamidi. (2010). At study of relationship between suicidal, depression, anxiety, resiliency, daily stresses and mental health among Tehran university students. *Procedia Social and Behavioural Sciences*. 5:1515-1519.
- Noradilah Md Nordin, Mansur Abu Talib, Siti Nor Yaccob & Mohamed ShatarSabran. (2010). A Study on Selected Demographic Characteristics and Mental Health of Young Adults in Public Higher Learning Institutions in Malaysia. *Global Journal of Health Sciences*. 2(2): 104-110.
- O'Donnell, Wardle, J., Dantzer, C. & Steptoe, A. (2006). Alcohol Consumption and Symptoms of Depression in Young Adults from 20 Centuries. *Journal of Studies on Alcohol*. 67(6): 837-840.
- Peters, H. (2011). Mental health: Special needs and education. *ASEAN Journal of Psychiatry*. 11(1).
- Rodgers, B., Korten, A. E., Jorm AF, Jacomb, P. A., Christensen, H. & Henderseon, A. S. (2000). Non linear relationships in associations of depression and anxiety with alcohol use. *Psychol Med*. 30:421-432.
- Sarwono, S. W. (2002). *Psikologi Remaja*. Jakarta: Raja Grafindo Persada
- Siti Nor Yaacob, Rumaya Juhari, Mansor Abu Talin & Ikechukwu Uba. (2009). Loneliness, stress, self-esteem and depression among Malaysian students. *Jurnal Kemanusiaan*. 14:85-92.
- Smith, D. K., Leve, L. D. & Chamberlain, P. (2006). Adolescent Girl's Offending and Health-Risking Sexual Behavior: The Predictive Role of Trauma. *Child Maltreatment*. 11:346-353.
- Stone, G.L. and J. Archer. (1990). College and university counseling centers in the 1990's: Challenges and limits. *The Counseling Psychologist*. 18:539- 607.
- Tahir Mehmood Khan, & Syed Azhar Syed Sulaiman Mohamed Azmi Hassali. (2009). The causes of depression? A survey among Malaysians about perception for cause of depression. *Asian Journal of Pharmaceutical and Clinical Research*. 2 (2).
- The National Institute on Alcohol Abuse and Alcoholism. (1997). Youth drinking: Risk factors and consequences. *Alcohol Alert*. 37.
- Thorne, S. (1995). On-campus physicians witnessing changes in medical problems faced by university students. *Canadian Medical Association Journal*. 154(1):77-79.
- Yeap, R., & Low, Y. Y. (2009). Mental health knowledge, attitude and help-seeking tendency: A Malaysian context. *Singapore Med Journal*. 50(12):1169-1176.