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SELF-ESTEEM, MOTIVATION AND STRESS LEVELS TOWARD HAPPINESS AMONG ADOLESCENTS: A PREDICTOR MODEL

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Abstract

Adolescents who lack personal qualities might have low happiness levels which would contribute to the development of social problems. This study examined the influence of individual attributes such as motivation (intrinsic and extrinsic), self-esteem, and perceived stress on happiness among adolescents in Malaysia. A quantitative, cross-sectional research design was used in this correlation study and a total of 480 adolescents were recruited using a multi-stage cluster sampling method. The variables in the research were measured by the translated Malay version of the Subjective Happiness Scale, the Brief Motivation Scale, the Rosenberg Self-esteem Scale and the Perceived Stress Scale. The results showed that the adolescents who had higher motivation (intrinsic and extrinsic) and self-esteem were happier whereas those with higher perceived stress experienced less happiness. The results of a multiple regression analysis showed that self-esteem appeared to be the strongest predictor of happiness, followed by perceived stress, intrinsic motivation and extrinsic motivation and the combination of these variables yielded a total of 31% of variance in explaining adolescents' happiness level. Overall, the findings had provided evidence and new knowledge in the field of study on happiness among adolescents specifically in Malaysian context.

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Keywords: Motivation, self-esteem, perceived stress, happiness, Malaysia.

1. Introduction

Society has shown interest in the matters related to happiness in recent years. More attention has been given to the investigation of happiness among adolescents as the previous studies of happiness were mostly based on happiness of the adults instead of adolescents (Chaplin, 2009; Mahon & Yarcheski, 2002; Park, 2004). Adolescents are said to be in a "storm and stress" period during which they undergo conflicts and mood swings (Lerner & Steinberg, 2009; Santrock, 2008; Susman & Dorn, 2009) whereby the adolescents are commonly challenged by developmental and identity crises (Tsang, Hui, & Law, 2012).

In the transition period from childhood to adulthood, adolescents might be challenged with different changes and this overstrains their coping process, leading to negative stress and health problems (Byrne, Davenport, & Mazanov, 2007). Happiness levels during adolescence are also reported to be less compared to the other age groups (Csikszentmihalyi & Hunter, 2003). Therefore, investigations on the indicators and factors that relate to adolescent happiness in Malaysia are required to enhance their happiness level. This study focuses on motivation (intrinsic and extrinsic motivation), self-esteem and perceived stress as indicators of happiness. Therefore, happiness should be considered as the key aim in policy making by reshaping the world with a sustainable development agenda.

Happiness has an enhancing effect on psychological well-being, such as in improving the living skill of an individual (Veenhoven, 2001). Cohn, Fredrickson, Brown, Mikels, and Conway (2009) mentioned that happiness predicted our abilities in constructing our personal qualities in order to promote life satisfaction. These personal qualities can act as a coping mechanism, consequently increasing the ability to adjust and adapt to challenging environments. The meaning of happiness was identical to life satisfaction and subjective well-being as they were used interchangeably in various past studies (Chan & Lee, 2006; Easterlin, 2001; Layard, 2005). Social factors was one of the external factors that contributed to happiness. Diener and Seligman (2002) stated that individuals with high socializing skills such as being in romantic relationships and being active with religious activities were very happy. There was a study that showed that social relationship was more related to happiness (Holder & Coleman, 2009). It has been noted that social factors are important in achieving happiness, but the previous studies focused more on adults rather than adolescents.

Motivation is a complicated factor that stirs people to act and achieve particular aims linked to subjective well-being. Therefore, motivation is not only important to guide a person to strive for their aims, but also to guide a person to feel better (Yi & Gore, 2014). There are two dimensions of motivation which are intrinsic and extrinsic motivation. Motivated students are found to be happy and have motivation to learn. Self-efficacy involved in learning strategy are completely associated with intrinsic motivation whereas social influence involving rewards and punishment might be partly associated to extrinsic motivation (Safiah, Jain, & Fauziah, 2013). Past studies showed that people who are high in intrinsic motivation have a higher scale of happiness (Guillen-Royo & Kasser, 2015). Although there were studies suggesting that higher extrinsic motivation will decrease a person's level of happiness, happiness was found to be enhanced during active learning sessions which involved students interacting and engaging with climate-related issues (Guillen-Royo & Kasser, 2015; Safiah et al., 2013).

Accomplishment motivation was a significant predictor that served as protective factors for happiness (Kadir, Mustapha, Abdul Mutalib, & Rahim, 2014).

Self-esteem is the global evaluation of self-concept (Marsh & O'Mara, 2008). Another conceptualisation of self-esteem is the self-evaluation of individuals on their personal worth (Gray, Chamratrithirong, Pattaravanich, & Prasartkul, 2011). Self-esteem is usually recognized as a determinant for self-development which helps individuals to overcome challenges in life and difficult tasks when they feel good about themselves. A person who is high in self-esteem may be able to shield themselves against anxiety and problem behaviour. It is suggested that the higher the self-esteem of the adolescents, the higher their happiness levels are (Gray et al., 2011; Kapikiran, 2012; Wong, Chang, He, & Wu, 2010).

Perceived stress has been linked with adverse physical health illness, with research suggesting that high levels of perceived stress contribute to feelings of anxiety, depression, biological and behavioural processes that play a role in the development of several physical health problems (Miller, Chen, & Cole, 2009). Studies found that individuals with higher perceived stress are less happy compared to those with lower perceived stress (Abdollahi, Abu Talib, Yaacob, & Ismail, 2014; Schiffrin & Nelson, 2010). Consistently, stress has often been denoted as a significant predictor of happiness (Abdollahi et al., 2014).

The framework of the study was formulated from self-determination theory (Deci & Ryan, 2000). This theory conceptualizes psychological needs such as competence, autonomy, and relatedness as being key factors involved in an individual's well-being and optimal psychological growth (Deci & Ryan, 2000). Thus, the present study utilises the three basic psychological needs which are competence, autonomy and relatedness.

The need for competence denotes one's ability and tendency to put in effort to succeed in challenging tasks and attain desirable outcomes. Individuals with this need try to cope with environmental conditions and attempt to influence the environment in order to feel competent (Baard, Deci, & Ryan, 2004). Therefore, people who are have a sense of competence will gain higher confidence after overcoming a challenging task, and this eventually leads to an increase in well-being (Deci & Ryan, 2008). The need for competence can best predict happiness (Sapmaz, Dogan, Sapmaz, Temizel, & Tel, 2012). Using these explanations, self-esteem is the personal perceptions of success that a person should have in order to fulfil the need for competence through autonomously motivated behaviours. Autonomously motivated behaviour is a result of a self-determined motivational orientation that leads to positive psychological outcomes such as non-contingent self-esteem (Hein & Hagger, 2007). Self-esteem involved motivational concepts such as competence, optimism, hopefulness and mastery which indicate the capability of success and competency (Lyubomirsky, Tkach, & Dimatteo, 2005). This sense of competence will lead to greater happiness level due to the positive correlation between daily competence and positive feelings, liveliness, and well-being (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Meanwhile, the need for autonomy requires an individual to behave according to the terms of their own choices and feelings; they have to act as if they have the power of initiating their own actions (Deci & Ryan, 2000). Besides, satisfaction of autonomous psychological needs allows individuals to gain their freedom in choosing their own behaviours, taking their own responsibilities in working out towards a goal and achieving a sense of belonging. Eventually, this will increase the individual's well-being and happiness (Deci & Ryan, 2008). In this sense, intrinsically-motivated behaviours can be considered as

autonomous behaviours because these behaviours are self-determined in a way that it was performed out of personal inherent interests.

Conversely, well-being is reduced when there is a controlling or high-pressure environment whereby basic needs are not met. This causes them to be more prone to experience stress as they will usually select themselves directly or indirectly into stress-producing situations. However, it was believed that motivational orientations have impact on stress responses. This can be seen when autonomous individuals are more likely to reduce defensive response and are able to show adaptive and active coping styles when responding to stressors rather than avoiding the stressors. Autonomous people also regard stress-inducing events as challenging rather than stressful (Weinstein & Ryan, 2011). It was noted that adaptive and active coping styles with regards to stress are the vital determinants for well-being and good mental health (Gross & Munoz, 1995).

Finally, the need for relatedness is an attempt of an individual to gain satisfying and collaborative involvement with others which involves creating meaningful and close relationships alongside a sense of belonging to the environment (Deci & Ryan, 2000). The ability to relate and stay connected with others can build up strong social support and contribute to a higher well-being society. As such, extrinsic motivation is said to fulfil the needs of relatedness as it involves external factors which are uncontrollable by one's own self (Asl, 2018; Ryan, Sheldon, Kasser, & Deci, 1996). As the individuals have the intention to build relationship with others in order to get social support as a form of extrinsic motivation, the person tends to make one's self relevant to other people. This relating to others signifies a sense of relatedness and belonging towards a particular person or a group (Demir, Jaafar, Bilyk, & Mohd Ariff, 2011). It was also found that happiness was positively associated with relating to significant others such as friends (Demir et al., 2011).

In conclusion, the well-being or happiness of a person is very much dependent on the satisfaction of the three basic psychological needs in self-determination theory. This theory has provided inspiration and a firm base to the conduct of the present study. It supports all the personal factors in the present study in accordance to the three basic psychological needs proposed. Basically, personal factors such as extrinsic motivation, intrinsic motivation, self-esteem, and perceived stress are happiness-inducing factors with the theoretical support of the three psychological needs of self-determination theory, i.e. competence, autonomy and relatedness.

2. Problem Statement

According to the 2015 World Happiness Report backed by the United Nations, Malaysia has dropped 5 spots from 56th to the 61st out of 158 countries compared with the previous report in 2013. Malaysians became unhappier compared to the previous years (Helliwell, Layard, & Sachs, 2016). Happiness or well-being should be regarded as a key aim in policy making and acknowledged as an important factor in reshaping the world with a sustainable development agenda. Given this objective, investigations into the indicators and factors related to the happiness level among Malaysian were required to increase happiness level among Malaysian adolescents. However, studies about personal factors such as motivation (intrinsic and extrinsic motivation), self-esteem and perceived stress as the predictors of happiness or well-being were found to be limited and were less targeted towards individuals

in Malaysia. Therefore, in this study, we are interested in investigating how the personal factors such as motivation (intrinsic and extrinsic motivation), self-esteem and perceived stress are related to the level of happiness in Malaysia context (Sustainable Development Solutions Network, 2015).

In our study, our target age group is adolescents between the ages of 10 and 19 years based on the age range set by World Health Organisation (WHO) (2018). We chose this target group as we considered them more likely to have a lower level of happiness. This was due to the fact that adolescents are at a stage where rapid changes are happening in their physical and psychosocial development. At this stage, developmental and identity crises are a common challenge faced by the adolescents (Tsang, Hui, & Law, 2012). The adolescents' coping ability will determine their future development. Certain emotional and behavioral problems might occur if they have problems in the coping process and their identity formation (Tsang et al., 2012). Therefore, adolescents are in a group who are at high risk of negative behavior, such as suicidal behavior. Globally, suicide is the third leading cause of death in adolescents with the age of 15-19, with an estimated 53,000 deaths due to suicide and 16% of the global burden of disease and injury in 10-19 year olds are related to mental health conditions (WHO, 2018). Since adolescents tends to experience mental health problems and psychiatric disorders (Compas & Reeslund, 2009; Ozer & Irwin, 2009; Santrock, 2008), we decided to investigate the correlation between enhancing happiness and internal attributes such as motivation (intrinsic and extrinsic motivation), self-esteem and perceived stress.

3. Research Questions

- Is there any significant relationship between motivation (intrinsic motivation & extrinsic motivation), self-esteem, perceived stress and happiness among adolescents in Malaysia?
- What are the unique predictors of happiness among adolescents in Malaysia?

4. Purpose of the Study

The purpose or general objective of this study was to identify how intrinsic motivation, extrinsic motivation, self-esteem and perceived stress were related to the happiness among adolescents in Malaysia.

5. Research Methods

The present study was administered amongst adolescents in Malaysia. This study recruited 480 secondary school students aged between 13 to 17 years old (Mean= 15.06, Standard deviation= 1.26) by employing a multi-stage cluster sampling method. This research was conducted in Penang, Perak, and Kuala Lumpur through a random selection from the states of Malaysia. There were a total of 12 clusters with a cluster representing 40 students in a class. The three states were randomly selected using a random number generator. The list of schools from each states were obtained from Ministry of Education and assigned a unique number ID, following which a random number generator was used to select the schools. Therefore, from each state, two schools were chosen and from each school two classes (one class for Form 4 and one class for Form 2) were selected to participate in this study. Among the 480 school

students who participated in the data collection, 52% were Malay, 25% Chinese, 12% indigenous people and 11% were Indian. 58.5% of the respondents were females and the rest were males.

The approvals of application for the research questionnaire distribution were obtained from the Ministry of Education (MOE), *Jabatan Pendidikan Negeri* (JPN), and *Pejabat Pendidikan Daerah* (PPD) prior to actual data collection. Besides, parental consent forms in Bahasa Malaysia were distributed to get approval from the parents of the students below the age of 17 before the collection of actual data. Students were briefed on the purpose of study and confidentiality and were requested to sign their personal consents. It took approximately 15 minutes for the respondents to complete the questionnaire. All the assessments used in the study were translated into Malay language using back-to-back translation procedure.

The subjective happiness of the participants was measured by Subjective Happiness Scale (SHS: Lyubomirsky & Lepper, 1999). SHS is a 4-item inventory with 7-point Likert scales of the range from (1= not a very happy) to (7= a very happy person). The scores for SHS were calculated by computing a mean score whereby higher mean score indicates greater happiness. The reliability for SHS was α=.82.

The intrinsic motivation and extrinsic motivation were measured by Motivated Strategies for Learning Questionnaires (Pintrich et al., 1993). The study focused only on two subscales which wereintrinsic goal orientation (4 items) and extrinsic goal orientation (4 items) with 7- point Likert scales from (1=not at all true of me) to (7= very true of me). The reliability for intrinsic goal orientation was α = .74 whereas the reliability for the extrinsic orientation was α = .62.

The Rosenberg Self-esteem Scale (SES; Rosenberg, 1965) is another 10-item inventory with a four-point scale that is (1) strongly agree, (2) disagree, (3) agree and (4) strongly agree. It consists of 10 statements that measure the positive and negative feelings related to the feeling of self-worth and self-acceptance of individuals. There were 5 items with the reverse score (items number 2, 5, 6, 8, and 9). Higher total scores would indicate higher level of self-esteem. The reliability was .77.

Perceived Stress Scale (PSS; Cohen et al., 1983) is a 10-item inventory with 5-point Likert scales ranging from 0 (Never) to 4 (Very Often) that measures the perception of stress. Specifically, it was used to measure which situation that the individual's life will be valued as stressful. There were 4 items in reverse score (items number 4, 5, 7, and 8). Score for PSS are based on the total score whereby the lower the total score, the lower stress of individuals are. In the present sample, the reliability was (α =.712).

IBM Statistical Package for Social Science (SPSS) version 20.0 was used in data analysis. Descriptive statistics was used in this research to organize, summarize and present the collected observational data. In addition, inferential statistics were also used to investigate the associations between the variables. According to Allen and Bennett (2008), Pearson's product-movement correlation coefficient is used to examine the magnitude and direction of the linear relationship between two variables. Multiple regression analysis was used to measure the prediction power of multiple predictors in regressing towards the dependent variable. In order to answer the research question of the present study, Pearson correlation was used to investigate the significant relationships among intrinsic and extrinsic motivation, self-esteem, perceived stress and happiness of adolescents in Malaysia. Multiple regression analysis was used to determine the unique predictors of happiness among adolescents in Malaysia. All statistical procedures utilised 0.05 as significant value.

6. Findings

As displayed in Table 01, intrinsic motivation is positively correlated with happiness, r (478) = .334, $p < 0.001$, extrinsic motivation is positively correlated with happiness, r (478) = .223, $p < 0.001$, and self-esteem is positively correlated with happiness, r (478) = .453, $p < 0.001$. However, there is a negative significant relationship between perceived stress and happiness, r (478) = -.380, $p < 0.001$. This indicated that adolescents who have intrinsic and extrinsic motivation, high self-esteem, and experience less stress tend to be happier.

Table 01. Descriptive statistics and correlations among variables (N=480) *** $p < .001$

Variable	Mean	SD	1	2	3	4	5
Intrinsic motivation	4.86	1.10	1				
Extrinsic motivation	5.74	1.11	.332***	1			
Self-esteem	34.63	5.30	.250***	.164***	1		
Perceived stress	18.64	5.26	-.246***	.031	-.539***	1	
Happiness	4.86	0.92	.334***	.223***	.453***	-.380***	1

The findings of the present study showed that there is a positive relationship between intrinsic motivation and happiness among adolescents in Malaysia. Individuals are believed to have a higher tendency to pursue intrinsic motivation such as self-acceptance and affiliation that are important for the psychological needs and to a better psychological well-being (Schmuck, Kasser, & Ryan, 2000). This finding was supported by other studies which indicated that individuals who get higher intrinsic motivation tend to increase their happiness as well (Guillen-Royo & Kasser, 2015; Kasser & Ryan, 1996).

The present study also investigated the relationship between extrinsic motivation and happiness among adolescents in Malaysia. The findings indicated that there is a positive significant relationship between extrinsic motivation and happiness among adolescents in Malaysia. Past studies showed that people will feel happier when they are extrinsically motivated to learn through reward and social learning (Safiah et al., 2013). Past studies also revealed that there is a positive and significant relationship between academic achievement and happiness (Khoshnam, Ghamari, & Gendavani, 2013). Individuals with high extrinsic motivation tend to achieve good results and to maintain the academic achievement which leads to greater happiness.

The findings of the present study also indicated a positive significant relationship between self-esteem and happiness among adolescents in Malaysia. As supported by the findings of the past studies (Csikszentmihalyi & Hunter, 2003; Gray et al., 2011; Uchida, Norasakkunkit, & Kitiyama, 2004), the individuals' self-esteem level is strongly related to the level of happiness. Self-esteem was previously said to be positively correlated with the tendency for control, hopefulness, and positive emotion while negatively correlated with depression, anxiety and loneliness (Panahi, 2016).

Additionally, the present study also revealed that the adolescents who experienced higher perceived stress were found to have lower happiness level, which is reflected in previous studies (Abdollahi et al., 2014; Abolghasemi & Varaniyaba, 2010; Schiffrin & Nelson, 2010). It is believed that the people who have lower perceived stress are able to protect themselves from negative feelings that lead

to depression and anxiety. This is because happiness incorporates with positive affection, satisfaction, and not having negative feeling, depression and anxiety (Panahi, 2016).

According to Table 02, results showed that the combination of intrinsic motivation, extrinsic motivation, self-esteem, and perceived stress accounted for 31% of variance in predicting the adolescent's happiness. Self-esteem appeared to be the strongest weight ($\beta = .287$, $p < .001$) in the model followed by perceived stress ($\beta = -.190$, $p < .001$), intrinsic motivation ($\beta = .166$, $p < .001$) and finally extrinsic motivation ($\beta = .136$, $p < .05$). For self-esteem, intrinsic motivation and extrinsic motivation, 1 unit of increment will elevate happiness by .287, .166 and .136 respectively. Besides, 1 unit of increment in perceived stress will lead to -.190 in happiness. These findings strengthen the results of correlational analyses in which the adolescents with higher score on these variables were expected to have higher happiness level. However, perceived stress has a negative regression weight, indicating that adolescents with higher perceived stress were expected to have lower happiness level.

Table 02. Predictors of adolescents' happiness (N=480)

Variable	B	SE B	β	T	p
Adolescents' sex (0=Male)	.255	.074	.136	3.446	.001
Intrinsic motivation	.139	.035	.166	3.938	.000
Extrinsic motivation	.084	.035	.102	2.392	.017
Self-esteem	.050	.008	.287	6.148	.000
Perceived stress	-.033	.008	-.190	-4.059	.000

Note: $R^2 = .31$ (N= 480, $p < .001$)

In accordance with the previous studies, self-esteem (Cheng & Furnham, 2003; Csikszentmihalyi & Hunter, 2003; Furnham & Cheng, 2000; Uchida, Norasakkunkit, & Kitiyama, 2004), perceived stress (Abdollahi et al., 2014; Abolghasemi & Varaniyaba, 2010; Schiffrin & Nelson, 2010), intrinsic motivation (Cini, Kruger, & Ellis, 2012; Guillen-Royo & Kasser, 2015; Kasser & Ryan, 1996), and extrinsic motivation (Cini et al., 2012; Guillen-Royo & Kasser, 2015; Kasser & Ryan, 1996) were the predictors of happiness among adolescents in Malaysia. As expected, the results of multiple regression from the present study showed that intrinsic motivation, extrinsic motivation, self-esteem, and perceived stress could predict happiness among adolescents in Malaysia. In fact, the strongest predictor of happiness was self-esteem, followed by perceived stress, intrinsic motivation, and extrinsic motivation.

As such, some intervention or prevention plans to increase adolescents' self-esteem, intrinsic motivation, and extrinsic motivation could be planned by practitioners. Information dissemination method involving motivational talks or campaign could be held at schools by inviting some motivational speakers to share their motivational stories in life and suggesting ways for the adolescents to boost up their self-esteem, intrinsic motivation, and extrinsic motivation as well as the proper ways of coping with stress. Thus, happiness among adolescents could be increased by these interventions of spreading positivity among the adolescents and helping them to seek balance in them.

Besides that, educational practitioners and parents could improve their teaching methods in positive and encouraging ways in order to enhance the adolescent's self-esteem, intrinsic and extrinsic motivation besides minimizing their perceived stress. In order to enhance the adolescents' happiness in

their learning process, secondary school educators and parents should undergo more training workshops on how to enhance the students' self-esteem, intrinsic motivation, and extrinsic motivation while teaching. During the workshop, the educators and parents are being educated on the way of utilizing humanistic way in promoting the adolescents' motivation and reduce their stress in their learning. This includes gestures such as giving rewards and praises whenever they accomplished a task correctly. Even at the times that the adolescents make mistakes in their task, encouragement should be given to them in order to build their self-esteem.

7. Conclusion

In conclusion, happiness is vital for one's well-being and the society has always overlooked the importance and the indicators of happiness. This study has succeeded in filling a substantial knowledge gap in this field of research on happiness. Most of the happiness studies among adolescents were studied based on the western context and there were limited studies which were based on a Malaysia context. This study has provided new findings and patterns of happiness levels among adolescents specifically in a local context. More research studies regarding happiness are encouraged to be carried out in order to further deepen the knowledge that has been accumulated by this study. The present study has provided empirical evidence to support the effect of intrinsic motivation, extrinsic motivation, self-esteem, perceived stress on happiness among adolescents in Malaysia. The results of the study showed that intrinsic motivation, extrinsic motivation, self-esteem, and perceived stress are clear predictors of happiness. In a nutshell, the findings of the present study could be beneficial to the society. Implementations of trainings and workshops on how to enhance the adolescent's self-esteem, intrinsic motivation, and extrinsic motivation could be done in order to increase the happiness of the adolescents. A society that is under stress and less happy will only tarnish society's well-being and performance.

Acknowledgments

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