



## Health behavior and subjective well-being among marginalized young Malaysians

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### Abstract

Youth marks the transition period from a child to an adult. During this period, youths are trying to “find” themselves, and identify where they stand in society. A smooth transition from childhood to adulthood is important for youths to ensure that their potential can be manifested to the fullest. A smooth transition would include youths keeping healthy and having an overall positive outlook on life. Therefore, this paper aimed to determine the health behavior and behaviorist associates among Malaysia youths. Specifically, this study aimed to identify the prevalence of health behavior and its correlates. A secondary outcome for this study was to explore the relationship between health behavior and well-being. In total, 3, 558 youths who live in marginalized areas and were aged 15–25 years participated in this study, being selected using stratified cluster sampling. Health behavior was measured using the Health Promotion Scale, well-being was measured using items developed from The Office for National Statistics, UK. This study found that Malaysian youths moderately practiced healthy behaviors ( $\bar{x} = 3.7$ ,  $SD = 0.54$ ), and reported moderate subjective well-being ( $\bar{x} = 3.63$ ,  $SD = 0.59$ ). This study found that both subjective well-being and health behavior were not significantly different between all demographic variables tested. Health behavior was found to be associated with well-being, where youths who reported higher practices of health-promoting behaviors also reported higher subjective well-being ( $OR = 0.52$ ,  $95\% CI: 0.59–0.55$ ). This study showed that strategies and policies in promoting youth well-being may be achieved through health-promoting campaigns.

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### Introduction

Marginalization occurs when people are systematically excluded from meaningful participation in economic, social, political, cultural, and other forms of human activity in their communities and thus are denied the opportunity to fulfill themselves as human beings (UNESCO, 2000). Millions of people throughout the world experience some form of marginalization due to their skin color, race, educational status, disability, being a minority, being elderly, or being young. Any form of marginalization can have an adverse effect on youths.

Those in a marginalized community often feel they have relatively little control over their lives and the resources available to them; they may become stigmatized and are often at the receiving end of negative public attitudes (Burton & Kargan, 2010).

The World Conference on Youth (2014) considered the following groups as marginalized: young people with disabilities, indigenous youth, youth from rural communities/young farmers, key affected populations/those affected by intersectionality, young people from conflict-affected areas, marginalized ethnic and cultural groups, young people from low social and economic backgrounds, migrants, and refugees. The Malaysia Youth Policy (2015) categorized marginalized youth as orphans, poor or on an income below RM 3,000 (USD 672) a month, homeless, or an under-aged single mother or single father. Marginalized youths in Malaysia were previously

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classified according to three criteria: first, the geographical location (the location may include land settlement, estate, traditional and new villages, and urban poor), second, economic status (youths with parents whose incomes were below RM 2,000 (USD 448) for those living in rural areas; and those below RM3,500 (USD 784) for those living in urban areas) and third, aged between 15 and 25 (Malaysia defines a youth as between 15 and 40 years old).

Regardless of marginalization, adolescents and young adults are generally believed to be in the prime of health (Chen, Lai, Chen, & Gaete, 2014; Chen, Wang, Yang, & Liou, 2003). However, several important public health and social problems that start or peak during these years may impede their transition into becoming a positive member of the society. Youths within this range of ages appear to be more vulnerable and are exposed to life events that may lead to health-damaging behaviors. Thus, these youths are at a higher risk of becoming unproductive citizens in the future (Kasim, Zulkharnain, Hashim, Ibrahim, & Yusof, 2014).

### *Importance of Health and Well-Being in Youth*

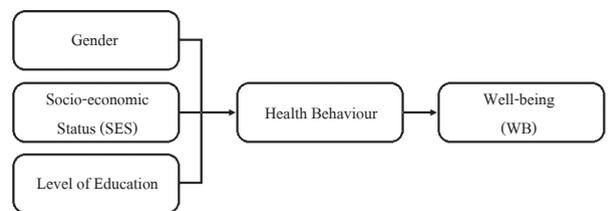
According to Diener (1994), subjective well-being refers to individuals' evaluation of the quality of their lives in general, which can be judgments such as life satisfaction and evaluations based on feelings, including moods and emotions. The relationship between well-being, health, and longevity is well-established (Diener & Chan, 2011). Adrian, Charlesworth, Stoep, McCauley, & Becker (2014) found healthy behavior was a strong indicator to enhanced mental health and well-being. Individuals with poor health reported lower life satisfaction and were more likely to engage in risk behavior, be physically inactive, and suffer from obesity (Evers, Castle, Prochaska, & Prochaska, 2014). Socio-economic status proved to be absolutely necessary to enjoy good life but education seemed to be more important and dominant to subjective well-being (Alvarez-Galvez et al., 2013).

Youth is a critical transitional period that includes the biological changes of puberty—physically, psychologically and socially. Youths begin to explore needs, make decisions and form social relationships, and habits are developed during this period that will continue throughout their lives. Youths are also easily influenced by peers, and as they get older, may receive less guidance and supervision from their parents. Therefore, if youths are in contact with negative social circle, they may take up risky behaviors such as smoking, alcohol consumption, substance use, illegal racing, and risky sexual behavior. Such behaviors emerging during the period of youth, portend long-term risk of adult chronic disease (Adrian et al., 2014). On the other hand, involvement in these risky activities may also underline their low well-being (Camacho, de Matos, Tome, & Simoes, 2014).

Malaysian Youth Index (2015) addressed self-development, social relationship, identity, self-potential, leisure time, health, media penetration, safety, deviant behavior, education, politics, and economic well-being as important indicators in improving the quality of life and well-being of Malaysian youths. The focus on developing a healthy young generation with sufficient knowledge and skills competencies should be the utmost priority for Malaysia and every developing nation (Lim et al.,

2016). The ability to develop strategies however requires a deep understanding of the relationship between health behavior and well-being. Therefore, this paper aims to review gender, socio-economic status, and the level of education and subjective well-being among marginalized youth. Hence, more appropriate and effective health promotion behavior and well-being intervention could be initiated.

Figure 1 outlines the model that guides the present analyses. The model distinguishes the health behavior factor and the relationship to well-being. The model proposes that gender, socio-economic status (SES) and the level of education will affect youth health behavior. In addition, as shown in Figure 1, the health behaviors are hypothesized to have a direct relationship with youth well-being.



**Figure 1** Conceptual model

### **Literature Review**

Public health institutions around the world have increasingly emphasized the importance of a healthy lifestyle over the decades. Health outcomes for youths are grounded in their social environments and are frequently mediated by their behaviors. According to Chen et al. (2003), social support, life appreciation, health responsibility, eating and exercise behaviors, and stress management are considered as relevant dimensions of healthy lifestyle, and should be included when assessing health behaviors among adolescent populations. Behaviors in these dimensions can promote good health, and therefore, are also known as health-promoting behaviors.

There are gender differences in high risk health behaviors. Several studies found that females have higher health responsibility, are more likely to appreciate their lives and to manage stress (Aghamolaei & Tavafian, 2013), while males were reported to engage more in physical activities, leisure activities, and participate in sport (Wu, Rose, & Bancroft, 2006). However, the male prevalence is to be involved in fighting, smoking, and alcohol consumption, whereas females are at greater risk of leading a sedentary lifestyle (Huurre, Aro, & Rahkonen, 2003) and are likely to practice unhealthy eating patterns to control their weight (Wu et al., 2006).

Socio-economic status (SES) is also related to variations in youths' health habits. The children of families living in poverty may have an unhealthier dietary intake and are more likely to have poorer health condition (Shaffer-Hudkins, 2011). Social and economic disadvantages in childhood show a strong direct effect on health and well-being during adulthood in the long term (Sheikh, Abelsen, & Olsen, 2014), with an earlier onset and a faster progression of functional problems from midlife into old age (Agahi, Shaw, & Fors, 2013). Youths growing up in distressed, poverty-stricken neighborhoods are at risk of a

variety of negative outcomes, including poor physical and mental health, delinquency, and risky sexual behavior.

The levels of education and academic success or achievement are strong predictors of overall adult health outcomes and play a crucial role in improving health (Alvarez-Galvez et al., 2013). Education levels are associated with lower rates of high-risk behaviors and higher rates of healthy behaviors (Koivusilta, West, Saaristo, Nummi, & Rimpela, 2013). Adults who are better educated have lower rates of health problems, enhanced financial stability during adulthood, slower progression of mobility impairment, and engage in more preventive and risk control behaviors (Agahi et al., 2013; Cutler & Muney, 2010). Age was also found to be associated with high-risk behaviors. Older youths reported higher mentally unhealthy days compared to physically unhealthy days; and university students reported better mental health, self-rated health, and fewer high-risk behaviors compared with secondary school students (Zahran, Zack, Vernon-Smiley, & Hertz, 2007).

## Methodology

### Research Design

This was a cross-sectional survey to explore the health behavior of young, marginalized Malaysians. The secondary aim of this study was to explore the relationship between health behavior and well-being among marginalized youths in Malaysia.

### Participants

The respondents were recruited through stratified, two-staged cluster sampling. Malaysia was stratified into seven regions—five in Peninsular Malaysia (north, south, east, west, and central) and one each for Sabah and Sarawak. Within each region, two marginalized areas were randomly selected. Within these areas, respondents were randomly selected based on gender and ethnicity to represent the make-up of the Malaysian population. The demographic characteristics measured in this study were: gender; education level (highest grade completed of primary/secondary school education; tertiary education), and total household income. Total household income was grouped into three categories, (i) RM

1,000 (USD 224) and below; (ii) from RM 1,001 (USD 225) to RM 3,000 (USD 672); and, (iii) above RM 3,001 (USD 672).

### Research Instruments

The primary measures for this study were health behavior and well-being. Health behavior was measured using the Adolescent Health Promotion (AHP) scale (Chen et al., 2003) which was adapted to the Malaysian context. The 40 items are ranked using a 5-point Likert scale, ranging from 1 “strongly disagree” to 5 “strongly agree”. Well-being was measured using the Subjective Well-Being items developed by the Office for National Statistics (ONS) (Tinkler & Hicks, 2011). The Subjective Well-Being Scale was developed to capture what people think about their well-being, and consists of items that asks participants about their feelings over the previous four weeks in relation to four items used to measure aspects of mental well-being (satisfaction of life, feeling happy, feeling restless, things you do in your life that are worthwhile), with respondents self-reporting using the Likert scale with a five-point response format: “never, rarely, sometimes, usually, always”, with the rating score ranging from 1 to 5, respectively.

## Results

In total, 3,558 marginalized young Malaysians, aged 15–25 years, completed the survey. From these, 1,758 (49.4%) identified themselves as ethnic Malays, 915 (25.7%) as Chinese, 271 (7.6%) as Indians, and 614 (17.3%) as Sabah and Sarawak ethnic groups. The study sample comprised 1,947 (54.7%) males and 1,611 (45.3%) females, which adequately represented the Malaysian population. This study found that 853 (23.9%) of young Malaysians had a total household income of RM 1,000 and below, 1,977 (55.6%) reported a total household income of from RM 1001 to RM 3001 and lastly, 728 (20.5%) young Malaysians in this study reported a total household income of RM 3001 and above. For education attainment, 2,632 (73.7%) reported having completed only primary/secondary school, while 935 (26.3%) of young Malaysians reported having completed tertiary education (Table 1).

**Table 1** Descriptive statistics

	N	%	$\bar{x}$	SD
Gender				
Male	1947	54.7	-	-
Female	1611	45.3	-	-
Education Level				
Primary/Secondary	2623	73.7	-	-
Tertiary	935	26.3	-	-
Household Income				
RM 1,000 and below	853	23.9	-	-
RM 1,001 – RM3,000	1977	55.6	-	-
RM3,001 and above	728	20.5	-	-
Health behavior				
Male	1947	-	3.73	0.555
Female	1611	-	3.74	0.514
Total	3558	-	3.74	0.535
Subjective Well-being				
Male	1947	-	3.62	.0586
Female	1611	-	3.63	.0602
Total	3558	-	3.63	0.594

RM 1,000 = USD 224

**Table 2** Comparison of health behavior among demographic variables

	N	Health Behavior		p
		$\bar{x}$	SD	
Gender				
Male	1,947	3.73	0.555	.594
Female	1,611	3.74	0.514	
Education Level				
Primary/Secondary	2,623	3.72	0.541	.126
Tertiary	935	3.77	0.524	
Household Income				
RM 1,000 and below	853	3.75	0.502	.136
RM 1,001 – RM3,000	1,977	3.72	0.538	
RM 3,001 and above	728	3.76	0.573	

RM 1,000 = USD 224

**Table 3** Comparison of subjective well-being among demographic variables

	N	Subjective Well-Being		p
		$\bar{x}$	SD	
Gender				
Male	1947	3.62	0.586	.190
Female	1611	3.63	0.602	
Education Level				
Primary/Secondary	2623	3.62	0.597	.089
Tertiary	935	3.63	0.582	
Household Income				
RM 1,000 and below	853	3.61	0.585	.460
RM 1,001 – RM3,000	1977	3.63	0.593	
RM 3,001 and above	728	3.62	0.604	

RM 1,000 = USD 224

The AHP scale measures health-promoting behavior, and this study found that young, marginalized Malaysians reported a moderate level of health-promoting behavior ( $\bar{x} = 3.74$ ,  $SD = 0.535$ ), and at the same time also reported a moderate level of subjective well-being ( $\bar{x} = 3.63$ ,  $SD = 0.594$ ). There were no significant differences in health behavior between genders. There were also no significant differences in health behavior between those who had a primary/secondary level of education ( $\bar{x} = 3.72$ ,  $SD = 0.54$ ) compared to a tertiary level ( $\bar{x} = 3.77$ ,  $SD = 0.52$ ;  $t = 0.126$ ,  $p > .05$ ), nor were there significant differences in health-promoting behaviors among young, marginalized Malaysians based on household income ( $F = 1.995$ ,  $p = .136$ ).

The same pattern was observed for subjective well-being, where there were no significant differences in subjective well-being reported between the genders, and also between those who had a primary/secondary level of education ( $\bar{x} = 3.62$ ,  $SD = 0.597$ ) compared to a tertiary level ( $\bar{x} = 3.63$ ,  $SD = 0.582$ ;  $t = 0.089$ ,  $p > .05$ ). There were also no significant differences in subjective well-being among young, marginalized Malaysians based on household income ( $F = 0.460$ ,  $p = .460$ ).

The secondary aim of this study was to explore the relationship between health-promoting behaviors and subjective well-being among marginalized, young Malaysians. A univariate regression analysis was carried out and identified that health behavior was significantly associated with subjective well-being ( $OR = 0.518$ ,  $p = .016$ ; 95% CI: 0.486–0.550).

## Discussion

This study found that the health behavior and well-being among marginalized, young Malaysians were both at a

moderate level, indicating that although these young Malaysians lived in marginalized areas, this may not have had a significant influence on their well-being.

Although previous studies have found gender differences in health-related behaviors (Kandrack, Grant, & Segall, 1991; Wu et al., 2006), the same differences was not observed in this study. This may have been due to the way health behavior was measured. Previous studies have looked at specific health behavior, while this study attempted to measure overall health-promoting behavior, which included physical activity, stress management, nutrition behavior, social support, and health responsibility and life appreciation. Therefore, men may have had better health behavior in one area (physical activity), but in others (for example diet), women may have better health behavior. Therefore, an overall measurement of health behavior has masked these differences.

The lack of an association between household income and education level with health behavior may indicate that marginalized, young people may be different from the mainstream population because past studies in mainstream populations have shown that the household income and education level are associated with health behavior, where those who are higher educated and have a higher income have better health behavior (Adler et al., 1994; Virtanen et al., 2007). Previous studies have shown that those with a higher level of education reported better health behavior (Cutler & Lleras-Muney, 2010) and those with higher income also reported better health behavior (Alvarez-Galvez et al., 2013). The lack of a significant association in this study will prompt further studies to explore other socio-economic factors that may be associated with health behavior among marginalized, young people.

The combined findings in this study (moderate health behavior) may have been due to the mixed development in Malaysia, where there is no real marginalization, where people are cut off from development, especially in Peninsular Malaysia. Young people living in marginalized areas may still have access to information through modern technologies (such as the Internet and WiFi). Therefore, a lack of a formal education experience does not impede them from getting information on health through other non-formal means.

The positive significant association between health behavior and well-being found in this study is supported by previous studies that found a similar relationship (Adrian et al., 2014). This suggests that one potential effective strategy in improving subjective well-being among young people living in marginalized areas may be through health promotion strategies. Improving health-promoting behaviors, not only improves future health outcome, but a secondary outcome would be improved, subjective, well-being in the population of young Malaysians.

### Conclusion and Recommendation

This study produced uncommon findings. Although demographic variables were correlated in a standard way with individual health behavior, the socioeconomic status and education level of respondents did not show statically significant relationships with health-promoting behaviors. With the significant relationship between health-promoting behavior and well-being, one recommendation is that programs to improve well-being among young, marginalized Malaysians can be conducted through health-promoting programs. This will achieve two public health objectives through one program on health and well-being.

### Conflict of Interest

There is no conflict of interest.

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