# Muslim youths' e-lifestyle and its impacts on well-being

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**Abstract:** In the lives of young people, particularly the students, the internet has become all-pervasive. Internet development has sparked debates on how the online activities and online behaviour of youths can affect their well-being. While the positive aspects of internet usage have the potential to learn and improve social relationships, overuse of the internet can lead to addiction, as well as online risks such as abuse, cyberbullying, and sexual exploitation. This research aims to examine the impact of e-lifestyle on wellness dimensions and the total well-being of Muslim youth in Malaysia. The data was collected through a survey of 255 Muslim respondents aged between 18 and 24 years and analysed using SmartPLS 3.0. The results indicate that the second-order construct of e-lifestyle has a significant effect on all wellness dimensions, while only social wellness has a significant effect on the total well-being of Muslim youth. Later, the future implications are discussed, and a conclusion is provided.

Keywords: e-lifestyle; Muslim youth; well-being; wellness; problematic internet use.

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### 1 Introduction

The emergence of the internet and mobile communications has stimulated remarkable changes in individual lifestyles. The internet has revolutionised communication and transformed how people socialise, entertain, work, study, think, and even shop (Cerniglia et al., 2017). The internet provides several practical tools, leading individuals to become more dependent on the internet to carry out their daily activities (Cardak, 2013). It not simply an information sources or an easy way of communicating. Rather, when people rely on internet to perform basic human functions, it has become a way of life. It has become a tool for entertainment, shopping, and sharing in society. It offers tools that allow individuals to access information more easily and quickly. The use of the internet and the diversification of such use in educational institutions have made it possible for

the young generation to become internet-savvy, even though the drawbacks of internet overuse are high (Zochil, 2015).

The United Nations (2013) defines 'youth' as an individual aged between 15 and 24 years. Despite the usefulness of the internet, there is a risk that one may develop dysfunctional behaviour related to the usage of such technology (Callea et al., 2016). Internet technology increases the overall likelihood of users, especially young people, falling prey to the risks of undesired and unwanted content, such as pornographic content or other violent content (Wisniewski et al., 2015). Many people use the internet in such a way that essential work is ignored because people use the internet for long periods of time, which eventually leads to addiction (Upadhayay and Guragain, 2017). In other words, internet use could become pathological if the time and energy spent online affects people's lives (Callea et al., 2016) and as a results can lead to problematic internet user. Thus, it is important to understand individual online behaviours and experiences, especially in terms of youth safety and well-being (Wisniewski et al., 2015).

Problematic internet users have excessive mental activity relating to the internet, such as thinking constantly about the internet or dreaming about online activities. Internet addiction, is recognised as internet problem use (PIU), is defined as wide-ranging or poorly controlled internet problems, impulses or behaviours that trigger disability or distress (Weinstein et al., 2015). Internet addiction has been characterized as extensive online usage which results in significant amounts of time being spent online on a daily basis somewhere from 40 to 80 hours per week with sessions that could last up to 20 hours. In critical cases, caffeine pills are consumed to assist in the extended internet sessions. PIU could lead to insomnia and cause sleep deprivation. Such sleep deprivation leads to excessive fatigue, weakens academic or occupational performance, and may harm the immune system, making users more vulnerable to disease (2004, 2017). Such addicts also do not get proper workouts due to prolonged periods of sitting in front of the computer. This makes the search for quality of life (QoL) a growing priority for people and communities in a technologically changing world seeking to find sustainable life satisfaction (Lachmann et al., 2016; Leung and Lee, 2005).

In Malaysia, the 2007 Youth Society and Youth Development Act describes 'young people' as those aged between 15 and 40 years. However, the National Youth Policy in Malaysia usually targets youth aged between 15 and 25 years (Mustaffa et al., 2011). Usually, young people experience a higher level of affluence, and appear to be technologically savvy. Youth, especially students, use the internet regularly for various reasons such as obtaining knowledge, spreading information, contacting friends and family, spending leisure time, or online shopping (Upadhayay and Guragain, 2017). They tend to be the major population of internet users in Malaysia as internet usage has been an essential part of the academic and social aspects of university life. The internet has the benefits of connecting with friends and family, performing business transactions, entertaining, and discovering and accessing new information with a simple mouse click (Weinstein et al., 2015). However, it has been suggested that some students may have an increased vulnerability to becoming problematic internet users (Zochil, 2015). When people indulge in the use of the internet in such a way as they ignore other important work for long periods of time, this may lead to addiction. Addiction to the internet directly affects depression, anxiety and stress (Suris et al., 2014). According to Shaw and Black (2008, p.1), internet addiction can be defined as "excessive or poorly controlled preoccupations, urges or behaviours regarding computer use and internet access that lead to impairment or distress." internet addiction and depression research has shown that overuse of the internet, which leads to a disturbance of an individual's normal lives and the people around him, is associated with an increase in depression frequency (Suris et al., 2014).

Previous studies have indicated that students have an increased risk of developing internet addiction due to the free time available, as well as the lack of parent and school constraints after passing the college entrance exam (Wang et al., 2013). In Malaysia, excessive internet use among the youth is on the rise (Cheng, 2016). Cheng (2016) have found that 37% of parents worry about the online lifestyle of their children. They fear their children's online activities conflict with their responsibilities to the home and school. Meanwhile, 18 per cent of parents said their kids sacrificed basic social activities for their online activities. The male youth who live in major cities such as Klang Valley, Ipoh, or Penang are among the most vulnerable to internet addiction in Malaysia (Cheng, 2016).

With the rise of internet addiction among the youth in Malaysia, attention must be paid to the online behaviours and well-being of the youth. According to Worldometers (2019), the youth population aged between 15 and 24 years in Malaysia comprises about 5,532,800 individuals, representing 17.09% of the total population of the country. Thus, youth make up a substantial part of the population and are more responsible for further development in the nation (Mustaffa et al., 2011). Muslims form the majority in Malaysia, representing 61.3% of the Malaysian population. This signifies that Muslim youths represent an important group that could contribute to the economic development of the country in future.

It is crucial to understand how e-lifestyles affect the well-being of Muslim youth. Hence, the present study aims to develop a thorough understanding of the factors that could affect the well-being of Muslim youth from the e-lifestyle lens and its effect on the various dimensions of wellness as on total well-being. Creating linkages among Muslim youths' e-lifestyle, wellness, and total well-being is imperative due to the advancement of internet technology.

#### 2 Well-being of youth

Human beings often think about the reasons they may be feeling happy and why people feel happy (Cardak, 2013). The keys to happiness have always been at the centre of human interest. Since the dawn of the time, people have been searching for the source of happiness. Well-being is a way of living an ideal life in terms of health and wellness, of living a full and functional life considering the social, personal, environmental, and other aspects. Health, well-being, and lifestyle are closely related. There are two basic perspectives regarding well-being: eudemonic and hedonic well-being. Subjective and psychological well-being respectively emerged due to the scientific conceptualisation of these different paradigms. Subjective well-being implies to happiness, relief and a relative lack of difficulties, whereas psychological well-being refers to obstacles, an effort, personal development and an attempt to improve. Cardak (2013) discovered that internet addiction has a negative relationship to subjective well-being. His study results showed that addiction to the internet negatively affects psychological well-being, which means that a higher level of internet addiction is associated with lower levels of well-being. Another study noted a significantly strong association between poor mental

health and well-being (Zochil, 2015). Internet addiction was also found associate favourably with a depressive mood (Cheung et al., 2018; Van Rooij et al., 2017) and loneliness (Cheung et al., 2018). This means that people see themselves happier, more excited, and more vivacious while using internet but when there is no internet, they feel unhappy and start experiencing negative emotions. They feel uncomfortable in environments where they do not have internet and feel relaxed and relieved when they do.

Students' academic performance can be influenced by time spent on the internet, which can also impact their social and psychological well-being (Kirschner and Karpinski, 2010; Sarafraz et al., 2019). Students with high internet use are more likely to experience poor psychological well-being (Kirschner and Karpinski, 2010; Kraut et al., 1998; Sharma and Sharma, 2018). Addiction to the internet is an issue which can be seen in many different societies and cultures (Masud et al., 2016). Increased use of the internet often causes neglect of other responsibilities due to time mismanagement (Young, 1999, 2004, 2017). This could result in lower productivity and dishonesty with oneself and others (Kraut et al., 1998; Masud et al., 2016). Overuse of internet among students also can contributes to the deterioration of family relationships, friendships and other social relations. People are starting to neglect their friends and family because of their addiction to the internet.

## 2.1 Wellness and its dimensions

In this study the well-being of youth will be measured and explained using three dimensions, which are intrapersonal wellness, social wellness and emotional wellness. Intrapersonal wellness helps in building and maintaining harmony with oneself and with family and friends (Chikwaiwa et al., 2013). Intrapersonal wellness usually assists in promoting the capacity for intimacy and is a main predictor of subjective well-being. Intrapersonal wellness involves elements such as joy and happiness, hope for the future, self-esteem, and confidence. According to Yampolsky et al. (2008), intrapersonal wellness includes a sense of meaning, fulfilment, and purpose (existential well-being). Intrapersonal health for the young person was largely defined and strengthened by factors such as age, sex, home form, physical ability, stigma and home safety (Mupedziswa, 2013).

Although social wellness includes contact with others and the interdependence of all individuals, it also involves society and nature relationships (Meiselman, 2016). Chikwaiwa et al. (2013, p.54) defined social wellness as "opening up to honesty and the sharing of one's feelings in a relationship and also how to reach out to others." Issues pertaining to social include networks of social support, and how you feel connected to family, friends, and society. Social wellness definition is broad in scope because it encompasses the individual's relationship with others, culture, environment, and work.

Emotional wellness represents the individual's perceptions toward themselves as well as the way problems and situations are addressed (Anderson, 2016). Emotional wellness also often includes the understanding and management or acceptance of emotions as well as actions, relationships, aspirations, personal abilities, power over one's life, and the ability to cope with the demands and pressures of everyday life, also called resilience (Meiselman, 2016). It includes essential and observable factors like happiness, satisfaction in life and positive mental health. Happiness, life satisfaction, and resilience are important components of health assessment and related concepts.

#### 2.2 E-lifestyle

The term 'lifestyle' comes from the sociological and psychological fields. The concept describes the way people live and has mainly been used to check the living patterns and mobility of different social classes (Yu et al., 2015). E-lifestyle has been associated with information and communications technology (ICT)-enabled products and services (Yu, 2011). E-lifestyles are perceived to be able to reflect consumer interests, activities, and opinions via the use of internet platforms (Pandey and Chawla, 2016; Yu, 2011). E-lifestyle represents the living, spending, and working patterns of people who use the internet and electronic or digital mediums (Hoque et al., 2018). This study conceptualized e-lifestyle as a collection of individual activities representing psychological problems and sociological consequences of use of the internet and electronic media (Hassan et al., 2015; Yu, 2011). Understanding the e-lifestyle of customers is relevant because it opens up a global marketplace for businesses; the markets have historically been limited by geographical areas (Ahmad et al., 2010; Hassan et al., 2015).

The rating scale of behaviours, desires, beliefs (AIO), originally presented by Wells and Tigert in the early 1970s (Tigert and Wells, 1971), and the rating scale of values, attitudes and lifestyles (VALS), initially developed by Mitchell in 1983, are two well-known and widely used lifestyle instruments. Business marketing strategy and marketing strategy scholars usually adopt the AIO concept, while the VALS rating scale is mostly used by behavioural scholars. However, the working, learning, shopping, and lifestyle patterns of people have changed due to the advancement of the internet in recent years. This makes traditional lifestyles inadequate for explaining today's electronic lifestyles (Mendi and Mendi, 2015; Pandey and Chawla, 2014; Yu et al., 2015). The present study therefore followed the conceptualization of the e-lifestyle as defined by Yu (2011), which set out four interrelated components: e-activities, e-opinions, e-interests, and e-values are the dimensions used to explore individual psychological issues and the sociological implications of e-lifestyle.

E-activities can be categorized as online activities for consumers with respect to online entertainment, online transaction, and social networking (Hassan et al., 2015). E-interest in this study can be conceptualised as the youth's attentiveness to the internet, the latest technology, and trends (Hassan et al., 2015). E-interest can also be described as "sensible tendencies to use and know the ICT-enabled services or products" (Yu, 2011). E-opinions reflect views on the continued development of internet services from the financial, economic, cultural, educational and life well-being perspectives (Hassan et al., 2015). E-values represent the trust of consumers in how the internet will support their lives with regard to job performance, networking, information and convenience (Hassan et al., 2015).

#### **3** E-lifestyle as a hierarchical reflective model

Next, the paper will then address briefly why e-lifestyle was conceptualized as a hierarchical construct. As has been discussed in the previous literature (Wetzels et al., 2009), hierarchical or multidimensional constructs are described as more than one-dimensional constructs, where each dimension captures some portion of the overall latent variable (see Figure 1). Such higher-order constructs are being tested by more and more researchers, as they have been effective in increasing theoretical parsimony and the

model complexity (MacKenzie et al., 2005). Petter et al. (2007) further confirmed that such reflective measures are anticipated to be unidimensional. Therefore, from the original article of Yu (2011), e-lifestyle has been conceptualised as a higher-order reflective model.

Figure	1	E-lifestyle

E-activities (EA)	E-opinion (EO)		
E-interest (EI)	E-values (EV)		

*Source:* Yu (2011)

## 4 Framework and hypotheses development

## 4.1 Relationship between e-lifestyle and intrapersonal wellness

The intrapersonal wellness of individuals has been said to depend on the social processes and social environment of the individuals (Chikwaiwa et al., 2013). Individuals who use the internet to broaden their social circle will enhance their intrapersonal wellness because their feelings, thoughts, emotions, and outlooks are affected by their social environment. The perceived stress of individuals has also been found to be related to their behaviour (Schultz et al., 2019). Any stress that a person feels is said to be a barrier to healthy behaviour. If individuals do not perceive their life as stressful and have strong defence mechanisms for dealing with stress, they might not use the internet as a way to avoid stress, which could otherwise contribute to internet addiction at a later stage.

H1 E-lifestyle has impacts on intrapersonal wellness.

## 4.2 Relationship between e-lifestyle and social wellness

In an online environment, the person who has the need to develop a close social network will use the internet more to make friends. Such individuals may end up being problematic internet users. Individuals who take part in online community activities can establish close social interaction with other members of the online community. Such relationships would allow individual members to maintain an active social connection with other members of the online community from them, which in turn may contribute to their psychological dependence on the online community (Yang et al., 2016). According to Koshksaray and Farahani (2015), individuals who are sociability-driven use the internet and electronic services to create an online conversation environment. Interpersonal interaction occurs which leads to an expansion of the social life of the individuals – they exchange information, beliefs, and ideas through the internet and participate in social events. The social interactions will later enhance their feelings of being connected with society, thereby improving their sense of social wellness. But past studies have also suggested that a consequence of internet abuse is social isolation

(Darcin et al., 2016; Young, 1999). A recent study also found that there is no significant relationship between internet addiction and social wellness (Gorritz, 2018). College students are said to have the ability to interact socially with other students and may be able to develop healthy relationships with others offline.

H2 E-lifestyle has impacts on social wellness.

## 4.3 Relationship between e-lifestyle and emotional wellness

Past studies have demonstrated that PIU has been negatively associated with emotional well-being, with the results revealing that PIU could lead to depression, loneliness, anxiety disorders, and low self-esteem (Callea et al., 2016; Diener et al., 1999; Gorritz, 2018; Ostovar et al., 2016; Wu et al., 2016; Zochil, 2015). Cerniglia et al. (2017) found that teenagers who struggle with internet addiction also struggle with feelings of anger and loss of control. Problematic internet users take advantage of the internet to modulate their negative moods (Young, 1999). So, adolescents with bad moods will always choose to cope with their negative emotion by spending time on the internet, which may increase their risk of becoming internet addicts. Excessive smartphone use has also been discovered to be closely related to a variety of mental health issues, including depression and an increased risk of excessive anxiety. Along with internet addiction, mobile smartphone addiction has emerged as a new form of addiction. Research has found that low levels of emotional isolation have been associated with less use of the internet and getting more of face to face friend circles.

H3 E-lifestyle has impacts on emotional wellness.

## 4.4 Relationship between intrapersonal wellness and total well-being of youth

A past study has examined how intrapersonal wellness affects the total well-being of individuals. The results indicate that intrapersonal wellness such as physical health, mental health, loneliness, and financial capability predicted the well-being of a person (Hodgkin et al., 2018). Meanwhile, intrapersonal wellness in case of children affected their levels of confidence and happiness, as well as the child's overall development (Mupedziswa, 2013). A study by Leonov and Hasan (2019) discovered that intrapersonal wellness is a strong predictor of QoL among adolescents. Therefore, intrapersonal wellness can be predicted to affect the total well-being of youth.

H4 Intrapersonal wellness has impacts on total well-being of Muslim youth.

## 4.5 Relationship between social wellness and total well-being of youth

Loneliness and isolation are said to be related to internet use. Even though some research studies conclude that the internet has actually contributed to an expansion in social networks, concerns remain about whether internet use is related to social isolation (Livingstone and Helsper, 2007). Chikwaiwa et al. (2013) indicated that the healthier their well-being would be if the more individuals had a strong social network both within the family and between friends as well as out in the community or at work. Lee (2018) found that social wellness is positively related to QoL and subjective happiness. However, internet usage connected with social activities is discovered to be inversely

associated with satisfaction and QoL (Leung and Lee, 2005). This is because people spend a lot of time speaking about their personal feelings on the internet, but in doing so, they lose out on the time to engage in more valuable activities in reality, such as social communication, sleep, leisure activities, or reading books.

H5 Social wellness has impacts on total well-being of Muslim youth.

## 4.6 Relationship between emotional wellness and total well-being of youth

Problematic internet users will probably suffer from unpleasant feelings if they do not have access to the internet for a long time. They will think of ways to find the pleasant feelings again, such as excitement, euphoria, and exhilaration, by attempting to gain access to the internet. Past studies have also suggested that adolescents use the internet excessively due to feelings such as social anxiety and depression. Adolescents try to diminish these feelings by spending time online to 'soothe' symptoms of stress, anxiety, depression, and other concurrent psychosocial problems (Gorritz, 2018). Past studies have concluded that increased depression results in less satisfaction in life and decreased well-being among problematic internet users (Wang et al., 2013). However, Lee (2018) studied the relationship between emotional wellness and QoL as well as subjective happiness, and found a positive relationship among the variables. The study confirmed that QoL and subjective happiness of the individuals increased only when the wellness dimensions of the person increased.

H6 Emotional wellness has impacts on total well-being of Muslim youth.

A research framework is built based on reviews of literature, as illustrated in Figure 2.

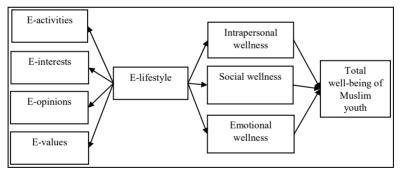


Figure 2 Proposed research framework

# 5 Methodology

In this study, the population targeted is Muslim students aged between 18 and 24 years. Non-probability convenient sampling was used in the data collection process. Muslim students were approached and asked to fill in the questionnaire in a few lecture halls of Universiti Sains Malaysia (USM). The students came from various states in Malaysia. The survey form of this study encompassed four dimensions (i.e., e-activities, e-interests,

e-opinions, and e-values) underlying the Muslim youths' e-lifestyle construct. The e-lifestyle instrument was adapted from Yu (2011). There are three dimensions for the construct of wellness (i.e., intrapersonal, social, and emotional wellness). The items for intrapersonal wellness were adapted from Livingstone and Helsper (2007), the items for emotional wellness were adapted from Young (1999), and the items for social wellness were adapted from Sherbourne and Stewart (1991). The e-lifestyle and wellness items were assessed using a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree) and the items of total well-being was measured using a seven-point Likert scale ranging from one (strongly agree). The measurement items for total well-being were adapted from Yu (2011).

#### 6 Data preparation

#### 6.1 Missing value analysis

This research uses the algorithm method of expectation-maximisation (EM) to avoid the issue of missing data. When participants fail to answer or miss one or two questions in the survey, missing data or missing values occur. Missing data is inconsequential if less than 5% (Schafer and Graham, 2002), and even up to 10% (Cohen et al., 2014) do not cause any serious problems in interpreting the results (Cohen et al., 2014). In the present case, it was less than 1%, which indicates the missing values are not a serious issue in the dataset of this paper.

#### 6.2 Common method bias

For this research Harman's single-factor technique, developed by Mahmud et al. (2017), was used. The test result indicated a variance of 17.87 % after assuming all dimensions in a single factor. This means that common method bias (CMV) is not an problem in the present paper's data collection.

#### 7 Data analysis and result

#### 7.1 Profile of respondents

A total of 255 usable questionnaires were gathered from Muslim youth aged between 18 and 24 years in Malaysia. Frequency analysis results indicated that female respondents constituted 70.2% of the total respondents, while male respondents constituted 29.8% of the overall respondents. Most of the respondents were 21 years old. The results revealed that most respondents came from various states, but the highest numbers were from Penang (20.7%), Kedah (19.8%), and Perak (11.2%) respectively. According to the results, 62.6% of Muslim youth spent less than RM50 on their monthly internet subscription as the Wi-Fi on the campus was free and could be accessed by all students. It was noted that 38.5% of the respondents spent their time online for approximately five to seven hours per day. The profiles of the respondents are displayed in Table 1.

		Frequency	Percentage (%)
Gender	Male	76	29.8
	Female	179	70.2
Age	18	3	1.2
	19	9	3.6
	20	23	9.1
	21	101	39.9
	22	53	20.9
	23	46	18.2
	24	18	7.1
State of the hometown	Penang	24	20.7
	Kelantan	10	8.6
	Kedah	23	19.8
	Terengganu	7	6.0
	Perak	13	11.2
	Perlis	5	4.3
	Selangor	3	2.6
	Negeri Sembilan	4	3.4
	Johor	8	6.9
	Pahang	8	6.9
	Melaka	4	3.4
	Sabah	1	0.9
	Sarawak	1	0.9
	Kuala Lumpur	5	4.3
Monthly spend on internet subscription	Less than RM50	159	62.6
	RM50-100	75	29.5
	RM101–150	13	5.1
	RM151-200	2	0.8
	Others	5	2.0
Average time spent online daily	Less than 1 hour	3	1.7
	2–4 hours	50	28.7
	5–7 hours	67	38.5
	8–10 hours	23	13.2
	More than 10 hours	27	15.5
	Other	4	2.3

Table 1Respondent profile

# 7.2 Assessment of the hierarchical e-lifestyle construct

We conceptualized e-lifestyle as 2nd order constructs which was created based on four different 1st order reflective variables. The level of variances was assessed and displayed

in Table 2. The variances were high with the values ranging from 40.8% (e-activity), 75.2% (e-interest), 45.3% (e-opinion) and 70.6% (e-values) with all associations were significant at p < 0.01. The AVE of the hierarchical construct was 0.580 and composite reliability (CR) was 0.844 which all exceeded the cut off values recommended in the literature.

	E-activity	E-interest	E-opinion	E-values
R <sup>2</sup>	0.408	0.752	0.453	0.706
β	0.639	0.868	0.673	0.841
t-value	14.7	43.57	14.261	38.9
Significance	p < 0.01	p < 0.01	p < 0.01	p < 0.01

 Table 2
 Second-order quality construct and its association with first order components

#### 7.3 Measurement model

Testing of measurement model was carried out using SmartPLS 3.0 software by two staged analysis process by Hair et al. (2019). The SmartPLS and two-step analysis approach was used to analyse the data (Ringle et al., 2015). The existing literature estimates the measurement model by evaluating CR, average variance extracted (AVE), and discriminate validity (Hair et al., 2015).

Construct				Composite reliability			AVE	
E-lifestyle				0.844			0.580	
Emotional	well-being	(EW)		0.909			0.557	
Intraperson	al wellness	s (IPW)		0.887			0.611	
Social well	ness (SW)			0.912			0.635	
Total well-	Fotal well-being of Muslim youth (TWB)			0.915		0.544		
Table 4         Discriminant validity								
Construct	EA	EI	EO	EV	EW	IPW	SW	TWB
EA	0.753							
EI	0.479	0.719						
EO	0.293	0.409	0.743					
EV	0.383	0.633	0.519	0.739				
EW	0.101	0.179	0.181	0.129	0.746			
IPW	0.152	0.143	0.314	0.150	0.521	0.782		
SW	0.141	0.440	0.281	0.446	0.061	0.105	0.797	
TWB	0.258	0.351	0.328	0.281	0.106	0.159	0.237	0.738

The minimum figure is to have 0.50 for each variable to pass the requirements of AVE, which means that a construct captures a great variance of its scales (Hair et al., 2019). A visual examination of Table 3 indicates that the sample data pass the criteria of AVE. Table 3 focuses on the quality criteria where AVE must be above 0.50 and the CR of

variables must exceed 0.7 (Hair et al., 2015). The variables in this study meet both the requirements.

All the square root of AVEs were greater than the correlations, thus supporting discriminant validity. For our analysis, the discriminant validity is shown in Table 4. Table 4 met the criteria to pass the discriminant validity as all the diagonals values are higher than the value inside the table.

## 7.4 Structural model

After establishing the validity of the measurement instrument, we examined the structural model. The results of testing the structural model are shown in Table 5 (Hair et al., 2019).

Hypotheses	Relationship	Beta value	T-statistics	P-values
H1	$\text{E-lifestyle} \rightarrow \text{IPW}$	0.237	4.136	Supported
H2	$\text{E-lifestyle} \rightarrow \text{SW}$	0.469	8.252	Supported
H3	$\text{E-lifestyle} \rightarrow \text{EW}$	0.212	4.136	Supported
H4	$IPW \rightarrow TWB$	0.120	1.189	Not supported
H5	$\mathrm{SW} \to \mathrm{TWB}$	0.222	3.304	Supported
H6	$\mathrm{EW} \rightarrow \mathrm{TWB}$	0.031	0.354	Not supported

Table 5Structural model

As hypothesized, e-lifestyle showed positive significant effect on IPW (H1,  $\beta = 0.237$ , p < 0.01), SW (H2,  $\beta = 0.469$ , p < 0.01) and EW (H3,  $\beta = 0.212$ , p < 0.01). In addition, SW (H4,  $\beta = 0.222$ , p < 0.01) influences significantly TWB. But there was no effect of IPW and EW on TWB. Therefore, H4 and H6 are not significant. See Table 5.

## 8 Discussion

The goal of this study aims to unravel the relationship between e-lifestyle, wellness dimensions, and total well-being of Muslim youth in Malaysia. The findings from the study support our understanding of the relationship between well-being and internet activities. Thus, the well-being of young people can be strengthened with an internet addiction avoidance system. The empirical results of this study revealed that e-lifestyle has significant effects on intrapersonal wellness, social wellness, and emotional wellness. However, only social wellness has a significant impact on the total well-being of Muslim youth in Malaysia. Interpersonal wellness and emotional wellness were found to be insignificant factors in relation to total well-being.

The relationship between e-lifestyle and intrapersonal wellness has been discovered to be significant. The intrapersonal wellness of Muslim youth is enhanced when they use the internet to broaden their social circle. This is because their feelings, thoughts, emotions, and outlooks are said to be affected by the social environment of the individuals. If the Muslim youth did not face any stress in their life and possessed strong defence mechanisms for dealing with stress, then they might not be addicted to the internet in a way that potentially affected their intrapersonal wellness. If a person successfully reduces their internet addiction, it will enhance their well-being as well. On the other hand, there is a significant relationship between e-lifestyle and social wellness. Muslim youth who used the internet to develop a close social network may affect their total well-being. Though these relationships allow individual members to maintain an active social relationship with other members of the online community and receive social support from them, which could contribute to their psychological dependency on the online community as is supported by previous research (Yang et al., 2016). On the other hand, interpersonal interaction in the virtual community leads to an expansion of the social life of individuals. They exchange information, beliefs, and ideas through the internet and participate in social events. The social interactions will later enhance their feelings of being connected with society, thereby improving their sense of social wellness.

Emotional well-being has also been found to have a significant impact on the emotional wellness of Muslim youth in Malaysia. According to Cerniglia et al. (2017), teenagers who struggle with internet addiction are found to struggle with feelings of anger and loss of control. The excessive smartphone uses also discovered strong associations with several mental health issues, including stress and increased risk of abnormal anxiety. This is because they are taking advantage of the internet to modulate their negative moods and in order to cope with their negative emotions by wasting time through surfing the internet. Therefore, the emotional wellness of Muslim youth with active e-lifestyles is found to be affected by high levels of internet usage.

Furthermore, the relationship between social wellness and total well-being of Muslim youth in Malaysia significant. This result is in line with those of past studies (Chikwaiwa et al., 2013; Lee, 2018). It suggests that Muslim youth who have a strong social network both within the family, between friends and out in the community or at work have better health. Lee (2018) also discovered that social wellness has a positive relationship with QoL and subjective happiness. According to Miller and Foster (2010) the importance of social determinants when assessing health imbalances. Being part of society is crucial to the economic, psycho-social, and political empowerment that underpins social well-being and health equitable.

Nonetheless, the results show that intrapersonal wellness is insignificant with respect to the total well-being of Muslim youth. This result contradicts the research by Hodgkin et al. (2018) who discovered that dimensions of intrapersonal wellness, such as physical health, mental health, loneliness, and financial capability, predicted the well-being of a person. The emotional state of a person has been said to be able to impact on their health and disease in turn may potentiate emotions. However, intrapersonal wellness has also been said to be affected by the coping style and defence mechanism of the individuals. If an individual can handle stress effectively and maturely, then the intrapersonal wellness dimensions might not affect their total well-being.

The relationship between emotional wellness and total well-being of Muslim youth is also insignificant. This result is inconsistent with the results of past studies such as by Wang et al. (2013) and Lee (2018) which concluded significant relationships between emotional wellness and subjective well-being as well as QoL. It has been argued that the capacity to cope with stress and maintain a positive attitude toward life as well as optimism about the future seem to have a powerful bearing on emotional wellness. Thus, it can be concluded that emotions and happiness are subjective, which supported by Miller and Foster (2010). What makes one person happy may not have the same effect on another. Therefore, the emotional wellness of Muslim youth can be said not to have any effect on their experience of total well-being.

### 9 Conclusions

In today's globally diverse environment, it is important to understand how e-lifestyle affects youth wellness and their total well-being. The best ways to keep using the internet while protecting users, particularly young people, in terms of their physical, social and mental well-being need to need to be considered. The risk of developing unhealthy behaviour and declining well-being among the younger generation may be reduced if consideration has been taken for preventive evaluation by the use of internet technology. As the youth make up a significant part of the Malaysian population, they bear a greater responsibility for further development in the country as it progresses towards a democratic, harmonious, and unified civil society. Therefore, it is important to realise and resolve the negative aspects of the internet to ensure greatest harmony and healthy lifestyles in order to protect users, especially the youth, in terms of their physical, social, and mental well-being.

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