

A FACTOR ANALYSIS OF MALAYSIAN YOUTH LIFESTYLE DOMAIN

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ABSTRACT This study was conducted to validate the 15 items that were newly developed to measure youth lifestyle within the context of Malaysian society. It is indeed essential to examine the relevancy of the items from the scope of the Malaysian culture since most of the tools in measuring lifestyle originated from outside the context of Malaysian society. An exploratory factor analysis was applied in order to generate simpler and more explicitly defined constructs to classify the lifestyles of youth based on Malaysian respondents. The result shows that there were only 9 items of the scale used to measure youth lifestyle in Malaysia. The 6 items that were initially used were dropped from the total items due to the lower than expected score for communalities. There were five proposed initial domains which were reduced to three domains. The justification of the new dimensions and implications of the findings are discussed.

Keywords: *Youth, lifestyles, factor analysis, instrument validity, Malaysia.*

INTRODUCTION

The paper aims to discuss the factor analysis finding on the measurement of Malaysian youth lifestyle. The instrument was developed to examine the relationship between youth lifestyle, digital engagement and political participation. Lifestyles and media usage were not a new phenomenon. Eastman (1979) was one of the earliest scholars who ventures into studying lifestyle in order to identify the relationship between lifestyle and media usage. And, it has been developing ever since. The paper is organized into two main parts. The first part will discuss two important points that set as a background of the paper. First, it focuses on the argument on the need of developing new instrument to measure youth lifestyles. Second, it will

discuss on the argument of defining youth lifestyles. This will then be followed by the process of conducting the factor analysis, discussion of the findings and conclusion.

YOUTH LIFESTYLE

Much has been said that youth today are the biggest users of digital apparatus and early adopters of new media (Krueger, 2002; Jones & Fox, 2009). In the context of Malaysia, recent survey shows that 25 million of Malaysian has access to the Internet. The age group of 16–24 years old is the highest group who has access (73 per cent) to the Internet. This was consistent with the finding of the National Youth Survey in 2008 conducted by Merdeka centre whereby, 96 per cent of the youth being interviewed (n=2518) owned a mobile phone. Being heavy users of new media powered by the digital and internet technology led us to an assumption. Assumption about what would be the lifestyle of youth today since they become the heavy users of digital media. It was this assumption that leads us into this investigation.

Most studies about youth and digital media focus on how the digital media could empower youth, particularly in the context of civic and political participation (Kirby et al., 2003, Reimer, 2003; Valenzuela, Park & Kee, 2009; Zhang, Seltz & Richard, 2013; Xenosa, Vronen & Loader, 2014; Che Ching et al., 2018; Samsuddin et al., 2019; Che Ching, 2020). However, none of the studies puts youth lifestyle as one of the variables to be investigated. Youth lifestyle is indeed a worthy investigation because youth today can be considered as the digital natives' group (Prensky, 2001; 2008). Being digital natives offers lots of promises that are different from the generation before them. This generation is seen as disinterested and living in their own world, hence the inclusion of lifestyle as a variable to be explored. Moreover, as argued by Montgomery, Robbles and Larson (2004) the growth of the internet has dramatically altered the ways in which individuals use the media, and youth are at the forefront of these changes.

Lifestyle was understood to be the outward expression of individuals' cultural identities (Miles, 2000). It was also the belief among communication scholars that mass media and Information Communication Technologies (ICT) are part of people's everyday lives. Lifestyle was generally accepted to reflect people's consumption practices (Smith, 2011). Lifestyle and consumption pattern are a fluid relationship. Barker (1999: 31) argued that "television is a major communicative device for disseminating those representations which are constitutive by cultural identity". Miles (2000) echoes the same sentiment when he argued that the centrality of electronic media usage to youths' lifestyle was connected to their consumption practices and exists as the "material expression of an individual's identity".

Steele and Browne (1995) argued that youths' sense of self shapes how they interact with media, and those encounters in turn shape their sense of themselves in the on-going process of cultural production and reproduction. Smith (2011) cited Bourdieu's concept of "cultural capital" and "taste" to establish the link that reflect the role of culture in maintaining distinctions of class, where class, in turn is understood to be "defined by consumption". Thus, Smith (2011) in her study operationalised cultural capital of respondents as an assessment of their lived conditions, access to media and ICTs and their preferences or value judgement. Therefore, to analyse youth lifestyle, we need to understand the youth cultural capital, i.e. their living condition as well as their access to media and ICT. Xenosa, Vronen and Loader (2014) also suggested that future research (about youth, internet and civic and political participation) should demonstrate the importance of attending to variables particularly relevant to young people such as political socialization and newly emerging norms of citizenship, in all areas of research on digital media and citizenship (p.164). The term 'newly emerging norms of citizenship' can be loosely translated as referring to the youth' lifestyle, in the context of this study.

While the existing literatures are overwhelmingly in support of the importance of lifestyles as the variables in segmenting people's media behaviour there were still some issues that were worth noting regarding lifestyles as variables. The first issue was regarding the conceptualizing and operationalizing of lifestyles. Lifestyle was a conception that represents the

modern society. It had taken over the concept of class and social stratification in sociology (Coulangeon, 2010). Even though lifestyle had become a popular concept it was an ambiguous and challenging term (Blaxter, 2004). For instance, Giddens (2008) defined lifestyle as a fairly coordinated set of behaviours and activities of a particular person in everyday life that requires a set of habits and orientation. Miles (2000) on the other hand defined lifestyle as the outward expression of individuals' cultural identities.

Another scholar defined lifestyle as to reflect people's consumption practices whereby lifestyle and consumption pattern is a fluid relationship (Smith, 2011). Miles (2000) echoes the same sentiment when he argued that the centrality of electronic media usage to youths' lifestyle was connected to their consumption practices and exists as the "material expression of an individual's identity". Coulangeon (2010) also offers similar definition of lifestyle when he proposed that lifestyles can be measured based on cultural leisure and cultural consumption.

The most popular definition of lifestyle can be traced back into the way market research and consumer behaviours' researcher look at lifestyle. For consumer behaviours' scholars, lifestyle consists of three dimensions. These dimensions were activities which look into the consumption behaviour of the consumers or attempting to answer what consumers buy or how they would spend their time. The second dimension refers to the interests of consumer. In this dimension, researchers were interested in investigating consumer preferences, such as for jobs, recreation, fashion or foods. The final dimension in studying lifestyle was the opinion dimension. In this dimension, investigators attempt to answer questions such as the views and feelings of consumers on local, world, economic as well as social issues (Ran Wei, 2006).

The above discussion implied that any studies about lifestyle should consist all or some of dimensions. Researchers like Seddon (2011) defined lifestyle as a way of living, of the things that a particular person or group of people usually do. Lifestyles were based on individual choices, characteristics, personal preferences and circumstances. In their free leisure time many choose to engage in the arts and culture, read a book,

visit the cinema, go on holiday and participate in sporting activities. Social participation includes looking after the family or home and care giving; interpersonal roles of friend and family member; life roles such as student, worker and volunteer; and community roles such as participant in religious, activity-based, or voluntary help organisations. Seddon's definition of lifestyle consists of two dimensions, namely behaviour and interests.

Coulangeon (2010) argued that in French, the French Ministry of culture has for a long time commissioned a large-scale survey on the French cultural practices. Since the early seventies, five consecutive surveys have thus been completed, in 1973, 1981, 1988, 1997 and 2008. These surveys made on representative samples of more than 1 500 individuals in 1973, and of about 4 to 5 000 for the following ones, give a detailed picture of people's habits in the field of cultural leisure and cultural consumption, including both 'high-brow' and very legitimate cultural practices, on the one hand such as classical and contemporary literature reading, classical music listening, theatre attendance, museums visits, and 'middle-brow' or 'low-brow' practices, belonging to popular and mass culture, on the other hand such as TV watching, pop music listening, gambling, etc. (Coulangeon, 2010: 3). This kind of explanation implied how lifestyle was measured based on one dimension only, behaviour.

Another example of lifestyle definition can be seen from other disciplines such as the definition given by Laska et al. (2009) in studying lifestyle and health risks. They measured lifestyles based on behavioural pattern of the respondents such as physical activities, dietary intake, stress management as well as alcohol and tobacco consumptions. This was another example to highlight how lifestyle can be measured based on a single dimension.

However, there were other scholars who insist on measuring lifestyle based on at least two dimensions such as Hartmann (1999) who argued that, studying lifestyles must involve attitude and behaviour (Hartmann, 1999). Veal (1993) combined activities, behaviours, values and attitudes in his construct of lifestyle. Salama (2007) operationalized lifestyles as work based, attitude based and status based.

In the local context, studies on lifestyles were mostly focuses on behaviour of individual. Fariza Md Sham et al. (2015) for instances defined lifestyle as the characteristic of an individual behaviour that related to social relations, consumptions, entertainment as well as the way they dressed. The study that these researchers had conducted showed that the lifestyle practices by youth in Malaysia were of these factors namely, consumption, modern and hedonistic.

Likewise, with the study conducted by Abdulrahman and Suandi (2015) in examining the comparison of lifestyle of youth in Malaysia and Saudi Arabia argued that lifestyles included the patterns of education, culture, food, the way they dressed, the usage of new media, their religious, sports and music activities.

Arguably, as presented above, there were various definitions of lifestyle. Depending on the type of study, lifestyle can be measured based on all the dimensions or a combination of two or with just one dimension. The discussion implied that whichever route a researcher chooses in defining lifestyle, it will be still acceptable. It should not be a problem whether a researcher uses multiple dimensions in measuring lifestyle or a single dimension.

Therefore, for this research project, the youth lifestyle was measured based on two dimensions: behaviour and interest. The reason for choosing these two dimensions was based on the fact that lifestyle reflected consumption practice. The attitude dimension was not included because attitude represents cognitive and reflects on mental state instead of behaviour.

Thus, for this study, a total of 15 items (questions) were developed to measure the frequency of consumption using a 5-point Likert scale. Respondents were asked how they would spend their leisure time. Table 1 shows the five domains of the measurement of lifestyle. These domains were media usage, community, and recreational, vocational and High-brow culture. The media domain was represented by four items namely watching movies/TV, surfing the social media like Facebook, YouTube, playing games both on the computers as well as mobile phone and reading (novel, books, magazine,

newspapers). While three items represented the community domain (B17–B19), two items explained the recreational domain (B20–B21), three items were used to measure the vocational domain (B22–B24) and the remaining four items represented the high-brow culture domain (B25–B27).

Table 1 Items developed to measure the lifestyle of youth

Item	Statement	Initial domain
B13	Watching movies / TV	Media domain
B14	Surfing social media such as Facebook, YouTube etc.	
B15	Playing games on computers / mobile phone	
B16	Reading novel / books / magazine / newspapers	
B17	Visiting worship places such as <i>surau</i> / church / temple / community meeting /	Community domain
B18	Visiting Café (Coffee bean, Starbuck, Kopitiam etc.)	
B19	Involves as volunteers in Orphanage / Environmental activities	
B20	Recreational (Jogging / Exercising / Cycling / Football, etc)	Recreational domain
B21	Joining self-defence activities	
B22	Learn how to repair cars / motorcycle / bicycle etc.	Vocational domain
B23	Learn how to sew / cook / making cake / self-presentation etc.	
B24	Learn how to use computer / repair computer / repair mobile phone etc.	
B25	Watching concert at the Cultural Palace / Theatre / Orchestra	High-brow culture domain
B26	Visiting museum	
B27	Vacation local / overseas	

To test the validity of the above instrument, a nationwide study was conducted involving a total of 5,954 respondents. These are youth age 15–25 years old. The following table (Table 2) shows the demographic profile of the survey’s respondents. There were slightly more male respondents as compared to female respondents. Obviously, there were more students (71 per cent) in the employment status as compared to the other groups. This could possibly affect the outcome of the analysis.

Table 2 Demographic profile of the respondents

Demographic profile	Class	Frequency	%
Age	15-17	1943	33
	18-22	2576	43
	23-25	1435	24
Gender	Male	3203	54
	Female	2751	46
Ethnic	Malay	2915	49
	Chinese	1563	26
	Indian	429	7
	Bumiputera Sabah	543	9
	Bumiputera Sarawak	490	8
	Others	14	1
Religion	Islam	3476	58
	Buddhist	1102	19
	Christian	960	16
	Hindu	359	6
	Others	21	1
Highest Education Achievement	UPSR	524	9
	PMR	1290	22
	SPM	2015	33
	STPM/STAM/Matriculation	460	8
	Certificate	255	4
	Diploma	858	14
	Degree	524	9
	Others	28	1
Employment Status	Students	4256	71
	Fixed employment	786	13
	Part-timer	457	8

	Unemployed (Inactive looking for job)	111	2
	Unemployed (Actively looking for job)	245	4
	Others	99	2
Household income	RM 1000 and below	1452	24
	RM 1001 - RM 2000	1598	27
	RM 2001 – RM 3000	1129	19
	RM 3001 and above	1775	30
Marital status	Married	304	5

FACTOR ANALYSIS

There are many uses of factor analysis (FA) and the aim of conducting the FA was to: (i) reduce the number of items in the domains of the construct, (ii) establish the underlying dimension between measured variables and latent construct, thereby allowing the formation and refinement of theory; (iii) provide construct validity evidence of self-reporting scale (William et al., 2010). For this study, the factor analysis was conducted to fulfil all the above mentioned uses of factor analysis. This was because the lifestyle measurement was newly developed thus, there was a need to reduce the number of items in the domains construct and to establish underlying dimension that will provide construct validity evidence of the measurement.

There were five steps involved to conduct the factor analysis for the lifestyle variable. Firstly, it was to determine if the data were suitable for analysis. For this purpose, the KMO and Bartlett's test of Sphericity was conducted. The KMO and Bartlett's Test as shown in the Table 3 showed that the sample size was adequate for further statistical test. However, a check on the communalities for each item showed that there were five items that recorded a score below the acceptable 0.50 as proposed by Hair et al. (2010). Items that recorded with communalities of above 0.50 were retained, while items that were below 0.50 were removed from the analysis as indicated in Table 4.

Table 3 KMO and Bartlett’s Test

Test		Score
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.849
Bartlett’s Test of Sphericity	Approx. Chi-Square	17928.111
	Df	105
	Sig.	.000

Table 4 Scores of the initial and extraction of the communalities of the items

Item	Initial	Extraction
B13 Watching movies / TV	1.000	.459
B14 Surfing social media such as Facebook, YouTube etc.	1.000	.613
B15 Playing games on computers / mobile phones	1.000	.546
B16 Reading novel /books / magazines / newspapers	1.000	.619
B17 Visiting worship places such as <i>surau</i> / church / temple / Community meeting / <i>gotong-royong</i>	1.000	.598
B18 Patronising café (Coffee bean / Starbuck / Kopitiam)	1.000	.397
B19 Involves as volunteers in orphanage / environmental activities	1.000	.513
B20 Recreational (Jogging / Exercising / Cycling / Football etc.	1.000	.549
B21 Joining self-defence activities	1.000	.524
B22 Learn how to repair cars / motorcycle / bicycle etc.	1.000	.603
B23 Learn how to sew / cook / making cake / self presentation etc.	1.000	.389
B24 Learn how to use computer / repair computer / repair mobile phone.	1.000	.304
B25 Watching concert at the cultural palace / theatre / orchestra	1.000	.665
B26 Visiting museum	1.000	.635
B27 Vacation local / overseas	1.000	.470

After removing items B13, B18, B23, B24 and B27, another analysis was conducted to determine the KMO, Bartlett test & communalities score and the results showed a scores of .790 as indicated in Table 5. This confirms the suggested score by Hair et al. (2010). However, item B20 recorded a communalities score of .222, which is way below the accepted score of >.5. Thus, item B20 has to be deleted and another factor analysis was run for the third time. After which, communalities score above 0.5 was obtained for each item.

Table 5 KMO, Bartlett test & Communalities after removing 5 items

Test / Item	Score
KMO measure of sampling adequacy	.790
Bartlett's test of sphericity sig	.000

Table 6 shows the new communalities scores of each item, where the remaining items now obtained the communalities scores of above 0.5

Table 6 Scores of the initial and extraction of the new communalities of the item

Item	Initial	Extraction
B14 Surfing social media such as Facebook, YouTube etc.	1.000	.705
B15 Playing games on computers /mobile phones	1.000	.678
B16 Reading novel /books /magazines / newspapers	1.000	.639
B17 Visiting worship places such as <i>surau</i> / church / temple / community meeting / <i>gotong-royong</i>	1.000	.544
B19 Involves as volunteers in orphanage /environmental activities	1.000	.559
B21 Joining self-defence activities	1.000	.524
B22 Learn how to repair cars / motorcycle / bicycle etc.	1.000	.545
B25 Watching concert at the Cultural Palace / Theatre / Orchestra	1.000	.605
B26 Visiting museum	1.000	.553

The next step in factor analysis after fulfilling the first three criteria was to determine the number of components as well as the total variance percentage. The accepted practice in determining the number of components was by setting the value of Eigenvalues >1 . Thus, as shown in the Table 7, three components out of the nine items scored eigenvalues >1 .

Hair et al. (2010) suggested that the accepted total variance percentage should be 60 per cent and above. As shown in the following table the rounded score was 60 per cent. It reached just the minimum level of accepted total variance percentage. However, there were some arguments on this. Statisticians were divided on the accepted score of total variance percentage. As noted by William et al. (2010) that cumulative percentage of variance (criterion) was another area of disagreement in the factor analysis approach, particularly in different disciplines. For example, for the Natural Sciences, Psychology, and the Humanities, there was no fixed threshold

exists, although certain percentages have been suggested. In the Humanities, the explained variance was commonly as low as 50–60 per cent. Therefore, the total variance percentage recorded in this analysis should be accepted.

Table 7 Total variance and initial eigenvalues

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2.914	32.382	32.382
2	1.326	14.728	47.110
3	1.120	12.448	59.558

Extraction Method: Principal Component Analysis

The next step was to decide on the factors that need to be analysed. For this, a rotation of the component matrix was done. Rotation maximises high item loadings and minimises low item loadings, therefore producing more interpretable and simplified solution. Rotation method chosen for this analysis is Varimax with Kaiser Normalization as shown in the following Table 8.

Table 8 Rotated component matrix

Item	Component		
	1	2	3
B14 Surfing social media such as Facebook, YouTube etc.			.820
B15 Playing games on computers / mobile phones			.798
B16 Reading novel /books / magazines / newspapers			.800
B17 Visiting worship places such as <i>surau</i> / church / temple / community meeting / <i>gotong-royong</i>			.699
B19 Involves as volunteers in orphanage / environmental activities	.602		
B21 Joining self-defence activities	.712		
B22 Learn how to repair cars / motorcycle / bicycle etc.			.721
B25 Watching concert at the Cultural Palace / Theatre / Orchestra	.752		
B26 Visiting museum			.687

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 4 iterations

CLASSIFICATION OF CONSTRUCT

Table 8 shows that items B19 to B26 were group under component 1, while items B16 and B17 were for the component 2 and finally items B14 and B15 were under the component 3. The final step in this analysis was to label each component. The labelling of factors was a subjective, theoretical and inductive process (William et al., 2010). Initially there were five domains in the construct. After the analysis, the five domains were reduced to three domains. The media domain retained two items which were B14 and B15. Thus, the label for this should remain the same.

The most interesting finding was shown in component 1, in which the initial domain was a combination of items from the community, vocational and high-brow culture domain. However, it was labelled as the high-brow culture. The reason could be volunteering among Malaysian youth, joining self-defence activities, as well as learning to repair cars/motorcycle and bicycle only attracted a small segment of the youth.

Initially, component 2 was the combination of the media and the community domain. However, based on the subjective interpretation, it could be said that this factor was more related to the traditional, conservative leisure time activities especially in comparison to the items listed in component 3 (media domain; item B14 and B15). It was a clear pattern between modern (read: IT based leisure time activities) and the item in component 2 which had nothing to do with the technology / IT based leisure time activities. Therefore, it was label as the traditional domain. Thus, the final construct in measuring Malaysian youth lifestyle was shown in the following Table 9. The table shows that the factor loading score for each item was at the minimum score of 0.6

Table 9 Measuring Malaysian youth lifestyle (leisure time activities)

Domain	Items	Factor Loading
Media	B14 Surfing social media such as Facebook, YouTube etc.	.820
	B15 Playing games on computers / mobile phones	.798
Traditional	B16 Reading novel /books / magazines / newspapers	.800
	B17 Visiting worship places such as <i>surau</i> / church / temple / Community meeting / <i>gotong-royong</i>	.699
	High-Brow	
Culture	B19 Involves as volunteers in orphanage / environmental activities	.602
	B21 Joining self-defence activities	.712
	B22 Learn how to repair cars / motorcycle / bicycle etc.	.721
	B25 Watching concert at the cultural palace / theatre / orchestra	.752
	B26 Visiting museum	.687

DISCUSSIONS AND CONCLUSION

The findings showed that the definition of the high-brow culture needs to be discussed further. There were initially three items representing the domain of high-brow culture. However, after the factor analysis, one item (B27) was deleted. The new items were added to the domain. High-brow culture as defined in the western society was mostly related to upper class society’s leisure time activities that require money to be spent, such as watching concert at the Cultural Palace. However, from the factor analysis, it is an interesting point to note that the three new items (volunteering/joining self-defence activities/learning to repair vehicles) added has nothing to do with the normal definition of high-brow culture activities.

There are three things that can be inferred from this. First, it was due to the cultural differences. Probably, the eastern society perception of high-brow culture was different from that of the western society. The second inference was the background of the respondents. As shown in Table 2, 70 per cent of the respondents were students. This is certainly having some effect to the outcome of the factor analysis. Had the percentage of respondents who were working been higher, most likely the survey would result in different outcomes. Finally, it is just the nature of the statistic where items were grouped based on the values, not on the definition.

Another point worth discussing is regarding the clear demarcation between the traditional leisure activities and the media and technology-based leisure activities. While this was expected, there was still a point worth discussing. This really represents the lifestyle of the youth today. For instance, item B16 was initially put under the media domain. However, after the factor analysis, this item was not grouped under the media domain but was moved to a different, new domain. In other words, media leisure activities for today's youth mean technology, networked based media, while reading books, newspapers and magazine was considered as traditional leisure activities.

The factor analysis conducted shed new light in the process of developing valid instrument to measure the construct of the lifestyle of youth today. However, as stated by Costello and Osborne (2005: 8) that researchers need to refrain from “drawing substantive conclusions based on exploratory analyses”. This is to allow for more sophisticated statistical analysis such as the Confirmatory Factor Analysis (CFA).

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