Published Online July 2016 in SciRes. <a href="http://www.scirp.org/journal/psych">http://dx.doi.org/10.4236/psych.2016.78106</a>



# Prevalence of Truancy and Its Associated Factors among School-Going Malaysian Adolescents: Data from Global School-Based Health Survey 2012

Norzawati Yoep¹\*, Leni Tupang², Ahmad Nadzri Jai¹, Lim Kuang Kuay¹, Faizah Paiwai¹, Noor Safiza Mohd Nor¹

Email: \*norzawati@moh.gov.my

Received 15 March 2016; accepted 11 July 2016; published 14 July 2016

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#### **Abstract**

This study aimed to examine the prevalence of truancy and its associated factors among school going Malaysian adolescents. The Malaysia Global School-based Health Survey (GSHS) was conducted from February to April 2012 involving 28,933 students aged 12 - 17 years old. A two-stage cluster sampling was used to select the schools and students with an overall response rate of 88.6%. The data were obtained using the GSHS questionnaire. The prevalence of truancy was 30.8% and significantly higher among male than female (32.9% vs 28.7%). The factors associated with truancy were current smoker (a0R: 2.23; 95% CI: 2.03 - 2.46), current drug user (a0R: 2.23; 95% CI: 1.52 - 3.29), current alcohol use (a0R: 1.39; 95% CI: 1.24 - 1.56), having been bullied (a0R: 1.31; 95% CI: 1.22 - 1.42) and not currently live with both parents (a0R: 1.25; 95% CI: 1.16 - 1.35). High truancy among school going adolescents warrants a new effective strategy to control truancy in Malaysia.

## **Keywords**

Adolescent, GSHS, Protective Factors, Risk Factors, Truancy

#### 1. Introduction

Truancy, defined as habitual engagement in unexcused absence from school is a type of behavior displayed by

\*Corresponding author.

How to cite this paper: Yoep, N., Tupang, L., Jai, A. N., Kuay, L. K., Paiwai, F., & Nor, N. S. M. (2016). Prevalence of Truancy and Its Associated Factors among School-Going Malaysian Adolescents: Data from Global School-Based Health Survey 2012. Psychology, 7, 1053-1060. <a href="http://dx.doi.org/10.4236/psych.2016.78106">http://dx.doi.org/10.4236/psych.2016.78106</a>

<sup>&</sup>lt;sup>1</sup>Institute for Public Health, Ministry of Health, Kuala Lumpur, Malaysia

<sup>&</sup>lt;sup>2</sup>Keningau Division Health District, Sabah, Malaysia

students that has drawn the concerns of parents, educators and society (Zhang et al., 2010). Truancy among adolescents is a serious problem around the world, and is associated with various negative health and socioeconomical outcomes (Vaughn et al., 2013; Carli et al., 2013). Studies have shown that the behavior is on the rise and crimes committed by these adolescents are alarming (Shah et al., 2012).

Truancy has been strongly linked to greater discipline problems in school and is a stepping stone for delinquent criminal behaviour in adulthood (Nik Jaafar et al., 2013). A myriad of negative outcomes have been found to be associated with truancy from school including social isolation, mood and conduct disorders, sleep disturbances and longer term outcomes such as dropping out from school (Muula et al., 2012). Truant students are also at higher risk of being drawn into behavior involving drug, alcohol and violence (Garry, 1996).

In Malaysia, truancy has been labelled as one of the major problems in this country. Despite efforts by schools, communities, states, and the federal government to reduce truancy over the past two decades, there is little evidence that any positive impact has been made on school attendance (Ministry of Education Malaysia, 1995). According to the Ministry of Education records, in 2010, out of 111,484 discipline problem cases, 19,545 (17.5%) cases involved truancy. In 2011, from the 108,650 discipline problem cases, 18,550 (17%) involved truanting behavior (Ishak & Fin, 2013). Studies carried out in Malaysia on various social problems involving teenagers, have reported a truancy percentage among students of around 30% (Shah et al., 2012; Hidayah et al., 2003; Nik Ruzyanei et al., 2009).

The causes of truancy may vary from individual to individual and need to be understood before determining the most effective means of controlling truancy. Although research in this area is increasing, most findings are from small scale studies, which are not representative of the Malaysian adolescents. This paper aims to determine the nationwide prevalence of truancy among adolescents aged 12 - 17 years in Malaysia and its associated factors.

#### 2. Method

# 2.1. Participants

Participants for this study were respondents from Malaysian Global School-based Student Health Survey (GSHS) 2012. Two stage cluster sampling was used to select a representative sample of school going adolescents aged 12 - 17 years old in Malaysia. Only students with parental/guardian consent were allowed to participate in the study. Students without consent were regarded as non-response. Detailed description on the methodology was discussed elsewhere (Fadhli et al., 2014).

## 2.2. Procedure

Self-administered questionnaire developed for the Global School-based Health Survey by the World Health Organization (WHO) was used. This was validated by a panel of experts in Malaysia. The dependent variable, truancy, was evaluated by the question "During the past 30 days, on how many days did you miss classes or school without permission?". Those who responded 0 day was classified as Non-truancy whilst respondents who answered 1 or more days were classified as Truancy. The independent variables examined in this study were Parental or guardians supervision, which was assessed by "Did your parents/guardians know what you were doing with your free time" and the Peer support was measured by the question "How many close friend/s that you have". The response options were "Yes" or "No".

Other factors that were investigated in the study were smoking status, alcohol consumption, drug use and having been bullied in the past 30 days. Those who reported smoking/drinking/drug usage at least once in the past 30 days were classified as "Current smoker", "Current alcohol drinker" and "Current drug user", whilst those reported they had been bullied at least once in the past 30 days was classified as "Currently bullied".

## 2.3. Data Analysis

SPSS version 21 (SPSS IBM, New York, U.S.A) was used to perform the statistical analysis. The outcome variable was Truancy. Data were weighted taken into the consideration the study design and non-response rate before the analysis. Descriptive statistics were used to describe the population characteristic and estimate the prevalence of truancy. Multivariable logistic regression using backward likelihood method was used to determine associations between the effect of each independent variables (peer support, parental/guardian supervision,

smoking, alcohol use, drug use and being bullied) and truancy within the last 30 days after controlling for the effects of other independents variables. All statistical analysis were analysed at 95% Confidence Interval.

## 3. Results

The overall response rate for the GSHS was 88.6% of which 25,461 (88.0%) responded to the module on truancy. The proportions of male and female adolescents were almost equal; (50.2% males and 49.8% females). More than half of the adolescents were of Malay descent (60.8%), followed by Chinese descent (20.2%), Indian descent (6.9%), Sarawak and Sabah descent (4.9%) and others (1.7%). This is comparable to the Malaysian adolescent population as a whole. About two third of the respondents were from lower secondary (63.0% aged 12 - 15 years old) (Table 1).

**Table 2** shows that the prevalence of truancy was significantly higher among males students (32.9% vs 28.7%), students from upper secondary (35.8% vs 27.9%), and from single parent background (36.0% vs 29.9%). In particular, the prevalence of truancy among adolescents who reported smoking (50.0% vs 28.3%) and using drug (61.8% vs 30.4%) in the past 30 days was about double that of the respective comparison group.

Consistent with the differences in prevalence rates, multivariate logistic analysis revealed that current smokers (aOR: 2.23; 95% CI: 2.03 - 2.46) and current drug users (aOR: 2.23; 95% CI: 1.52 - 3.29) were more than twice as likely to be truant. Worthy of note, compared to the youngest age (≤13 years old), the likelihood of truancy increase progressively with age up to 16 years old.

Table 1. Distribution of school going adolescents by socio-demographic characteristics.

	Male					Female				
Factor	N	n	%	95% CI		.,			95% CI	
				Lower	Upper	N	n	%	Lower	Upper
				Age						
≤13 year old	231624	2793	20.6	18.7	22.6	243969	2588	21.8	19.8	23.9
14 years old	232912	2743	20.7	18.3	23.3	228473	2605	20.4	18.1	23.0
15 years old	223669	2796	19.9	18.2	21.6	229756	2752	20.5	18.6	22.6
16 years old	219518	2181	19.5	17.5	21.7	212116	2375	19.0	16.6	21.5
17 years old	217897	2210	19.4	17.4	21.5	204378	2407	18.3	16.0	20.8
Form										
Lower secondary (12 - 15 years old)	692041	8367	61.6	59.6	63.6	704025	7962	63.0	61.0	64.9
Upper secondary (16 - 17 years old)	430599	4332	38.4	36.4	40.4	413801	4749	37.0	35.1	39.0
Ethnicity										
Malay	682231	8525	60.7	55.8	65.4	681512	8537	61.0	56.8	65.0
Chinese	236792	2365	21.1	16.9	26.0	216502	2138	19.4	16.0	23.2
Indian	76348	703	6.8	5.1	9.0	77604	737	6.9	5.7	8.4
Bumiputera Sabah	52496	464	4.7	4.0	5.4	58151	527	5.2	4.2	6.4
Bumiputera Sarawak	57622	448	5.1	4.2	6.3	64420	572	5.8	4.5	7.4
Others	18892	203	1.7	1.2	2.3	19680	205	1.8	1.1	2.8
Parents marital status										
Married and living together	965082	10926	86.0	85.0	86.9	935920	10708	83.8	82.6	84.9
Single parents	157576	1761	14.0	13.1	15.0	181052	1995	16.2	15.1	17.4

Table 2. Prevalence of truancy among school-going adolescents by selected background variables.

	· ·		Yes			· ·		No		
Factor			103	95% CI				95% CI		
	N	n	%	Lower	Upper	N	n	%	Lower	Upper
Gender										
Male	369799	3944	32.9	31.1	34.8	753336	8751	67.1	65.2	68.9
Female	321364	3473	28.7	27.1	30.5	796447	9244	71.3	69.5	72.9
				Age						
13 year old and below	111656	1232	23.5	21.5	25.5	364435	4150	76.5	74.5	78.5
14 years old	138069	1508	29.9	27.4	32.6	322957	3837	70.1	67.4	72.6
15 years old	135032	1545	29.8	27.2	32.5	318487	4003	70.2	67.5	72.8
16 years old	158791	1583	36.8	33.8	39.9	272798	2971	63.2	60.1	66.2
17 years old	149409	1564	35.4	32.5	38.5	272408	3050	64.6	61.5	67.5
Form										
Lower secondary (1 - 3)	390129	4344	27.9	26.2	29.7	1006525	11986	72.1	70.3	73.8
Upper secondary (4 - 5)	301543	3075	35.8	33.5	38.1	541249	5993	64.2	61.9	66.5
Ethnicity										
Malay	408725	4864	30.0	28.1	31.9	954806	12192	70.0	68.1	71.9
Chinese	143126	1339	31.6	27.6	35.9	309417	3157	68.4	64.1	72.4
Indian	52153	446	33.8	29.9	37.9	102053	999	66.2	62.1	70.1
Bumiputera Sabah	35283	310	31.9	25.7	38.8	75342	679	68.1	61.2	74.3
Bumiputera Sarawak	36104	296	29.6	26.0	33.3	85999	724	70.4	66.7	74.0
Others	16452	164	42.6	34.1	51.6	22159	244	57.4	48.4	65.9
			Parer	nts marital	status*					
Married and living together	567985	6121	29.9	28.3	31.5	1331820	15495	70.1	68.5	71.7
Single parents	121988	1280	36.0	33.8	38.3	216666	2480	64.0	61.7	66.2
Parental/guardian supervision										
Yes	442607	4645	34.7	32.9	36.6	832523	9399	65.3	63.4	67.1
No	248709	2763	25.8	24.3	27.4	714712	8556	74.2	72.6	75.7
				Bullied*						
Yes	142735	1445	37.8	35.4	40.3	234558	2711	62.2	59.7	64.6
No	645869	6928	30.6	29.0	32.2	1466275	17019	69.4	67.8	71.0
			Curren	t alcohol d	rinking*					
Yes	83867	791	42.6	38.6	46.8	112942	1128	57.4	53.2	61.4
No	598260	6540	29.5	28.0	31.1	1428122	16780	70.5	68.9	72.0
Current smoker*										
Yes	128326	1309	50.0	47.8	52.3	128144	1386	50.0	47.7	52.2
No	559570	6063	28.3	26.7	29.9	1418525	16573	71.7	70.1	73.3
Current drug user										
Yes	20700	199	61.8	53.6	69.4	12792	140	38.2	30.6	46.4
No	671485	7226	30.4	28.9	31.9	1538076	17867	69.6	68.1	71.1

It then declined slightly for those 17 years (aOR: 1.59; 95% CI: 1.45 - 1.75) although the risk was still higher than the reference age group. Finally, those who reported being bullied in the last 30 days had a slightly higher risk as well (aOR: 1.31; 95% CI: 1.22 - 1.42). On the other hand, students having close friends (aOR: .84%; 95% CI: .71 - .99) and those who reported to have parental or guardian supervision (aOR: .70%; 95% CI: .66 - .75) were significantly less likely to be truant (**Table 3**).

Table 3. Multivariable regression analysis on factors associated with truancy among school going adolescents in Malaysia.

_		95% CI			
Factors	Adjusted OR	Lower	Upper		
Male	1				
Female	.99	.93	1.06		
13 year old and below	1				
14 years old	1.25	1.13	1.37		
15 years old	1.29	1.17	1.41		
16 years old	1.76	1.60	1.94		
17 years old	1.59	1.45	1.75		
Malay	1				
Chinese	1.00	.92	1.09		
Indian	1.13	.99	1.28		
Bumiputera Sabah/Sarawak	.93	.83	1.04		
Others	1.50	1.20	1.88		
Married and living together	1				
Single parents	1.25	1.16	1.35		
Yes	.84	.71	.99		
No	1				
Yes	.70	.66	.75		
No	1				
Yes	1.31	1.22	1.42		
No	1				
Yes	1.39	1.24	1.56		
No	1				
Yes	2.23	2.03	2.46		
No	1				
Yes	2.23	1.52	3.29		
No	1				

# 4. Discussion

Truancy prevalence and its related factors in Malaysia were examined in the nationwide Global School-based Health Survey. This study showed that the prevalence of truancy among school going adolescents was 30.8%. This figure is comparable with other previous studies done in Malaysia (Shah et al., 2012; Hidayah et al., 2003) as well as GSHS data from neighbouring Indonesia, where it was reported at 32.0% in 2007 (WHO, 2007). However, it is much higher compared to GSHS data from Thailand (18.2%) in 2008 (WHO, 2008) and Swaziland in 2007 (Seter et al., 2007) but considerably lower than Zambia (58.8%) (Muula et al., 2012).

In term of risk factors, current smoking and drug use were identified as behaviors highly associated with truancy; specifically, twice the risk. Current alcohol use was also associated with a higher risk of truancy. Although the direction of the relationship cannot be established in the present study, this finding is consistent with Mounteney et al. (2010) who reported that truancy increases the level of alcohol use and alcohol-related problems.

Controlling for all other factors, another significant risk factor emerging from this study was the role of bullying in schools. Students who reported being victims of bullying were more likely to have been truant (aOR: 1.31; 95% CI: 1.22 - 1.42). This supports GSHS findings from Thailand (Pengpid & Peltzer, 2013), Swaziland (Seter et al., 2007) as well as Zambia (Muula et al., 2012). Absenteeism from school is possibly to avoid further victimization or assault. It is thus important that parents and school authorities explore the reasons behind truancy. Therefore, we believe schools should have a strict "anti-bullying" programme in-line with the Ministry of Education Malaysia's Guidelines on Prevention and Handling of Bullying Behaviour Among Student in Malaysia (Ministry of Education Malaysia, 2010).

We observed that 13 years olds were less likely to be truant compared to older students. This is probably because younger adolescents are more likely to be supervised by their parents/guardians than older students (Choon et al., 2013).

Parent's marital status was another important finding in this study, specifically adolescents who reported that they have parents who live together were less likely to be truant than those with single parents. This is similar to the study on psycho-behavioural factors contributing to truancy among at-risk secondary school students in Kuala Lumpur, Malaysia (Shah et al., 2012). The study found that students with single parents were almost twice more likely to be involved in truancy.

Within the home environment, adolescents who reported their parents/guardians are aware of their activities were at lower risk of being truant. This protective effect was also seen in other studies on truancy (Muula et al., 2012; Seter et al., 2007). Our findings also extends previous research by Choon et al., 2013 on the parental attachment, peer attachment, and delinquency among adolescents. The study of adolescents aged 13 - 17 years old in four urban secondary schools found that father and mother attachments have negative relationships with adolescents' delinquency, including truancy. Parents who are more attached to their children are more aware of their children's daily activities and their friends.

In contrast to other studies, sex and ethnicity were not significantly associated with truancy. This supports the study based in at-risk secondary schools in metropolitan Kuala Lumpur (Nik Jaafar et al., 2013) as well as another study in a small urban area close to Kuala Lumpur (Shah et al., 2012). However, a study in the United States found that truancy is associated with ethnicity (Vaughn et al., 2013).

Truancy reduction programmes should aim at addressing a broad range of factors at different levels (Dembo & Gulledge, 2009). For example, providing mentoring teacher-student relationships to encourage both attendance and performance at school through daily student check-ins and one-on-one interactions with teachers (DeSocio et al., 2007). Check and Connect, a school-based intervention program designed to engage students in school and support regular attendance, has been implemented in various elementary, middle, and high schools in both urban and suburban settings in the United States (Lehr et al., 2004). In addition to truancy programs at schools, there are community-based truancy interventions, for example, the Community Brigade Program, a community-based intervention designed to reduce truancy (Ministry of Education Malaysia, 1995).

### 5. Conclusion

Our study found a 30.8% prevalence of school truancy within the past 30 days among adolescents in Malaysia. Factors such as current smoker, current drug user, current alcohol use, recent history of being bullied, and current parental marital status, which have been reported elsewhere, were identified as factors associated with truancy, and were also identified in our study.

# 6. Limitations

In any study, it is important to recognize the limitations. Firstly the study was based on data collected by self-reports. Students may have misreported intentionally. One needs to be cautious about the validity of the responses of the questionnaire as it is entirely based on anonymity or due to under reporting. This was probably an advantage as well over named responses especially for sensitive questions on risk behaviors. Data were also collected from students who were available in schools on the day of the survey. Thus, students who were absent, both truant and otherwise were not included, hence we may have under estimated the prevalence of truancy.

# 7. Human Subjects Approval Statement

The study was approved by the Medical Research Ethics Committee, Ministry of Health, Malaysia and Ethics Committee, Ministry of Education, Malaysia.

# **Acknowledgements**

The authors would like to thank Director General Health of Health Malaysia for his permission to publish this study.

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