

TIME ALLOCATION AMONG YOUTH IN MALAYSIA

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ABSTRACT

Flow is a psychological state of experience where people are feeling concentrated, enjoyed, involved and in control in the activity that they are interested in. This study focused on the ecological perspective of how young people in Malaysia allocate their time in various activities. Furthermore, state of flow is operationally defined as the indicator of positive experience. Experience sampling method (ESM), a research technique that records on-going patterns of daily live experience had been employed. Four hundred Malaysian university students, age ranged between 20 to 25 years old (M=21.90, SD=0.93) had reported their daily activities and the state of flow during a normal week. A total of 1727 responses were obtained from a sample of 400 young people. Participants were found to spend 40.59% of their time in productive-related activities, 28.77% of the activities were maintenance-related activities, followed by 18.99% were spent in passive leisure-related activities and 11.65% of the time were spent in active leisure-related activities. Findings of this study suggest that types of activities have effects on state of flow. Participants reported high state of flow in active leisure and maintenance activities, followed by passive leisure activities and productive activities. Findings contributed to more understanding about young people in Malaysia and provided useful information on how activities can be designed for them in order to increase their state of flow and consequently their positive experience in life. Limitations of the study and recommendations for future studies were also discussed.

Keywords: Flow, Experience Sampling Method, Young People in Malaysia, Activities

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ABSTRAK

Keadaan aliran didefinisikan sebagai satu keadaan psikologi di mana seseorang mengalami tahap tumpuan perhatian, perasaan keseronokan, penglibatan dan kawalan diri yang tinggi semasa menjalankan sesuatu aktiviti. Kajian ini memberi tumpuan kepada perspektif ekologi tentang bagaimana warga orang muda di Malaysia meluangkan masa mereka dalam pelbagai aktiviti di kehidupan seharian. Keadaan aliran dioperasikan sebagai penujuk pengalaman positif. Kaedah persampelan pengalaman (ESM) digunakan untuk merekod corak pengalaman harian. Sebanyak empat ratus pelajar universiti di Malaysia yang berumur antara 20 hingga 25 tahun (M= 21.90, SD= 0.93) teleh melaporkan aktiviti harian dan keadaan aliran dalam tempoh masa seminggu. Kajian ini teleh memperolehi sebanyak 1727 laporan. Dalam sampel ini, dapatan kajian ini menunjukkan peserta

kajian meluangkan 40.59% masa mereka untuk aktiviti produktif, manakala 28.77% masa mereka digunakan untuk aktiviti kategori penyelenggaran, seterusnya sebanyak 18.99% masa mereka digunakan dalam aktiviti lapang pasif, dan akhirnya 11.65% masa mereka digunakan dalam aktiviti lapang aktif. Dapatan kajian mengambarkan hubungan antara jenis aktiviti dan keadaan aliran. Kajian ini menunjukkan bahawa peserta kajian mengalami keadaan aliran yang tinggi semasa menjalankan aktiviti lapang aktif dan aktiviti kategori penyelenggaran. Dapatan kajian ini penting untuk menjawab persoalan tentang bagaimanakan aktiviti harian boleh dirancangkan supaya dapat memupuk pengalaman positif. Akhirnya, kelemahan kajian dan cadangan untuk kajian masa depan juga dibincangkan.

Kata Kunci: Keadaan Aliran, Kaedah Persampelan Pengalaman (Esm), Warga Orang Muda di Malaysia, Aktiviti

INTRODUCTION

Flow refers to a psychological state in which people undergo optimal experience during a particular activity. Specifically, people who experience flow are happy, cognitively efficient, and motivated at the same time. The state of flow refers to a psychological state of experience where individuals undergo a high level of concentration and enjoyment and feel highly, involved and in control with the activity that they are engaged in (Schmidt, Shernoff, & Csikszentmihalyi, 2007). Likewise, state of flow is also known as the optimal experience where individuals demonstrate high level of engagement of their cognitive, affective, and motivation (Csikszentmihalyi, 1991).

Flow, Well-being and Personal Development.

There are many benefits for individuals who constantly experience state of flow in their daily life (Nistor, 2011). People who experienced high level of flow are more likely to report higher psychological wellbeing and life satisfaction compared to their peers (Bassi et.al, 2013). Positive experiences in state of flow are found to be associated with high level of concentration, happiness, enjoyment, and a sense of control and involvement (Asakawa, 2004). Individuals who experience flow in daily life are intrinsically motivated and have higher self-esteem (Hektner & Csikszentmihalyi, 1996). In other words, past studies have shown that flow is an indicator of positive experience that is beneficial for personal well being and development.

Measuring Flow with Experience Sampling Method (ESM).

Flow is a subjective, experiential psychological construct in daily life. Thus far, research efforts and approaches to measure this subjective state of consciousness had faced great challenges. To understand more about flow experience, Csikszentmihalyi and Larson (1987) had pioneered an ecological approach called Experience Sampling Method (ESM). ESM is a systematic discovery technique designed to capture the dynamic of subjective experiences within the ecological



context of daily life (Csikszentmihalyi & Larson, 1984). It involves sending several random signaling per day to remind participant to record the nature and quality of their experience at that particular time.

Based on this approach, participants are required to record their ongoing daily experience (e.g., time, location, activity, content of thought, and companionship) and rate their quality and intensity of various cognitive, emotional, and psychological states using open-ended questions, sematic differential and Likert scales respectively (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi, Larson, & Prescott, 1977). Therefore, data that were collected using ESM consist a lot of authentic and dynamic lives experiences.

The lives of young people constitute a lot of rich information that most of researches have neglected (Larson, 1989). Flow is an indicator of positive experience in daily life that can be beneficial to personal growth. It is important to understand more about daily life experiences, especially positive ones such as flow. ESM is a great tool to study daily life. Therefore, this study proposed flow as a framework in which ESM is utilized to investigate how young people in Malaysia spend their time and thus experience flow across different activities. Therefore in order to better understand flow, this article reviews the literature on flow and the different types of activities among young people.

Types of Activities and Flow

What is the relationship between types of activities and state of flow among young people? Past studies categorized activities in daily life into several themes such as productive, active leisure, passive leisure, and maintenance (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi & LeFevre, 1989). In these studies, the quality of experience had been analyzed based on the interaction between types of activities and state of flow (Bassi & Delle Fave, 2004; Delle Fave & Bassi, 2000; Delle Fave & Massimini, 2005).

The first theme of activity is called productive. It refers to a set of activities that are compulsory or mandatory (e.g., work and study). Performing productive activities can promote personal development and growth (Rathunde, 1996; Hektner, 2001). Individuals will gain additional knowledge and skills upon completion of productive activities. Nevertheless, Csikszentmihalyi and Hunter (2003) found that productive activities are associated with lower score of happiness when compared to social, active, and passive leisure activities.

Delle Fave and Massimini (2005) revealed that cognitive components of flow such as concentration and control of the situation are remarkably stable across productive activities. However, affective and motivational components of flow such as happiness, and having sense of clear goals and motives to perform the activity varied widely among these activities. Past studies suggested that although individuals are able to stay focus and learn something new, they are not necessarily

feeling happy and motivated at the same time (Delle Fave & Bassi, 2000). As a result, productive activities are important to promote growth but do not necessarily associated with fun.

The second theme of activity is called leisure. It is seen as the pursuit of freely chosen recreational activities, or time spent in activities that provide intrinsically rewarding experience (Csikszentmihalyi & LeFevre, 1989). Thus, it is further divided into two categories. Active leisure refers to activities that able to provide fun and also promote room for skills to develop (e.g. sports and hobbies) whereas passive leisure refers to activities that are able to provide pleasure without high demand of skills (e.g. watching TV) (Csikszentmihalyi & Larson, 1984).

The role of active leisure activities is important to shape and develop one's life themes and a sense of future life goals (Bassi & Delle Fave, 2004; Collins, Sarkisian & Winner, 2009). Active leisure activities are found to be able to produce greater positive experience and improve overall quality of life among young people (Csikszentmihalyi & Larson, 1984). Csikszentmihalyi and LeFevre (1989) found that long-term engagement in meaningful leisure activities that cultivate flow experience enriches individuals' development and social interaction.

Nevertheless, passive leisure is more on the pursuit of relaxation activities that require less demand of attention. Individuals tend to perform passive leisure activities when they are free and had nothing to do (Csikszentmihalyi & Larson, 1984). It is also found to be a source of apathy where individuals reported less engaging state compared to active leisure activities (Delle Fave & Bassi, 2000). Likewise, both active and passive leisure are vary in term of the degree of perceived of challenges, demand of skills, cognitive efficiency and motivation toward the activity (Delle Fave & Massimini, 2005).

Lastly, maintenance refers to activities that involved basic survival activities that keep life going such as chores, errands, and personal care and grooming. In the study of Csikszentmihalyi and Larson (1984), maintenance activities were found to score below average for concentration, showing that daily routines required less effort in attention to perform. Furthermore, they found that young people have a sense of obligation to fulfill their basic needs. Findings suggested that individuals are familiar with and obligated to perform their daily maintenance activities without requiring any extra effort.

Study Objectives

This study is intended to understand the daily life of young people in Malaysia by using the concept of flow and ESM. Two research questions have been developed to guide the scope of the study.

1. How do young people in Malaysia spend their time for various activities?



2. Is there any relationship between types of activities and state of flow among young people in Malaysia?

METHOD

Sample

Four hundred young people (334 female and 66 male) whose aged between 20 to 25 years old (M= 21.90, SD= 0.93) were recruited from two campuses of a public university located in the northern region and east coast region of Malaysia respectively. The gender distribution reflects the general distribution in Malaysian universities where there are more female students compared to male students (Kapok & Au, 2001).

Table 1. Characteristics of Participants

Characteristics	Number (N)	Percentage (%)
Gender		
Male	66	16.50
Female	334	83.50
Ethnicity		
Malay	186	46.50
Chinese	184	46.00
Indian	21	5.25
Others	9	2.25
Educational background		
Biological Sciences	24	6.00
Chemical Sciences	21	5.25
Communication	23	5.75
Computer Sciences	11	2.75
Dental Sciences	6	1.50
Health Sciences	78	19.50
Housing, Building and Planning	12	3.00
Humanities	34	8.50
Industrial Technology	8	2.00
Languages, Literacies and Translation	4	1.00
Management	83	20.75
Mathematical Sciences	15	3.75
Medical Sciences	16	4.00
Physics	1	0.25
Social Sciences	48	12.00
Art	16	4.00

State		
WP Labuan	1	0.25
Melaka	4	1.00
Perlis	5	1.25
Kuala Lumpur	10	2.50
Negeri Sembilan	10	2.50
Sabah	11	2.75
Pahang	12	3.00
Sarawak	15	3.75
Terengganu	20	5.00
Kelantan	28	7.00
Selangor	28	7.00
Johor	40	10.00
Kedah	55	13.75
Perak	68	17.00
Pulau Pinang	93	23.25

Procedure

This study employed ESM for data collection. Before the research begins, all the participants were briefed, on the purpose and the procedure of the study. The duration of data collection was one week (i.e., Monday to Sunday). To obtain a representative daily experience, interval-contingent sampling was used to generate a signaling schedule (Reis & Gable, 2000). It refers to a schedule of timing where participants complete self-reports at the same time every day or at regular intervals (Hektner, Schmidt & Csikszentmihalyi, 2007). It begun from 8:00 a.m. to 10 p.m. with the restriction of two signals that would not repeated fewer than 30 minutes apart and not more than 3 hours apart (Csikszentmihalyi & Larson 1987).

In this study, 3 sets of timetable were created where each set of timetable consisted of 5 representative hours, namely morning, early afternoon, late afternoon, evening, and night. Every participant was randomly assigned to one set of timetable (out of three) using counterbalancing method (Gaito, 1961). Hence, participants were only required to respond to 5 signals in one selected day. Our targeted responses were (400 participants x 5 times per day) = 2000 responses. To obtain a consistent and reliable ESM database, some of the reports were discarded during data cleaning because of compliance issue and spam detection. At the end, there were 1727 responses obtained from 400 participants yielded about 86.35% of response rate.

Measures

Types of Activities.

The measurement used was intended to measure the main activity the participants were doing. Participants responded to the open-ended question, "When signaled,



what was the main thing you were doing" were coded into several broad categories. The coding scheme was adopted from Csikszentmihalyi and Larson (1984) as source of reference in this research. Based on the reviews abovementioned, themes of activity in this research were categorized into productive, active and passive leisure and maintenance. All activities were coded and labeled as productive, active, passive, and maintenance, respectively.

Quality of Experience.

In line with Schmidt et al., (2007), 5 experiential items on the Experience Sampling Form (ESF) were adopted to operationalize state of flow. Four items including concentration ("how well were you concentrating?"), enjoyment ("did you enjoy what you were doing?"), interest ("was this activity interesting?"), and control ("did you feel in control of the situation?") were measured using 9-Likert-scales ranging from 1= not at all to 9= very much. However, item involvement ("involved" vs. "detached") was measured using 7-point semantic differential scales with reversed scoring of 1= involved to 7= detached. As advised in Schmidt et al., (2007), all the experiential items were computed by taking the mean of individuals' momentary rankings at the time of the ESM signal. Likewise, the minimum point of the product will be 1, whereas the maximum point of the product will be 8.6. For the purpose of data analysis, state of flow was labeled as FLOW.

RESULTS

Allocation of Time for Various Activities

How do young people in Malaysia allocate their time according to various activities? In this sample, 40.59% of the time of young people was found spent in productive-related activities such as doing assignments (15.58%), studying and learning (8.11%), listening to classes (5.04%), discussion (2.37%), revision (1.22%) and others (8.27%).

Twenty-eight point seventy seven percent (28.77%) of the activities were found to be in maintenance-related activities such as eating and drinking (10.94%), sleeping and napping (4.75%), resting (3.07%), and others (10.01%).

For leisure activities, 18.99% of the responses were found to spend in passive leisure-related activities such as watching something (6.37%), surfing Internet for social media (4.81%), and using mobile devices (1.62%) and others (6.19%).

Only 11.65% of their time was found to spend in active leisure-related activities such as socializing (3.42%), reading (2.26%), personal hobbies (1.16%), co-curricular program (1.10%) and others (3.71%).

Hierarchical Linear Modeling (HLM)

The nature of dataset in ESM has a 2-level structure where observations (Level

1) are nested within participants (Level 2) because it is a repeated measurement (Schmidt et al., 2007). Hence, the assumption of independence of uncorrelated errors is violated for the dataset (James, Witten, Hastie, & Tibshirani, 2014).

Therefore, the approach of using ordinary least square (OLS) method to deal with dataset that is multilevel in nature tend to have statistical problems such as handling within-participant effect by ignoring person variable and analyzing between-participant effects by aggregating across participant (Moneta, 2012). Likewise, we implemented HLM to overcome these limitations (Raudenbush & Bryk, 2002).

The one-way ANOVA with random effects (null model).

The first step of HLM is to perform the model of one-way ANOVA with random effects (e.g null model). It provides useful preliminary information about how much variation in the state of flow lies within and between individuals.

Fixed effect Coefficient SE T-ratio 98.45** 5.34 0.05 g_{00} Random effect Variance Component SD F-value 0.80 0.89 9691.76** \mathbf{u}_{0i} 1.22 1.10 r

Table 2: Null model

Note: p-value < 0.001 **

For the fixed effect, the grand mean of FLOW, (g_{00}) = 5.34 with standard error of 0.05. t (1367) = 98.45, p< 0.0001 showed that it was statistically significant. For the random effects, the estimates for the value of between-groups variance in FLOW, (τ_{00}) = 0.80 whereas the estimates of the value for within-groups variance in FLOW, (σ^2) = 1.22.

In this case, the degree of dependence of the observations within each individual, intraclass correlation (ICC) was equal to 0.80/(0.80+1.22) = 0.40, indicating that about 40% of the variance in Flow was coming from between-group level, 60% of the variance was attributable to within-group level variation.

The Random Coefficient Model.

Next, this research performed the random coefficient model to examine if there is any relationship between types of activities and state of flow among young people in Malaysia.

 u_{2j} u_{3j}

Coefficient	SE	T-ratio
5.07	0.07	75.65**
0.49	0.11	4.52**
0.38	0.09	4.24**
0.49	0.08	6.20**
Variance Component	SD	F-value
0.93	0.97	90.94*
0.75	0.87	
	0.49 0.38 0.49 Variance Component 0.93	5.07 0.07 0.49 0.11 0.38 0.09 0.49 0.08 Variance Component SD 0.93 0.97

0.75

0.73

0.99

Table 3: Random Coefficient Model

Note: p-value < 0.01 * p-value < 0.001 **

0.56

0.54

0.99

Compared with the reference variable PRODUCTIVE ($g_{00} = 5.07$, t (1364)=75.65), significant higher level of FLOW was reported in ACTIVE ($g_{10} = 0.49$, t (1364)=4.52, p<0.001), PASSIVE ($g_{20} = 0.38$, t (1364)=4.24, p<0.001) and MAINTENANCE ($g_{30} = 0.49$, t (1364)=6.20, p<0.001). In term of random effects, the estimated of the value for between-groups variance in FLOW, (τ_{00})= 0.93. This means that FLOW was 0.93 varied across individual. The inclusion of the term (τ_{00}) allows for individual difference in the scaling of state of flow so that individual standardization of the variables was unnecessary (Moneta, 2004). On the other hand, the estimated variance of the slopes were ACTIVE (τ_{11})= 0.75, PASSIVE (τ_{22})= 0.56 and MAINTENANCE (τ_{33})= 0.54. Lastly, the estimates of the value for within-groups variance in FLOW, (σ^2)=0.99.

To understand how much of the group variance in FLOW was explained by these activities, this study computed the (σ^2)) estimates across the two models (i.e., one way ANOVA and random coefficient regression model) and then developed an index of the proportion reduction in variance or "variance explained" at level 1 (Raudenbush & Bryk, 2002).

The result showed that the estimated observation-level variance (σ^{4} 2) now was 0.99. However, the estimated variance in the one-way ANOVA model was 1.22. Hence, we estimated the proportion of variance explained at level-1 by iterated (1.22-0.99)/1.22=0.19. Likewise, within-group variance was reduced by 19% when PRODUCTIVE, ACTIVE, PASSIVE, and MAINTENANCE were added as the predictors of FLOW.

DISCUSSION

Young People's Activities Allocation and Flow

How do young people in Malaysia allocate their time accordingly to various activities? This study found that young people spent 40.59% of their time doing productive activities such as doing assignment, study and learning, attending classes, discussion, and revision. Compared to the study conducted by Csikszentmihalyi and Larson (1984), there were only 29.00% found doing such productive works, and about 37.10% in Delle Fave and Bassi (2000) study. As global economic has grown rapidly, it is not surprise that young people in Malaysia have allocated more time in productive-related activities compared to the past studies (Hanushek et.al. 2008). This is also consistent with the life style of young people in academic setting where studying may represent an integral aspect of their life thus demanding more of their time and energy. The finding may also reflect cultural differences where academic performance may be much more salient for Asian families thus explaining why more time was spent on productive activities for this sample compared to the study by Csikszentmihalyi and Larson in 1984 and Delle Fave and Bassi in 2000.

This study reported 30.64% of time was spent doing with leisure activities. More specifically, 18.99% was spent in passive related activities such as watching movies, surfing Internet for social media, and usage of mobile devices. The trend of using Internet and mobile devices has been seen as a sign of technology revolution because the percentage of these activities was rather small compared to past studies (Bassi & Delle Fave, 2004). This study found that, only 11.65% was spent in active leisure such as socializing and personal hobbies. This small percentage of involvement in active leisure might due to large involvement in productive activities. At this point, it is not clear whether people are doing this voluntarily, or they were only responding to life demands where there is a pressing need to spend on productive activity rather than any other category.

Lastly, this study reported 28.77% of the times were spent in doing maintenance activities such as eating and drinking, sleep and napping, resting, and others. As these activities are the basic survival requirements to keep life going, results found were similar with past studies (Csikszentmihalyi & Larson, 1984; Bassi & Delle Fave, 2004).

Daily Activities and Flow

Is there any relationship between types of activities and state of flow among young people in Malaysia? In this sample, this study found that young people experienced high score of state of flow during active leisure activities and maintenance activities, followed by passive leisure and productive activities.

In line with Bassi and Delle Fave (2004), active leisure was found as a most conductive factor to state of flow. Findings suggested that on average, the estimated score of active leisure in flow was about 5.56 units out of 8.60 units.



Active leisure is seen as recreational activities that free from obligation. At the same time, it is able to provide fun and promote room for skill to be developed (Delle Fave & Massimini, 2005). Past researches found that individuals who are in state of flow have high sense of control in doing the things that they are interested in. For instance, Csikszentmihalyi (1975) discovered that flow experience is often related to personal hobbies and sports such as playing music, chess, and basketball, rock climbing, dancing. As active leisure is a context that conductive to self-interests that motivates individual, it is therefore seen as a context that is most conductive to state of flow.

Maintenance activities are found to be a second conductive factor to state of flow in this sample. Findings suggested that on average, the estimated score of maintenance in flow was about 5.56 units out of 8.60 units. The nature of maintenance involves basic survival activities that keep life going such as chores, errands, grooming and personal care. It is a basic thing for individuals to continue their life in comfortable condition. Past studies found that young people have reported having a sense of obligation and motivation to fulfill basic needs (Csikszentmihalyi & Larson, 1984). On the other hand, Asakawa (2004) found that doing maintenance activities led to positive experience such as enjoyment, happiness, and satisfaction. The nature of context is found to be similar with active leisure activities where both are self-motivated and produce a sense of satisfaction. This study suggested that young people felt equally positive when doing things like personal care and sport and hobbies.

Passive leisure activities are found to be the third conducive factor to state of flow. Findings suggested that on average, the estimated score of passive leisure in flow was about 5.45 units out of 8.60 units. Moreover, this study found an empirical support that the nature of active and passive leisure activities is experientially distinct. Delle Fave and Massimini (2005) found that active leisure activities are associated with significantly high in focus and control whereas passive leisure activities are found to less goal-directedness. Moreover, individuals who engaged in active leisure activities are rapidly developing new skills and at the same time having fun whereas engagement in passive leisure activities are often found for the sake of relaxation without high demand of skills. As conditions of flow require high balance of challenges and skills, clear goals and feedbacks, this explained why active and passive leisure activities have different experiential effects in daily life (Nakamura & Csikszentmihalyi, 2002).

Productive activities are found to be the least condusive factor to state of flow. Findings suggested that on average, the estimated score of productive in flow was about 5.07 units out of 8.60 units. Shernoff and Vandell (2007) explained productive activities (i.e. doing home work) were found to be more for the sake of extrinsic motivation (e.g. for teacher, parent) rather than intrinsic motivation. This is consistent with the study of Delle Fave and Bassi (2000) where they found that productive activities such as studying at home and classwork were related to

negative mood and lack of intrinsic motivation. The lack of intrinsic motivation can lead to low level of interest and it affects the enjoyment of activity and vice versa. As flow is a state of mind that is highly associated with intrinsic motivation (Moneta & Csikszentmihalyi, 1996), this explained why the level of state of flow for productive was found less conducive to state of flow.

Our model of one-way ANOVA with random effects showed that there was approximately 60% of the variance that can be attributed within the observations. However, the random coefficient model that proposed by this study only managed to explain 19% of the variance. Thus it can be suggested that contextual factor such as types of activities might only contribute to partial explanation of state of flow. Future studies may further explore how perceptual and individual factors affect state of flow among young people in Malaysia (Nakamura & Csikszentmihalyi, 2002).

Limitations of Study

There are several limitations in this study. Firstly, despite the assurance of reliability and validity of ESM conducted by Csikszentmihalyi and Larson (1987), it relied heavily on self-report data. Hence it is vulnerable to problems such as exaggeration and intentional falsification. Future studies may employ more sophisticated methodology that can allow for some information to be verified.

Secondly, the sample was not large enough to represent the whole population of young people in Malaysia. This is because the sample that was only recruited from two campuses within one university. Therefore, any decisive conclusions should not be overgeneralized to represent the whole population at this point. Future studies may include more young people across different settings and from different universities to further confirm current findings.

Thirdly, this study conducted only regression analyses with data gathered at one time, hence it is not possible to infer causality in this study. Therefore the data and findings should be cautiously interpreted. Future studies may include experimental design that can better capture the cause-and-effect relationships between variables.

CONCLUSION

How we spend our time in daily activity is crucial for us to build life goals and values. The objective of this study is to understand the daily life of young people using the concept of flow and ESM. Findings showed that young people spent most of their time in productive works, followed by maintenance, passive leisure and active leisure activities. However, high level of flow was reported during active leisure and maintenance activities, followed by passive leisure activities and productive activities. This study highlights the need to further understand about life optimal experiences such as flow, especially within the context of young people. If productive activities can be designed to incorporate some of the elements from active leisure, it is possible to have an "optimal" activity that will not only increase



flow for young people but also increase their productivity level. Flow can also be part of the indicator to be included in Malaysian Youth Index.

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