

**THE CONTRIBUTION OF THE INTERNAL AND
EXTERNAL DIMENSIONS OF LIFE
EXPERIENCE TO THE STATE OF FLOW
AMONG YOUTH:
THE CASE STUDY OF A MALAYSIAN
UNIVERSITY**

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by

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LIST OF ABBREVIATIONS

ACTIVE	Active leisure related activities
ANOVA	Analysis of variance
AVGCF	Averaged score of sum of clear and immediate feedback
AVGCG	Averaged score of sum of clear and important goals
CXS	Interaction of perceived challenges and skills
ESF	Experience Sampling Form
ESM	Experience Sampling Method
FLOW	State of flow
HLM	Hierarchical Linear Modeling
IRR	Inter-rater reliability
MAINTENANCE	Maintenance related activities
NLME	Linear and nonlinear mixed effects models
PASSIVE	Passive leisure related activities
PRODUCTIVE	Productive related activities
RQ1	Research Question 1
RQ2	Research Question 2

**SUMBANGAN DIMENSI DALAMAN DAN LUARAN PENGALAMAN
HIDUP KEPADA KEADAAN ALIRAN DALAM KALANGAN BELIA:
SATU KAJIAN KES DI SEBUAH UNIVERSITI DI MALAYSIA**

ABSTRAK

Keadaan aliran didefinisikan sebagai satu keadaan psikologikal di mana seseorang mengalami tahap tumpuan, perasaan seronok, penglibatan dan kawalan diri yang tinggi semasa menjalankan sesuatu aktiviti. Kajian ini meneliti bagaimana kondisi aliran dan jenis aktiviti meramalkan keadaan aliran dalam kalangan orang muda di sebuah universiti di Malaysia. Kondisi aliran dikonsepsikan sebagai mewakili dimensi dalaman pengalaman hidup manakala jenis aktiviti dikonsepsikan sebagai mewakili dimensi luaran pengalaman hidup. Kaedah kajian yang digunakan adalah keratan rentas. Satu kaedah penyelidikan yang dipanggil Kaedah Persampelan Pengalaman (ESM) telah digunakan untuk mendapatkan maklumat tentang keadaan dan kondisi aliran dan aktiviti dalam kehidupan seharian orang muda. Tiga puluh lima peserta kajian yang berusia di antara 21 hingga 25 tahun ($M= 21.89$, $SD= 1.02$) telah melaporkan pengalaman seharian mereka dengan menggunakan kaedah ESM. Dapatan kajian menunjukkan bahawa menerima maklum balas yang jelas dan segera adalah peramal yang terpenting untuk menghasilkan aliran. Ini diikuti dengan matlamat yang jelas dan penting, dan interaksi di antara cabaran dan kemahiran. Manakala, aktiviti lapang aktif dilihat sebagai jenis aktiviti yang paling kondusif untuk menghasilkan keadaan aliran, diikuti oleh aktiviti kategori penyelenggaraan, aktiviti produktif dan aktiviti lapang pasif. Dapatan kajian menunjukkan bahawa

orang muda boleh meningkatkan keadaan aliran dengan menerima maklum balas yang jelas, menetapkan matlamat yang penting, di samping mencapai tahap interaksi yang tinggi di antara cabaran dan kemahiran. Selain itu, orang muda juga digalakkan untuk melibatkan diri dalam aktiviti lapang aktif supaya boleh memupuk keadaan aliran dalam kehidupan seharian. Kajian ini menunjukkan keperluan untuk memahami bagaimana aktiviti seharian dalam kehidupan orang muda boleh menyumbang kepada pengalaman hidup optimal.

**THE CONTRIBUTION OF THE INTERNAL AND EXTERNAL
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ABSTRACT

State of flow is defined as a psychological state where individuals experience high level of concentration, enjoyment, involvement and control with the activity that they are engaged in. This study investigated how conditions of flow and types of activities predict state of flow in the daily life of young people in a Malaysian university. Conditions of flow and types of activities are conceptualized to represent internal and external dimensions of life experience, respectively. The design of study was cross-sectional. A research technique called Experience Sampling Method (ESM) was used to collect information on state of flow, conditions of flow, and types of activities among the daily life of young people. Thirty-five research participants aged between 21 to 25 years old ($M= 21.89$, $SD= 1.02$) had been recruited to report their daily life experiences using ESM. In term of conditions of flow, findings of this study revealed that receiving clear and immediate feedbacks is the most important predictor of state of flow, followed by having clear and important goals, and interactions of perceived challenges and skills. In term of types of activities, active leisure is considered as the most conducive activity to facilitate state of flow, followed by maintenance, productive and passive. Findings of this study suggested that young people could enhance their state of flow by receiving clear feedback and setting important goal as well as achieving high level of interaction of challenges and

skills. Furthermore, young people are encouraged to engage more in active leisure activities so that they could cultivate flow-like experience. This study highlights the need to understand how young people's daily activities can contribute to their optimal life experience.

Chapter 1

Introduction

1.1. Introduction

Chapter one aims to introduce the overview of the research topic. It covers overview of the study, clarification of problem statement, definition of research objectives and research questions, and significance of study. Conceptual definition and operational definition are also included to ensure reader can understand the key concepts of this study.

1.2. Overview of The Study

The idea of flow as a psychological construct was first introduced by Mihaly Csikszentmihalyi in the late seventies during his studies on the creative process (Csikszentmihalyi, 1975). It refers to psychological state in which people are undergoing optimal experience during a particular activity. Individuals who experienced flow always mentioned that they have a feeling of total absorbed in the activity at hand. More specifically, they often described it as a natural feeling when their action and awareness were merged together until they lose track of both time and self (Csikszentmihalyi, 2000). Likewise, people who experienced flow are often feel happy, cognitively efficient, and motivated at the same time (Csikszentmihalyi, 1996).

During flow, quality of experience and personal growth are being optimized (Csikszentmihalyi, 1991). Past studies in this field have documented extensive information regarding the benefits of flow in daily life (Scollon, Kim-Prieto, & Diener, 2003; Peifer, Schächinger, Engeser and Antoni, 2015). For instance, researches revealed that flow is positively associated with self-esteem (Hektner &

Csikszentmihalyi, 1996), intrinsic motivation (Conti, 2001), psychological well-being (Nistor, 2011) and satisfaction in life (Bassi, Steca, Monzani, Greco & Delle Fave, 2013). Likewise, this study attempts to leverage the benefits of flow to promote positive experience in daily life.

To do this, this study focuses on understanding the antecedents of flow in daily life. There are two distinct dimensions of life experience that are related to state of flow. Firstly, internal dimension refers to perceptual factors that produce state of flow (Csikszentmihalyi & Larson, 1984). This study conceptualizes conditions of flow as an internal dimension of life experience. It is defined as a psychological state of experience where individuals attain high level of balance between challenges and skills, clear proximal goals, and immediate feedbacks during the activity that they performed (Nakamura & Csikszentmihalyi, 2002).

Secondly, external dimension refers to contextual factors that conducive to state of flow (Csikszentmihalyi & Larson, 1984). This study conceptualizes types of activities as an external dimension of life experience. Based on the studies of Csikszentmihalyi and Larson (1984), Delle Fave and Bassi (2000), Bassi and Delle Fave (2004), and Delle Fave and Massimini (2005), types of activities are categorized into several domains, such as active leisure, passive leisure, productive and maintenance.

Since the study of flow in daily life is a subjective experiential phenomenon (Nakamura & Csikszentmihalyi, 2002), this study applies Experience Sampling Method (ESM) as the core research technique to understand how different dimensions of everyday life experience are pertinent to state of flow (Csikszentmihalyi, Larson, & Prescott, 1977). ESM is an ecological approach that designed to capture the dynamic of subjective experiences within the context of daily

lives (Csikszentmihalyi & Larson, 1987). Hence, it enables researchers to obtain the authentic sample of subjective experience and behavior for each participant in natural environment (Barrett & Barrett, 2001).

In summary, this study leverages the concept of flow to promote positive experience in daily life. It applies ESM to examine how internal and external dimensions of life experience are related to state of flow in daily life. More specifically, this study is attempts to look at how conditions of flow and types of activities may predict state of flow. Findings of this study will provide comprehensive information on how to foster positive experience in daily life.

1.3. Statement of Problem

Firstly, researches in psychology are overly focused on negative experience (Seligman & Csikszentmihalyi, 2000). In Malaysia, latest trend of studies in young people's experience, specifically among university students are found related to psychological distress (Elias, Wong, Abdullah, 2011; Lin & Yusoff, 2013; Othman, Farooqui, Yusoff, & Adawiyah, 2013), anxiety (Shamsuddin et al., 2013), depression (Ibrahim, Kelly, Adams, & Glazebrook, 2013) and suicidal (Abdollahi, Talib, Yaacob, & Ismail, 2014). However, limited attention has focus on positive experience (Imam, Nurullah, Makol-Abdul, Rahman, & Hazizan, 2009; Regehr, Glancy, & Pitts, 2013). In a literal sense, Seligman and Csikszentmihalyi (2000) had shed the light on how the absence of negative experience does not meant to be the presence of positive experience. In fact, quality of life is determined by both the absence of negative experience and the presence of positive experience. To promote better quality of life, research on young people's experience has to also focus on

positive experience that makes life worth living (Fredrickson, 2004; Nakamura & Csikszentmihalyi, 2002).

Secondly, flow is one of the interesting topics that focus on positive experience in daily life (Larson, 1989). However, there are two important things that reflected the cultural gap between other studies and Malaysia. For instance, (1) how often of that particular life events occur and (2) how life events are being experienced in certain group of population may vary due to cultural diversities (Tov & Scollon, 2012). As the concept of flow reckons that the product of positive experience (i.e., state of flow) is an interactive outcome of how individuals think, feel, and behave in their daily activities (Csikszentmihalyi, 1991), there is a need to investigate how state of flow are being experienced among young people in Malaysia.

Thirdly, there are two key theoretical gaps that are critical to thoroughly understand flow as positive experience in Malaysia context. In term of internal dimension of life experience, most studies to date have focused on the examination of basic theoretical assumption of flow where state of flow is a function of high balance of individuals' perceptions toward the challenges and their skills in activities (Asakawa, 2004; Bassi & Delle Fave, 2004; Csikszentmihalyi, 1996; Hektner & Csikszentimihalyi, 1996). In other words, quality of positive experience is said to be optimized when individuals think that their skills are high in balance with the challenges that they faced in activities (Csikszentimihalyi, 1975). Nevertheless, other conditions of flow such as having clear and important goals and receiving clear and immediate feedbacks about the progress are often plausibly neglected in empirical research (Nakamura & Csikszentimihalyi, 2002). To accurately investigate the antecedents that are prerequisite to elicit state of flow, there is a need to

conceptualize conditions of flow as the interaction of perceived challenges and skills, clear and important goals, and clear and immediate feedbacks received in daily activities. The relationship between conditions of flow and state of flow should be examined simultaneously.

Fourthly, in term of external dimension of life experience, past studies in this field have focused on four different themes for types of activities such as, active leisure, passive leisure, productive and maintenance (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi et al., 1977; Delle Fave & Bassi, 2000). However, the role of activities and state of flow is not clearly identified (Gaggioli, Bassi, & Della Fave, 2003). One of the reasons is because, the quality of experience whether is positive or negative is very much depending on the context of lives. Furthermore, the nature of activity such as work or leisure (Csikszentmihalyi & LeFevre, 1989) and individual characteristics such as age, gender, and socioeconomic status are more likely to influence the quality of experience (Sharp, Coatsworth, Darling, Cumsille & Ranieri, 2007). As the contextual factors found in other studies might not applicable to Malaysia context, there is a need to investigate how different types of activities are conducive to state of flow among young people in Malaysia.

1.4. Research Objectives

The general aim of this research is to address the research gap on young people's experience. Furthermore, this study attempts to address the issue of cultural gap on research in flow. It strives to investigate how different dimensions of life experience influence flow experience. Based on two general research objectives, two specified research objectives are developed to guide this study:

1. To investigate the relationship between conditions of flow (i.e., interaction of perceived challenges and skills, clear and important goals and clear and immediate feedbacks) and state of flow among a young people in a Malaysian university.
2. To investigate the relationship between types of activities (i.e., active leisure, passive leisure, productive, and maintenance) and state of flow among young people in a Malaysian university.

1.5. Research Questions

Based on the research objectives above, the following research questions were developed to guide this study.

1. Is there any relationship between conditions of flow (i.e., interactions of perceived challenges and skills, clear and important goals, and clear and immediate feedbacks) and state of flow among young people in a Malaysian university?
2. Is there any relationship between types of activities (i.e., active leisure, passive leisure, productive, and maintenance activities) and state of flow among young people in a Malaysian university?

1.6. Research Hypotheses

1. There is a significant positive relationship between conditions of flow (i.e., interaction of perceived challenges and skills, clear and important goals, and clear and immediate feedbacks) and state of flow among young people in a Malaysian university.

2. There is a significant positive relationship between types of activities (i.e., active leisure, passive leisure, productive and maintenance) and state of flow among young people in a Malaysian university.

1.7. Significance of Study

This study is important in a number of ways. Firstly, findings of this study will reduce the current research gap of experience on young people in Malaysian university by looking at the positive side of experience. Instead of focusing on negative experience, this study reckons that it is important to study how to promote positive experience in daily life. On the grounds of this determination, flow is selected as the primary indicator of positive experience in young people's life. Findings of this study will contribute vital information of how can we build and foster positive experience (i.e., state of flow) among young people in Malaysian university.

In addition, this study will address the cultural gap in the studies of flow by using ESM to reinvestigate the antecedent of flow in Malaysia context. ESM is the origin research technique that has been used to study flow in daily life. It is based on an ecological approach that allows researcher to capture a systematic and authentic daily life experiences in natural setting. Data that collected from ESM consists of huge information in pertain of how people think, feel and behave in their daily life. Therefore, the richness of the data will permit the researcher to explore and compare the findings of how different dimensions of life experience and state of flow in Malaysia context.

Next, this study will contribute several practical implications by looking at how internal and external dimensions of life experience predict flow. In term of internal dimension of life experience, this study focuses on how conditions of flow may predict state of flow in this context. It looks at how individual perception toward their skills and challenges, clarity of important goals, and clarity of immediate feedbacks during the activity will influence their positive experience. Findings of this study will provide an idea of how to accommodate our perceptions during the activity to improve the positive experience in daily life.

Lastly, in term of external dimensions of life experience, this study focuses on how types of activity may predict state of flow in this context. This study reckons that the context of lives within individual will affect their quality of subjective experience. Therefore, this study aims to explore what are the contextual factors (i.e., types of activities) that are conducive to positive experience. Findings of this study will contribute empirical evidence of how active leisure, passive leisure, productive, and maintenance activities are conducive to state of flow in local context.

1.8. Conceptual Definitions

State of flow is defined as a psychological state where individuals experience high level of concentration, enjoyment, involvement and control with the activity that they are engaged in (Schmidt et al., 2007). It consists of five positive experiential elements such as concentration, enjoyment, involvement, interest, and control.

Internal dimension of life experience refers to perceptual factors that produce state of flow (Csikszentmihalyi & Larson, 1984). This study conceptualizes conditions of flow as an internal dimension of life experience. It is defined as a

psychological state of experience where individuals attain high level of balance between challenges and skills, clear proximal goals, and immediate feedbacks during the activity that they performed (Nakamura & Csikszentmihalyi, 2002).

External dimension of life experience refers to contextual factors that conducive to state of flow (Csikszentmihalyi & Larson, 1984). This study conceptualizes types of activities as an external dimension of life experience. Based on the literature of Csikszentmihalyi and Larson (1984), Delle Fave and Bassi (2000), Bassi and Delle Fave (2004), and Delle Fave and Massimini (2005), this study categorize types of activities into several domains, such as active leisure, passive leisure, productive and maintenance.

1.9. Operational Definitions

State of flow refers to the mean of individuals' momentary rankings of five experiential items in ESM such as concentration, enjoyment, involvement, interest, and control. Individuals who score high in this indicate that they are having high level of positive experience¹.

Conditions of flow are operationalized by three important criteria using ranking item in ESM¹.

1. Interaction of perceived challenges and skills refers to the geometric mean of perceived challenges and skills items on the ESM. Individuals who score high in this indicate that they are having high level of interaction between perceived challenges and skills.
2. Clear and important goals refer to the sum of average score of item clear and item important goals on ESM. Individuals who score high in this indicate that they are having high level of clear and important goals.

3. Clear and immediate feedbacks refer to the sum of average score of item clear and item feedback on ESM. Individuals who score high in this indicate that they are receiving high level of clear and immediate feedbacks.

Types of activities are operationalized by four important themes of activity using open-ended question in ESM¹.

1. Active leisure refers to activities that able to provide fun and also promote room for skills to develop, such as sports and hobbies.
2. Passive leisure refers to activities that are able to provide pleasure without high demand of skills, such as watching TV and surfing Internet.
3. Productive refers to activities that are related to productivity, such as work and study.
4. Maintenance refers to activities that involved basic survival activities that keep life going, such as chores, errands, personal care and grooming.

1.10. Conclusion

Chapter one attempts to ensure the readers are able to capture an overall picture of the study. It outlines a clear direction to conduct the research by providing a comprehensive overview on the research topic. Next, the following chapter will go into deeper discussion of relevant literature reviews, theoretical models regarding concept of flow and ESM. Subsequently, a conceptual framework of study that is based on the previous research will be developed in Chapter 2.

¹ The details of operational definition are also discussed at chapter 3, section 3.6. Moreover, reader may refer directly Appendix A for a quick review of the questionnaire.

Chapter 2

Literature Review

2.1. Introduction

This chapter introduces what is positive psychology and flow. Relevant topics such as theory of flow, benefits of flow, antecedent of flow, experience sampling method are also reviewed. In the context of this study, state of flow is conceptualized as dependent variable of this study whereas conditions of flow and types of activities are conceptualized as independent variables of this study. Finally, a conceptual framework for this study is also provided to guide the scope of study.

2.2. Positive Psychology

Positive psychology is a scientific study of human strengths and virtues (Seligman & Csikszentmihalyi, 2000). It investigates what are the conditions and processes that can foster the strengths and positive functioning of ordinary human being. The study of positive elements of human functioning in psychology is not entirely new (see, Bandura, 1983; Maslow, 1954; Rogers, 1957). However, many of the scientific inquiry in psychology has focused more on the treatment of mental illness rather than the understanding of building positive qualities that flourish the life of individuals (Synder, Lopez, & Pedrotti, 2011). Today, there is a growing interest leading by positive psychology to study the contributing factors for people to thrive and flourish (Compton, 2005).

Having said so, the rise of positive psychology is not to substitute any others disciplines of psychology, but to complement psychology today. It is important to clarify that positive psychology does not assume that the rest of psychology is negative. The utmost goal of positive psychology is to direct scientific attention to

positive aspects of human experience that are not yet well understood (e.g., how to become happier in life?). Hence, the rise of positive psychology is to rebalance the scientific study of human mind and behavior by not just asking what is wrong about human beings but also to ask about what is right about human beings.

This study is designed based on the philosophy of positive psychology where the concern is more on the positive aspects of human beings such as strength and virtues. It attempts to leverage the idea of positive psychology to promote well-beings among young people in Malaysia. The next section will review the dimensions of positive psychology.

2.3. Dimensions of Positive psychology

The scope of interests in positive psychology can be large. Therefore, Seligman and Csikszentmihalyi (2000) have classified the central concepts in positive psychology into several dimensions such as subjective level, individual level, and group level. At the subjective level, positive psychology focuses on positive subjective experience. One notable research center in this area is Diener Lab, an academic research center that found by Ed Diener at University of Illinois. At Diener Lab, Diener and her research fellows are interested to study about nature of subjective well-being or what we best known as happiness. To date, their researches have discovered that the “true happiness” has multiple facets. More specifically, it consists of the affective component such as the presence of positive feelings and the absence of negative feelings as well as cognitive component such as satisfaction with life (Diener, Scollon, & Lucas, 2003).

At the individual level, positive psychology focuses on positive individual traits. It refers to the study of positive behaviors and traits that are known as “character strengths” or virtues. One leading research center in this area is Character Lab, a nonprofit organization that founded by Angela Duckworth at University of Pennsylvania. At Character Lab, Duckworth and her research fellows are interested to study about how grit, a trait of perseverance and passion influence individuals’ long-term goals. For instance, they found that grit is an important trait to drive individual for pursue of excellence (Duckworth, Peterson, Matthews, & Kelly, 2007).

At the group level, positive psychology focuses on the development, creation and maintenance of positive institutions. In this area, researchers are interested to study about prosocial virtues such as compassion, altruism, and empathy. One notable academic research center in this field is The Center for Compassion and Altruism Research and Education (CCARE). It is found by James Doty at Stanford University to study how the root of benevolent behavior can lead to better community and society. At CCARE, Martin and colleagues (2014) studied about multiple facets of compassion. Their findings showed that compassion is able to facilitate workplace performance by lowering level of litigation and stress.

From the above discussion, positive psychology is concern with comprehensive aspects of human beings where the focus is not on just one level but at multiple levels. While it is ideal to look at more than one level, but constraints may require research to just focusing on one aspect at time. This study focuses on the subjective experience of individuals. The next section will further review positive experience in positive psychology.

2.4. Positive Experience in Positive Psychology

Experience is a gem that we learnt through accumulation of many life events. Positive experience is not a psychological construct but rather a description of positive component of life event. This may be a complex phenomenon with a broad array of components that range from purely subjective feelings to observable behaviors (Lucas, Diener, & Larsen, 2009). To facilitate discussion, this study describes positive experience from the components of affective, cognitive and motivational.

In term of affective component, positive experience may include feeling of pleasantness such as joy, happiness, enjoyment and elation (Lucas et al., 2009). Individuals who feel delighted may describe themselves as having a positive experience. In term of cognitive component, positive experience may refer to cognitive efficiency such as the ability to concentrate and stay focus in the activity that they are doing (Nakamura & Csikszentmihalyi, 2002). Individuals who are able to concentrate effectively when solving a problem may describe themselves as having a positive experience. In term of motivational component, positive experience may reflect behavioral activation that drives people without any external reward (Lucas et al., 2009). For instance, individuals who are able to do something that they wish to do intrinsically may describe themselves as having a positive experience.

From the above discussion, positive experience can have different components including affective, cognitive and motivational. This study proposed that an ideal positive experience should have the three components. Flow in positive psychology is one of the more comprehensive constructs that encompass various components of positive experience. Therefore, following sections will discuss more about flow in positive psychology.

2.5. Flow in Positive Psychology

Mihaly Csikszentmihalyi is the first scholar who pioneered the idea of flow as a psychological construct during his studies on the creative process in the late seventies (Csikszentmihalyi, 1975). The term of flow is taken from a metaphor of a smooth river. Csikszentmihalyi (1975) describe state of flow as the experience of flowing in the water. It is dynamic and still, strong and receptive, preserving and yielding. In this state, people usually describe themselves as flowing in a good time of doing something that they really like to do until they loss a sense self and time (Csikszentmihalyi, 1996). Likewise, Schmidt, Shernoff, and Csikszentmihalyi (2007), describe flow is a psychological state of experience where people are engaged in an activity in which they feel concentrated, enjoyed, involved, in control and interested in. In fact, people typically experience maximum enjoyment, creativity and involvement with the task at hand when they enter their state of flow (Synder et al., 2011).

For more than forty years of research and development, study of flow have been focusing on a series of questions that range from “what makes people repeatedly involve themselves in activities without any external reward” (Csikszentmihalyi, 1975) to “what are the benefits of flow” and “what are the antecedents of flow” (Nakamura & Csikszentmihalyi, 2002). To date, research and development of flow become one of the major focuses in positive psychology to promote good time and good life (see, Seligman & Csikszentmihalyi, 2000). Therefore, this study further reviews the importance of promoting flow in daily life.

2.6. Benefits of Flow in Daily Life

Why is flow important? According to Asakawa (2004), individuals who constantly experience flow in daily life are also reported having a sense of happiness, enjoyment, and fulfillment. Hektner and Csikszentmihalyi (1996) who conducted a longitudinal study on 281 young people in different locations across United States found that individuals who are boosted in flow have higher intrinsic motivation and self esteem. Furthermore, they tend to spend more time in engaging activities that related to their future career goals. Focusing on Asian sample, Asakawa (2010) who conducted a research among 315 young people in Japan revealed that individuals who encountered flow in daily life are more likely to illustrate low level of anxiety, better sense of fulfillment and greater well-being in life (Asakawa, 2010).

Flow is a positive experience that highly correlated with well-being (Csikszentmihalyi & Hunter, 2003a). However, McMahan and Estes (2011) had stressed that the precise nature of positive experience in relation to well-being is not straightforward. Raibley (2012) argued that having only the experiential element of positive affections such as happiness is not equal to well-being. Ryan and Deci (2011) defined well-being as optimal functioning based on two distinct philosophies, namely hedonism and eudaimonism. Huta and Ryan (2010) explained that the hedonic perspective of well-being can be achieved through the pursuit of pleasure, enjoyment, and comfort. In contrast, eudaimonic perspective viewed well-being is more than just happiness alone. Specifically, well-being should also consists of effort to fulfill and realize optimal human potential (Waterman, 1993).

Flow is conceptualized as an experience of enjoyment among individuals who pursuit their authentic happiness in their talented fields (Seligman, & Csikszentmihalyi, 2000). It is a sense of personal expression that emphasize on

eudaimonia well-being. For instance, a study conducted on a total of 637 young people in three different universities reported that flow experience corresponded with self-realization value, level of effort, level of importance and also intrinsic motivation on each activity (Waterman, Schwartz, and Conti, 2008). Thus, experiencing flow in daily life is one of the methods to promote eudaimonia well-being.

Findings above showed that there are many benefits for individuals who constantly experience state of flow in daily life. State of flow is a form of positive experience that is highly associated with psychological well-being and satisfaction in life (Bassi et al., 2013; Nistor, 2011). Likewise, this study attempts to apply the concept of flow as an indicator of positive experience to study the university experience of young people in Malaysia. To understand further, this study reviews the development of the theory of flow in positive psychology.

2.7. Theories of Flow

For the past four decades, researchers have strived to understand how flow is adhering to daily life of human beings (Ainley, Enger, & Kennedy, 2007; Voekl & Ellis, 1998). Researchers in this field are eager to deepen the knowledge of how to flourish good quality of life experience that can lead to optimal development (Csikszentmihalyi & Schneider, 2001). Likewise, various qualitative and quantitative approaches had been done to examine flow in daily life (Moneta, 2012).

The outcomes of extensive studies have demonstrated a general picture of what is flow in daily life (Nakamura & Csikszentmihalyi, 2002). The state of flow is defined as a psychological state of mind where individuals are highly concentrated and involved, experienced a sense of enjoyment and feeling in control during the

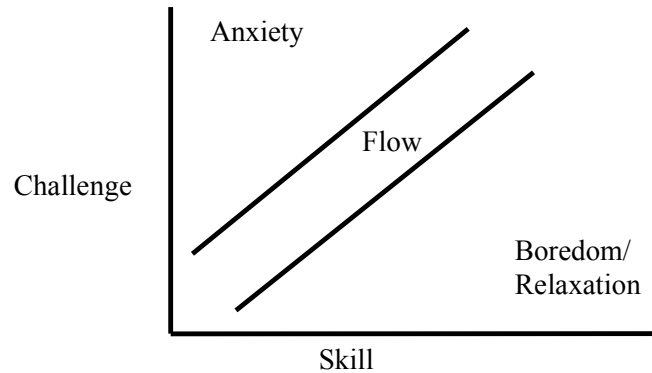
activity that they are intrinsically motivated by their own interest (Schmidt, et al., 2007). During the state of flow, individuals exhibit an intense psychological functioning when they interpret the challenges of the activity as high in balance with their view of their own capabilities.

The interaction or the balance of perceived challenges and skills has become a center of indication to define state of flow (Csikszentmihalyi, 1996). Theoretically speaking, state of flow occurs when perceived challenges of the task is neither overmatching nor underutilizing an individual's existing skills (Schiefele & Raabe, 2011). The fundamental conditions of flow are operationalized using the balance of perceived challenges and perceived skills across many studies. This including the samples from United States (Hektner & Csikszentmihalyi, 1996), Italy (Bassi & Delle Fave, 2004), Japan (Asakawa, 2004), Hong Kong (Moneta, 2004) and more recently in Taiwan (Tseng, 2010). To date, there are three models of flow have been developed.

The first model of flow is called Flow Channel Model (Figure 1.0). It is developed using qualitative approach such as interview and case study among individuals who were talented in their field of expertise (Csikszentmihalyi, 1975). The basic concept of this model consists of a graph with challenge level plotted on the y-axis (i.e., ordinate) whereas skill level plotted on the x-axis (i.e., abscissa). The diagonal line beginning from the bottom of the graph where both challenge and skill are low and extending to the upper right corner of the graph where both challenge and skill are high.

Figure 2.1.

Flow Channel Model.



According to Csikszentmihalyi (2000), the state of flow is posited to occur when there is an equivalent ratio of perceived challenge of the activity and perceived skill in carrying out the activity. However, when perceived challenge is higher than perceived skill, an individual is more likely to experience anxiety. Furthermore, if the perceived challenge is lower and the skill is greater, he or she will thus experience boredom or relaxation.

In the book of “beyond boredom and anxiety”, Csikszentmihalyi (2000) had illustrated two kinds of flow, which are macroflow and microflow. Higher level of the balance point where both perceived challenge skill are high in right corner is reflected as macroflow. It includes activities that involved deep plays and greater attention such as chess gaming, rock climbing, rock dancing, and also professional works like surgery (Csikszentmihalyi, 1975). Moreover, microflow occurs in trivial activity that required only lower level of balance point where perceived challenge and skill are matched in lower level (Csikszentmihalyi, 2000). It includes activities such as listening to music, watching television, or reading a book or even some

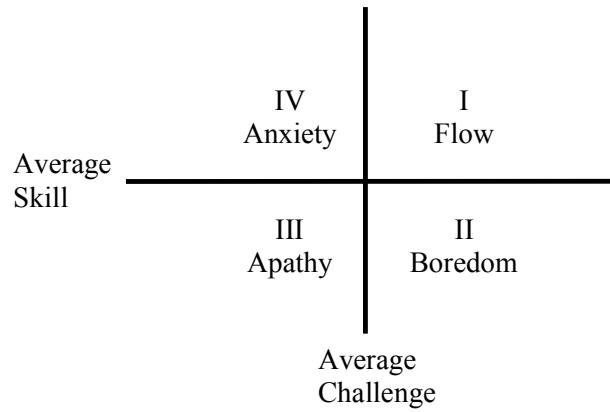
idiosyncratic movements, daydreaming, chit chatting with people (Csikszentmihalyi, 1975). In spite of this, microflow is still appears to produce positive affections that are essential for normal functioning (Compton, 2005). In summary, both of kinds of flow have some common elements in term of positive experience. However, they are also varying in term of the structure of intensity (Csikszentmihalyi, 2000).

Despite noble insight of this concept, the examination of this theoretical prediction using quantitative approach showed that individuals who rated high level of challenge and skill in their activities did not seem to be more alert, more concentrated, stronger, more in control, nor less self-conscious (Csikszentmihalyi & Csikszentmihalyi, 1992). Therefore, it required additional modification of this conceptual to refine this model of flow.

The second model of flow consists of four quadrants experiential states namely flow, boredom, apathy, and anxiety (Massimini & Carli, 1988). More specifically, Csikszentmihalyi and Csikszentmihalyi (1992) have cited that the second model of flow called, Four Quadrant Model (Figure 2.0) was first proposed by Professor Massimini and his research team at University of Milan, in year 1985. A synonym of this model is called Quadrant Model of Flow State (Moneta, 2012).

Figure 2.2.

Four Quadrants Model.



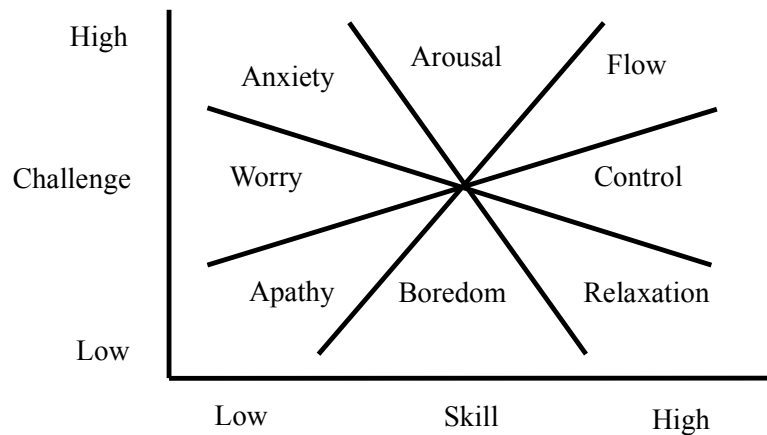
According to Csikszentmihalyi and LeFevre (1989), the flow context (i.e., I Quadrant) is occurs where both perceived challenges and skills are greater than individuals' average. The boredom context (i.e., II Quadrant) refers to a phenomena when challenges are less than the average, nevertheless skill are greater than individuals' average. The apathy context (i.e., III Quadrant) reflected that both challenges and skills are below the individuals' average levels. Last but not least, the anxiety context (i.e., IV Quadrant) occurs where challenges are greater than average, but skills are less than their average.

The Four Quadrants Model had further clarified that state of flow happens only when perceived challenges and skills are above a certain level, and are in balance (Massimini & Carli, 1988). This modification successfully demonstrated that flow is a function of perceived challenges and skills in daily activities (LeFevre, 1988). In addition, flow in daily activities is now able to generalize to a larger sample of population rather than single activity within individual who engaged in the activity that they are talented in (Moneta & Csikszentmihalyi, 1996).

Last but not least, the third model of Flow called Eight Channel Model (Figure 3.0) is focuses on smaller details (Massimini & Carli, 1988). The y-axis (i.e., ordinate) of this model represented by perceived challenge whereas the x-axis (i.e., abscissa) represent as perceived skill. Depending on the interaction of perceived challenges and skills, a Cartesian plane is partitioned into eight areas called channels (Delle Fave & Bassi, 2000). A model for the analysis of experience is shown in below.

Figure 2.3.

Eight Channels Model.



Based on this model, the perceived challenge and skill are divided into low, moderate and high respectively. Additionally, four quadrants namely flow, boredom, apathy, and anxiety are remain the same. Nevertheless, categorization of control, relax, worry, and arousal are added to form an Eight Channels Model instead of Four Quadrants Model.

Note. The theories of flow abovementioned are important to justify the operational definition of interaction of perceived challenges and skills. Kindly refers chapter 3, section 3.6 for more details.

2.8. Antecedents of Flow

Flow is an important indication of positive experience in daily life. Therefore, this study reckons that it is important to identify the antecedents of flow. There are two broad dimensions of life experience that can be linked to state of flow. First, internal dimension of life experience refers to the perceptual factors that produce state of flow (Csikszentmihalyi & Larson, 1984). This scope of study focuses on how individual's perceptions during the activity influence the quality of experience, whether positive or negative. According to the comprehensive reviews of Nakamura and Csikszentmihalyi (2002) and Schmidt and colleagues (2007), the potential variables include sense of autonomy, interaction of perceived challenges and skill during the activity, sense of successfulness in doing what an individual attempted to, sense of focus during the activity, and sense of importance toward the activity.

Secondly, external dimension of life experience refers to the contextual factors that are conducive to state of flow (Csikszentmihalyi & Larson, 1984). This scope of study aims to investigate how a certain context may influence the quality of experience, whether positive or negative. For instance, past studies investigated on how physical locations (e.g., at home, at class, at public places), types of activities (e.g., active leisure, passive leisure, productive, and maintenance), and companionships (e.g., alone, with friends and peers, with parent, with stranger) are related to state of flow (Schmidt et al., 2007).

As the exploration of antecedents of state of flow continue to grow and develop, simply exploring all the variables of internal and external dimensions of life experience that associated with state of flow is beyond the scope of study. To be more specific in this investigation, this study decided to focus on condition of flow

as internal dimension of life experience and types of activities as external dimensions of life experience. Justifications of the selection are provided in following sections.

2.9. Conditions of Flow and State of Flow

2.9.1. Interactions of perceived challenges and skills. The initial theoretical assumption of flow theory predicts that state of flow is peak during activities characterized by the simultaneous perception of high challenges and high skills (Csikszentmihalyi, 1988). Based on this theoretical assumption, Moneta and Csikszentmihalyi (1996) conducted a study on a sample of 208 talented adolescents from United States showed that respondents in flow felt happier, concentrated better, feeling of a sense of involved and motivated. However, their findings varied across different social contexts of activity.

On the other hand, Delle Fave and Bassi (2000) who examined this theoretical assumption in a sample of 120 Italian adolescents discovered that there were some contradict findings reported on the quality of experience between productive and leisure activities. Thus far, past findings are suggesting that quality of experience is not just postulated by the balance of perceived challenges and skills. In fact, types of daily activities have unique influential role on the subjective experience in life.

Although Asakawa (2004) who conducted total of 102 Japanese adolescents successfully exemplified the levels of intensity and conditions of flow to support this theoretical assumption, Moneta (2004) demonstrated a comparison study between United States and Chinese samples illustrated there was markedly strong cultural differences in flow theory. Specifically, individuals from different background have different value toward their perception of challenges and skills. In fact, Della Fave