

Playfulness and Emotional Intelligence of Chinese Preschool Children: Is it Parental Monitoring so Important?

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Abstract:

Emotional intelligence develops during the crucial early stage of age among preschool children and many negative impacts may arise and affect their lives due to the deficits in emotional intelligence. Playfulness, has been recognized as an essential element of childhood that are vital for promoting children's emotional development and future mental health. Besides, parents play the major role in building playfulness traits among their children and in benefiting children's emotional intelligence. This study aims to address potential associations of playfulness and parental monitoring with emotional intelligence and also whether parental monitoring could play its moderator role. Cross sectional questionnaire with Child Behavior Inventory of Playfulness (CBI), Adult Involvement in Media Scale (AIM) and Parents Rating Scales of Emotional Intelligence were available for 217 mothers with children aged 4±6 years in private preschool, Kuala Lumpur. Pearson correlation analyses revealed that children's playfulness ($r = .42, p < .01$) and parental monitoring ($r = .35, p < .01$) were significant positively correlated with emotional intelligence. Hierarchical Multiple Regression analysis disclosed parental monitoring did not moderate the effect of playfulness to emotional intelligence in this study.

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I. INTRODUCTION

Emotional intelligence (EI) is emerging as an increasingly important and growing area of behavioral investigation in education, psychology, learning and development (Serrat^[42], 2017; Zeidner, Matthews, Roberts & MacCann, 2003; Zeidner, Roberts & Matthews, 2002; Mayer, Caruso & Salovey^[22], 2000; Sullivan, 1999)^[40,52-53,20,44]. Emotional intelligence could be generally referred as abilities or skills to perceive and express emotions accurately, understand and interpret emotional content, manage and regulate emotions of the self and others (Serrat, 2017; Brouzos, Misailidi & Hadjimatheou, 2014; Reker, 2004)^[42,6,29]. The concept of emotional intelligence was first introduced by Salovey and Mayer^[39] (1990) and EI should be recognized and studied in children (Scharfe^[41], 2000) because the formation of

emotional aspects of enhancement occurred critically in the early stage of age among children (Fadzil, Abdullah & Salleh^[10], 2016). However, EI is not given attention in the preschool educational context in Malaysia, especially in private educational settings (Rohaizad, Kosnin & Khan, 2017; Yunus, 2013; National Pre-School Curriculum Standard, 2010; Curriculum Development Centre, 2007)^[35,51,24,8]. It could be supported by a previous study which found that majority of preschool children in southern part of west Malaysia were weak in mastering the elements of EI (Rohaizad, Kosnin & Nora^[33], 2012). If preschool children showed deficits in EI, many problems in adjustment may arise and their lives would be negatively affected (Rohaizad & Kosnin, 2014; Salovey & Mayer, 1990)^[34,39]. In addition, preschool-aged children with lower emotional intelligence tend to involve in the future truancy, drug abuse, and

become lawlessness if early mediation techniques like parental monitoring are absent (Carlson, Tiet, Bender & Benson^[7], 2011). Thus, EI is an important element to study and emphasize among preschool children. Therefore, the government has started to emphasize the importance of EI by trying to create a balanced and harmonious kid and aiming to develop the potential of children at the of age four to six years in physical, emotional, spiritual, intellectual and social (Rohaizad & Kosnin, 2014; National Pre-School Curriculum Standard, 2010)^[34,24]. National Pre-School Curriculum Standard (KSPK) ^[24](2010) and the revised KSPK^[25] (2017) included emotion as one of the domains of learning of the kindergarten curriculum in Malaysia. KSPK^[25] (2017) mentioned that the self-help skills should emphasize the development of socio-emotions and the development of interaction skills amongst pre-schoolers.

Nowadays, with the aid of modern electronic devices or technologies, the digitally minded kids have better play environments (Genc^[11], 2014). Thus, child's play and playfulness in this new era is not similar again with the more traditional methods of play in last time. Playfulness is the expression of the child's drive to engage with, connect with, and explore the surrounding world freely and pleasurable (Sanderson^[40], 2010). The impulse to play among children is innate and hence playing and playfulness are important and they are essential elements of childhood that support their development like emotional (Hosokawa & Katsura, 2018; Wilson, 2010)^[16,50]. Playfulness was proved to be related with children's EI and play was a good way for children to express themselves, communicate their feelings and thoughts, integrate and practice their learning about emotional and hence it had been proved could promote emotional intelligence in children (Christian^[9], 2011). Play is always presented in preschool children's life, thus they developed friendships and relationships, developed sense of identity through play (Jones Thomory & Mykhailovska^[18], 2016).

Besides, parental monitoring had been shown to predict children's emotional intelligence (Smith et al., 2015; Alegre, 2012)^[43,1]. Therefore, parental monitoring is important because the quality of early attachment between child and parents, modelling, reinforcement, feedback and parental socialization practices would have effects in the development of children's EI (Zeidner et al., 2003; Zeidner et al., 2002; Saarni, 1999, 2000; Salovey & Sluyter, 1997)^[52-53,36-38]. Children would learn to understand, comprehend, express and regulate emotions by exchanging their emotions with parents (Naghavi & Redzuan^[26], 2011). Parental monitoring was normally based on parents' attitudes and it could be described as the parent's actions in protecting, supervising and checking their kids (Nikken & Schols^[27], 2015; Livingstone & Helsper^[21], 2008). Parents were recommended to increase the opportunities for face-to-face interactions and their playing time with peers or families (Hosokawa & Katsura^[16], 2018).

In summary, a good understanding of the importance of playfulness and parental monitoring to children's EI are required. As mentioned earlier, EI is a key in leading individuals to succeed in their lives and avoid involving in negative activities. Hence, EI should be emphasized among children beginning from the kindergarten level.

1.1. Objectives of the present study

The aforementioned research contributions make this study sought to determine the relationship between playfulness, parental monitoring and emotional intelligence among Chinese preschool children. Next, this study would like to examine the moderating effect of parental monitoring on the relationship between playfulness and emotional intelligence. Accordingly, research hypotheses in line with objectives of the study were as follows:

Hypothesis 1: There is significant relationship between playfulness and emotional intelligence among Chinese preschool children.

Hypothesis 2: There is significant relationship between parental monitoring and emotional intelligence among Chinese preschool children.

Hypothesis 3: There is moderating effect of parental monitoring among Chinese preschool children on the relationship of playfulness and emotional intelligence.

II. LITERATURE REVIEW

2.1. Playfulness, parental monitoring and emotional intelligence

Play could help self-expression and self-regulation, promote emotional intelligence and develop socio-emotional skills among children (Rentzou^[30], 2014). Playful children were more likely to experience pleasure from exciting or novel situation while playing, they have greater emotion regulation abilities which was a component of EI, and they were more emotionally expressive (Christian^[9], 2011). Physical activity behaviours developed during the crucial early childhood period which was from zero till five years old and it would cause impacts on developmental outcomes in children, included their EI and hence it was essential for children (Hinkley, Brown, Carson & Teychenne, 2018; Reimers et al., 2018)^[15,28]. Playfulness was proved to be related to children's reported willingness to express emotions and children who were willing to express emotions may be better able to regulate emotions in an adaptive way (Christian^[9], 2011). Hence, parents described play provided happiness for children and created good memories, and hence they perceived that playful children would have a greater capacity to regulate their emotions and they were more willing to express emotions to others (Smith et al., 2015; Christian, 2011)^[43,9]. Playfulness was positively related to child's awareness of their emotions, emotion management and emotion regulations, which were

the components of EI (Christian^[9], 2011). Therefore, children who have playfulness trait were more emotionally expressive and have better emotion regulation abilities (Christian^[9], 2011).

Besides, parental monitoring had been shown to predict children's emotional intelligence (Smith et al., 2015; Alegre, 2012)^[43,1]. Additionally, according to Alegre^[1] (2012), parental monitoring was correlated positively with three emotional intelligence dimensions (emotion knowledge, emotion understanding and emotion regulation) in children (Alegre, 2012). Some types of parenting were related to children's higher EI, such as parental responsiveness, parental emotion-related coaching, and parental positive demandingness while parental negative demandingness was correlated with children's lower EI (Smith et al., 2015; Alegre, 2012)^[43,1].

2.2. Parental monitoring as potential moderator between playfulness and emotional intelligence

Some studies highlighted parental monitoring when talked about children's playfulness and EI. However, research on parental monitoring so far lack focused on the moderating effect of parental monitoring on psychosocial or emotional outcomes, especially in preschool children (Topper, 2017; Alegre, 2012)^[46,1]. Thus, this section would like to review and study parental monitoring to find whether it could be a potential moderator variable between playfulness and EI among preschool-aged children.

Parent's engagement level in play with their children always depended on their view of own parenting role and also their value about the importance of play and playfulness (Smith et al.^[43], 2015). Preschool children who spent more high-quality time with their parents in joint activities like playing together would have fewer emotional and behavioral problems because children would learn to regulate their emotions by observing or modelling their mothers, and hence it correlated positively with children's

tendency in regulating their own emotions (Smith et al., 2015; Alegre, 2012)^[43,1] and this finding helped to explain the moderating role of parental monitoring in this relationship. This could be supported by another researches which mentioned that there was an association between children's and parents' emotions, and playful parents would have playful children (Smith et al., 2015; Christian, 2011)^[43,9].

If parents did play with their child, they noticed positive changes in their child's behaviour (Smith et al.^[43], 2015). Hence, parental monitoring should be taken into account when discuss about the relationship between playfulness and EI in children because it might be a potential moderator variable.

2.3. Theoretical approach

Bronfenbrenner's ecological theory helped to explain the relationship between playfulness and emotional intelligence, and also the roles of parental monitoring. According to this theory, children's development occurs through frequent and reciprocal interactions between the child with an immediate environment for a period of time to shape development (Boyd & Bee, 2014; Bronfenbrenner, 1979)^[4-5]. Therefore, in this era, this theory could be applied to explain that children's development is taking place through their frequent and repeated interactions with their parents in living environment.

Bronfenbrenner^[5] (1979) mentioned there are five ecological systems to explain the individual's interactions with the environment whilst microsystem, mesosystem and exosystem could be used to explain and support the parental monitoring in this study. Microsystem is the first layer that consists activities, social roles and interpersonal relations in face-to-face interactions. This setting directly influences children through their immediate participation in home, and parents, caregivers, teachers or peers are within this subsystem. Thus, parents play an important role to guide their preschool children in playing because it might affect

their emotional intelligence. This could be supported by Alegre^[1] (2012) who mentioned that parenting practices could predict children's emotional intelligence.

Next, the second layer is mesosystem which refers to the interrelationship of the child's microsystem. According to Bronfenbrenner^[5] (1979), the mesosystem is composed of a network of the relationships between the various interacting factors. Co-play between parents and children, and playing between children and peers are good examples.

The third layer is exosystem and it refers to the social setting, like institutions of culture that affect children's development indirectly (Boyd & Bee^[4], 2014). The setting of his or her surrounding would affect their development and hence the effects of this layer are impersonal and indirect. The exosystem consists of a broad belief system, value and institutional pattern that are provided by individuals with different backgrounds in the social setting (Bronfenbrenner^[5], 1979). They do not have direct interaction with the children, but are able to influence their emotional development and EI indirectly, for instance, family influences like parents' working hours, total monthly income and mother's educational levels. These social settings seem like do not participate and affect children's EI level directly, but of all these social settings influence the parent-child interactions and relationships like parental monitoring, parent-child co-play, further, affecting children's emotional intelligence indirectly.

Next, the macrosystem involves the belief and values of the culture in which the child lives. Parents' beliefs and parental monitoring might be affected by the cultural values, customs, and principles. Thus, children may be affected by their parents' beliefs and cultural traditions practiced by their family (Bronfenbrenner^[5], 1979). For instance, parents' attitudes, beliefs and values towards the importance of childhood play and playfulness of their children might affect their EI. Hence, parental monitoring might be influenced by parents' own

values about the importance of play and playfulness to their preschool children.

Lastly, the following layer is chronological system which is termed by historical and chronological context. According to Bronfenbrenner^[5] (1979), the environment is ever-changing indeed. For instance, the changing of traditional play to modern play in the new era like playing Virtual Reality games might bring some effects to the children's EI level. In sum, all of these new conditions or circumstances in new environments will affect children's EI.

III. METHOD

3.1. Research Design and Sampling

In this research, quantitative approach was applied in order to reach the research objectives by employing a cross-sectional survey. The present study was carried out at private preschools in urban areas of Kuala Lumpur. Proportionate stratified random sampling was used to obtain a representative sample. The population of 474 Chinese preschool aged children in six selected private preschools which participated in this current study were then stratified by sex with using the same sampling fraction which was 3/5 for each stratum.

The university ethic committee of University Putra of Malaysia (JKEUPM) approved the research instruments for ethical clearance. Permission from the principals in each selected private kindergarten via lottery method were obtained to carry out data collection. A set of questionnaire in hard copy was distributed to mothers of Chinese preschool children between the ages of 4 and 6 years old who are study in the six selected private preschools. Before completing the survey, all mothers had been given the detailed debriefing about the study to explain the purpose of the study and obtain consent to assure their confidentiality. Respondents had been given a small gift (mini can of play-dough) as a token of appreciation. A total of 285 respondents returned the survey. After excluding those sets with over 20%

missing data, the sample size reduced to only 217 respondents.

3.2. Data collection instruments

The survey was composed of four separate sections, which were Child Behavior Inventory of Playfulness (CBI), Adult Involvement in Media Scale (AIM), Parents Rating Scales of Emotional Intelligence and also demographic information section included mother's characteristics (age, years of education and employment status), child's characteristics (gender and age), and family characteristics (number of children and family monthly income). The time taken for the respondents to complete the survey was approximately 15-20 minutes. All instruments in this research had been translated into Mandarin version via experts in Centre for the Advancement of Language Competence (CALC), UPM.

3.2.1. Child Behavior Inventory of Playfulness (CBI)

Child Behavior Inventory of Playfulness (CBI) was developed by Rogers, et al.^[32] (1998) and it was used by parents or teachers to measure playfulness as a trait characteristic in children. There were 2 subscales in this instrument, which were playfulness and externality factor, however this research was focusing on the variable of playfulness, therefore items in externality factor were excluded, because the externality scale needs further measure development and does not relate to playfulness (Christian^[9], 2011). There were 21 items in this subscale designed to measure overall playfulness, orientation to a task, intrinsic motivation, non-linearity, freedom from externally imposed rules, and active involvement during the task (Christian, 2011; Rogers et al., 1998)^[9,32]. All items were rated on a 5-point Likert scale, from 1 which is "very uncharacteristic" to 5 "very characteristic". If the child yields a high score on playfulness factor, the child indicates a playful personality disposition. The range of scores is 21 to 105. The CBI has excellent internal consistency on the playfulness factor with

the high reliability coefficients from .81 to .94 (Rogers, et al.^[32], 1998). Besides, CBI has good validity like content validity, construct validity and concurrent validity (Rogers, et al., 1998; McDevitt & Carey, 1995)^[32,23]. Overall, CBI has been proved by previous research that the instrument is reliable and valid (Christian, 2011; Trevlas, Grammatikopoulos, Tsigilis & Zachopoulou, 2003; Taylor & Rogers, 2001; Rogers et al., 1998)^[9,47,45,32]. In the present study, CBI showed good reliability with Cronbach's alpha coefficient of .90.

3.2.2. Adult Involvement in Media (AIM) scale

The Adult Involvement in Media Scale (AIM) parent version (Anderson et al., 2007; Gentile et al., 2004)^[2,12] is used to measure parental monitoring. Besides, it helps researchers to gather information on family use of media, parental consistency and bedroom media. Parent version of AIM measures four aspects of parental monitoring, which are co-viewing with two items, limit setting on amount with five items, limit setting on content with four items, and active discussion about media with two items. There are 13 items in AIM. 9 items are on a 5-point Likert scale with choices of 1= never, 2= rarely, 3= sometimes, 4= often or 5= always whereas 4 items are on 3-point Likert scale with choices of 1= no, 2= sometimes, or 3= yes. A higher total score indicates higher levels of parental monitoring. The scores of this instrument ranged from 13 to 54. For the reliability, AIM scale showed sufficient reliability with the Cronbach's α .85 and .82 for child and parent report, respectively (Gentile et al.^[13], 2012). Both child- and parent version of AIM and the variables on each version appeared to be equally valid (Gentile et al.^[13], 2012). Some past studies offers useful psychometric properties (Gentile et al., 2014; Gentile et al., 2012; Anderson et al., 2007; Gentile et al., 2004)^[13-14,2,12]. In the present study, overall Cronbach's alpha coefficient for this instrument achieved .82. Certain items in AIM scale were modified to include new and modern electronic devices like smartphone and tablets accordingly to

the suitability for the samples. Permission to modify the items and to utilize in mothers of preschool-aged children had been given by the author of the instrument.

3.2.3. Parents Rating Scales of Emotional Intelligence

EI of children was assessed by using Parent Rating Scales of Emotional Intelligence designed by Sullivan^[44](1999) based on the model of emotional intelligence abilities in order to provide researchers with a better understanding of children's levels of emotional development. This scale was an external measure of children's emotional intelligence skills and it is suitable to utilise with children aged between 4.5 to 9 years old (Sullivan^[44], 1999). This scale was completed by mothers. It consists of 14 items to assess the level of children's emotional intelligence that ranged from the lowest level of emotional intelligence which is perception of emotions, to the highest level, which is managing emotions. Items are scored on a 4-point Likert scale ranging from 0 (Never) to 4 (Always). Moreover, this scale has includes two subscales: a) Recognition (4 items), which measure the basic skills of emotional intelligence, such as perception of emotions in the self and others, and b) Response (10 items) which measure more advanced emotional intelligence skills like the abilities to understand and manage emotions in the self and in others (Sullivan^[44], 1999). The scores for this scale ranged from 0 to 56. Higher total score indicates higher levels of children's emotional intelligence. The reliability coefficients of Recognition and Response factor variables for Parent Rating Scale were .76 and .82 respectively and for the total score was .86 (Sullivan^[44], 1999). Besides, this instrument was proved to have criterion-related validity (Sullivan^[44], 1999). Past study had confirmed its strong internal consistency (Ulutas & Omeroglu,2012; Rissanen, 2010; Ulutas & Omeroglu,2007)^[49,31,48]. In this study, the overall Cronbach's alpha coefficient was

.89, with .87 for recognition and .88 for response factor.

3.3. Data analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS). Pearson's correlation analysis was used to examine the relationships between playfulness, parental monitoring and emotional intelligence. In the present study, the hierarchical multiple regression analysis was applied to examine the moderation effect of parental monitoring on the relations between playfulness and emotional intelligence among preschool-aged children. An exploratory data analysis (EDA) was done to ensure that there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity before conducting the hierarchical multiple regression analysis.

IV. RESULTS

In this study, 51.2% were girls. There were 69.6% of the respondents perceived that their children have moderate levels of playfulness. However, 13.3% of mothers reported their children have low level of playfulness (scored less than 64) in the study. Moreover, in parental monitoring, only 13.3 % of mothers perceived themselves have high level of parental monitoring (scored more than 47). In this study, there were only 16.1% of children rated by their mothers as having high level of emotional intelligence and no children was reported as having high level of recognition in EI.

The correlation between playfulness (as measured by CBI), parental monitoring (as measured by AIM scale) and emotional intelligence (as measured by Parent Rating Scale of Emotional Intelligence) was analyzed using Pearson's correlation analysis. The result showed positive significant relationship between children's playfulness with emotional intelligence ($r = .42, p < .01$). This finding suggested that if playfulness increases by one standard deviation from its mean, emotional intelligence

would be expected to increase by .42 standard deviations from its own mean, while holding all other relevant regional connections constant. Furthermore, the study also revealed that there was a significant positive relationship between parental monitoring with children's emotional intelligence ($r = .35, p < .01$). For instance, if parental monitoring increases by one standard deviation from its mean, emotional intelligence would be expected to increase by .35 standard deviations from its own mean, while holding all other relevant regional connections constant. The aforementioned results confirm the first and second hypotheses in this study (see Table 1).

Table I
Correlation results between study variables

Variables	CBI	AIM	EI
	$r(p)$		
CBI	1	.25 **	.42 **
AIM	.25 **	1	.35 **
EI	.42 **	.35 **	1

Note: ** $p < .01$, CBI= Child Behavior Inventory of Playfulness score, AIM= Adult Involvement in Media Scale score, EI= Emotional Intelligence

Hierarchical Multiple Regression analysis was used to test whether parental monitoring moderate the relationship between playfulness and emotional intelligence. There were four regression steps to test the moderation effect in the present study. The only significant background variable was mother's years of education. Therefore, mother's years of education was entered into the first step as the control variable. Based on the result, the findings illustrated that 15.9% of the variance in children's emotional intelligence can be explained by the background variables ($F(1, 203) = 5.24, p < .05$). Next, playfulness was entered in the second step. The results illustrated that there is an increase of the adjusted R^2 change of about .15 and the overall model explained 18 % of the variance ($F(2, 202) = 22.14, p < .01$) in step 2. This means that playfulness is a significant predictor of emotional intelligence. Then, parental monitoring was entered in the third

step of the regression equation to determine whether it may contribute significantly to emotional intelligence while controlling the playfulness and background variables. Based on the findings, there is a small adjusted R^2 change of 0.04, ($F(3, 201) = 19.84, p < .01$). It can be seen that parental monitoring contributes to a significant variance of emotional intelligence. Lastly, the moderation effect of parental monitoring on the relationship between playfulness and emotional intelligence was examined in the final step. When the product term (playfulness x parental monitoring) was entered, the findings revealed that the whole model explained 23% of the variance. Nevertheless, there is only minimal .01 changes in the adjusted R^2 ($F(4, 200) = 14.83, p < .01$). However, there was no significant increment in the prediction of children's emotional intelligence contributed by the interaction effect of playfulness and parental monitoring. The interaction between playfulness and parental monitoring was not significant ($\beta = -.25, p > .05$). This indicates that parental monitoring did not moderate the effect of playfulness to emotional intelligence. These findings confirm that hypothesis 3 is rejected (see Table 2).

Table II

Playfulness and emotional intelligence moderate by parental monitoring

Variables	Standardized Regression Coefficient (β)			
	Step 1	Step 2	Step 3	Step 4
Background variables				
Mother's years of education	.16 **	.06	.03	.02
Playfulness		.41 **	.39 **	.41 **
Parental Monitoring			.23 **	.22 **
Playfulness * Parental Monitoring				-.03
Adjusted R^2	.02	.17	.22	.21
F	5.24*	22.14 **	19.84**	14.83**
F change	5.24*	22.14 **	19.84**	.06

Note: * $p < .05$, ** $p < .01$, parental monitoring was dummy coded (0 = ≤ 38 , 1 = > 38)

As shown in Figure 1, there was no significant interaction effect of playfulness and parental monitoring on children's emotional intelligence. Nevertheless, the moderation effect of parental monitoring on the relationship between playfulness and emotional intelligence was illustrated through Modgraph with calculating by using the unstandardized coefficient regression, B (Jose^[19], 2013) to get a clear visual on the underlying pattern of interaction. The figure presented the predicted relationship between two levels of playfulness (low and high) and emotional intelligence at two levels of parental monitoring (0 represents low and 1 represents high level). Preschool children who had greater playfulness traits generally reported a higher level of emotional intelligence than those with low playfulness traits. The figure showed that preschool children who had greater playfulness traits and receiving higher levels of parental monitoring had higher level of emotional intelligence. When receiving more parental monitoring, their emotional intelligence level increased gradually when they have greater playfulness traits. It can be concluded that, when the model included the interaction of playfulness and parental monitoring, the effect of playfulness on emotional intelligence had been increased when increasing the parental monitoring level (see Figure 1).

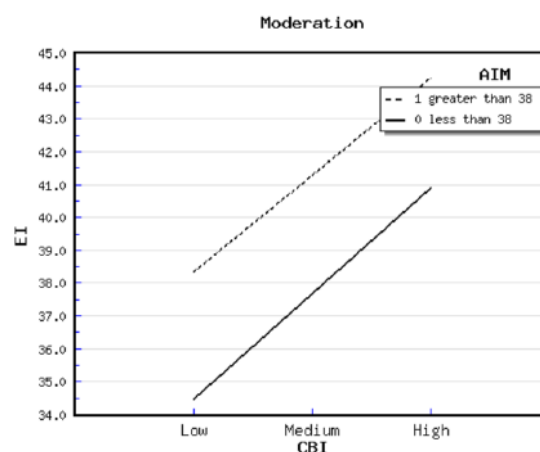


Fig. 1: The moderation effect of parental monitoring

V. DISCUSSION

The main purpose of this study was to determine the relationship between playfulness, parental monitoring and emotional intelligence among preschool children in Kuala Lumpur. The findings revealed that there were significant positive relationship between playfulness, parental monitoring and emotional intelligence. This findings are in line with the previous studies which suggested that playful children have greater emotion regulation abilities (Christian^[9], 2011), because play could help to promote emotional intelligence among children (Rentzou^[30], 2014), and also parental monitoring had been shown to predict children's emotional intelligence (Smith et al., 2015; Alegre, 2012)^[43,1]. Moreover, it could be supported by past studies which suggested that playful parents would have playful children (Smith et al., 2015; Christian, 2012)^[41,9] and some types of parenting were related to their children's higher EI, such as parental responsiveness, parental emotion-related coaching, and parental positive demandingness (Smith et al., 2015; Alegre, 2012)^[43,1]. In other words, children with greater playfulness traits tend to have higher level of emotional intelligence skills and higher level of parental monitoring might promote children's emotional intelligence level.

Based on the results, playfulness and parental monitoring were associated positively with emotional intelligence. This result confirms the relationship of playfulness with emotional intelligence and it is a novel contribution to the literature. Furthermore, current studies also suggested parental monitoring did not play moderating roles between playfulness and emotional intelligence. The findings are inconsistent with previous studies conducted by Gentile et al.^[12] (2004) and Bickham et al.^[3] (2003) who mentioned parental monitoring as a moderator of the effects of game violence and might moderate the effects of video game play.

These results support the Bronfenbrenner's Ecological Theory which recognizes the relationship of playfulness, parental monitoring and emotional intelligence. The present study emphasizes on examining the immediate context of preschool children like family setting (parental monitoring) and children's biological characteristics (playfulness) and its influence on child's emotional intelligence. In the terms of this theory, the child's playfulness and parental monitoring are labeled under the microsystem. The microsystem is the most influential level of the ecological system theory because it will directly influence children through their immediate participation in home. Hence, the results of present study supports Bronfenbrenner's Ecological Theory by showing that children's closest environments such as the family setting (parental monitoring) and child's biological characteristics (child's playfulness) influence children's emotional intelligence.

In uniquely addressing the relationship between playfulness, parental monitoring and emotional intelligence, the results of this study raise the awareness of the importance of playfulness and parental monitoring. Past study mentioned that some parents who experienced intergenerational poverty viewed parenting as private and their role was guiding their children to be good people but did not value the role of the parent as playing with their children (Smith et al.^[43], 2015). Besides, opportunities for active outdoor play among children nowadays were decreased because they had limited independent mobility especially at outdoor due to parental concerns about road safety and stranger danger (Hinkley et al.^[15], 2018). To contribute to the literature, a new line of research that focuses on playfulness rather on play has been highlighted in this study. This is because most of the past studies would focus more on play rather than playfulness (Hinkley et al., 2018; Reimers et al., 2018; Smith et al., 2015; Howard & McInnes, 2012; Kaugars & Russ, 2009)^[15,28,43,17,20]. Besides, scarce research has focused on the moderating effect of parental

monitoring on emotional outcomes, especially in preschool children (Topper, 2017; Alegre, 2012)^[46,1]. Hence, the current study tends to fill these gaps by utilizing CBI and AIM scale in order to measure playfulness and parental monitoring among preschool children and its association with EI. With this findings, government could consider to generate a new policy and upgrade the classroom by designing significant play programs like play-based classroom in the future.

There is a number of limitations in this study should be acknowledged. First, this current study applies cross-sectional nature of the data. Hence, this design is not able to track changes over time. However, emotional intelligence level would change and EI skills might get better with more practice or learning (Serrat^[42], 2017). Hence, longitudinal research should be carried out in future for better understanding on child's emotional intelligence. Moreover, the present study was not taking into account other potential factors such as children's interest in play and their living environment factors like the existence of playground or empty spaces in their housing areas and others. Future research should do some comparisons about preschool children's emotional intelligence and play time in urban areas and rural areas or make comparisons for each age group of children to find out how parental monitoring associates with the child's emotional intelligence in future study. Next, respondents in this study were from Kuala Lumpur, Malaysia and focused on Chinese preschoolers only in the age range from four to six years old, who already enrolled into the private kindergarten. Hence, the findings from this study could not be generalized to other population. Future research is suggested to investigate more about children's playfulness, parental monitoring and EI by using more diverse samples and different settings like from public preschools or private preschools and hence the results can be generalized to the whole population in Malaysia. Finally, the information was gathered using questionnaires. Hence, it is undeniable that response

biases and social desirability might be happened because respondents who did not answer honestly may affect the result and trustworthiness of this study. Future studies may consider to gather comprehensive information on the study variables via gathering information during interview from teachers and also child him/herself.

VI. CONCLUSION

Results of this study showed the existence of a positive relationship between playfulness and emotional intelligence, a positive correlation between parental monitoring and emotional intelligence and no moderation effect of parental monitoring between playfulness and emotional intelligence. Some of these findings are congruent with other studies especially the relationship between playfulness, parental monitoring and emotional intelligence (Smith et al., 2015; Rentzou, 2014; Alegre, 2012; Christian, 2011)^[43,30,1,9]. More studies are needed to investigate if parental monitoring can play its moderating role to children's EI with different age group and setting. As children's emotional intelligence is emerging important and started to emphasize by government (National Pre-School Curriculum Standard, 2017; Rohaizad & Kosnin, 2014)^[25,34], education programs that emphasize on the development or training of children's EI must be developed and implemented start from the preschool settings with taking into account the importance of playfulness and parental monitoring to children's EI.

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