Dynamics of Emotion in Adolescence with Depression and Anxiety: The Role of Emotional Attachment, Emotional Awareness, and Emotional Regulation

Abstract—Human is a dynamic and complex being that contain not only emotion, but also attachment. Emotion and attachment are progressive which plays an active role in daily life. Adolescence experience expanding social world, a journey to autonomy filled with developmental challenges and adversity such as negative emotional states. Emotional awareness is thought to be an important factor during adolescence to withstand negative interpretation of emotion. Meanwhile, emotional attachment, emotional awareness, and emotion regulation influence life satisfaction and foster healthy relationship that is interlinked with one another. The purpose of this research is to examine the role of emotional attachment, emotional awareness, and emotional regulation in adolescent between the ages of 12 – 18 with prior experience of rejection and mild or higher negative emotional states. It is thought that emotional awareness mediates emotional attachment and emotional regulation. Data was measured using IPPA-R, EAQ, and ERQ, which yield a total of 118 participants. CFA and path analysis using LISREL 8.80 were used to analyse the data. Finding indicates that emotional awareness does not mediate emotional attachment and emotional regulation with mother (RMSEA=0.00, Sobel Test=0.63) and father (RMSEA=0.00, Sobel Test=0.46), but mediate emotional attachment and emotional regulation with peers (RMSEA=0.00, P- value=1.00, Sobel Test=2.6).

Keywords: emotions, emotional attachment, emotional awareness, emotional regulation, adolescence, depression and anxiety

I. INTRODUCTION

According to the data of World Health Organization on the estimation of global health, Indonesia is listed as one of the top 10 country with highest depression and anxiety [1], a prevalence rate of 3% with an approximate number of 8.5 – 9 million suffering from depression and anxiety [2]. In 2018, suicide rate reaches 2.9% for every 100,000 people, which amount to an approximate yearly count of 7,540 individuals [3], 2011 noted 28 suicide cases involving children and adolescence, while 2012 noted at least 12 cases [4] Although studies on mental health problem in Indonesia are limited, Fauzan [5], reviewed eight published studies on mental health problem of children and adolescence in Indonesia. Findings indicate greater symptoms of emotional problems on children and adolescence that are related to higher risk of depression which in the long run potentially leads to suicide [5]. This indicate a serious concern of mental health problem in relation to negative emotional states and emotions, particularly in South- East Asia Region which include Indonesia and adolescence that are highly interdependent.

Meanwhile, based on the National Runaway Safeline data, Matta [6] noted an approximate number of adolescence that ran away from home every year reaches 2 million; 48% of which at risk of being trapped in prostitution [6]. Generally, individuals ran away from home due to uncomfortable environment or parental fault such as maltreatment, unhealthy communication between parent and child, feeling pressured since childhood, conflict with parents, being constantly scolded, and being constantly criticized [7]. Out of 1.6 – 2.8 million children that ran away from home, 89% of them experienced physical or mental pressure [6] from their family. This potentially involves attachment with parents, fear to express feelings and thoughts, as well as misunderstanding of emotions and control over emotions such as fear. The act of running away from home is an indicator that they have been hurt and felt hurt. It is an unspoken notion that there is a conflict which involves more than one individual and the active influence of emotions such as feeling of discomfort, fear, anger, and frustration.

Emotion is a state of reaction which involves appraisal of a situation [8]. Each and every individual have a set of control over their own emotions that influence their perception of a situation, the things they pay attention to, and thoughts on the event which produce a response or reaction [9]. Emotion regulation is regarded as a complex human system which influence the capability to withstand challenges such as threatening situations and adversity. Emotion regulation cannot be separated from emotions and...
is inextricably linked to attachment in early years of development.

Bowlby [10], proposed emotional attachment as a pattern of forming and maintaining relationships learnt through interactions with caregivers during early years that shape the expectation of how they would be treated [10]. Childhood interaction and environments is the beginning for a child to learn about emotion and cut their skills in being aware of emotions, to accurately perceive the emotions of others [11] which constantly develop over the course of life development. Different individuals interacts differently, and therefore different pattern of attachment are formed with different people [12]. Levitt et al. [13] found a shift in emotional needs during adolescence from parents to peer [13]. Adolescences began to focuses more on friends, spending less time with family and more with peers. In 2014, Tribunnews highlighted the lifestyle of teenagers to hang out together in which spending time together with friends became a new trend; an inextricable part of their life. Adolescence gathers in a cafè and spend time together, conversing and joking with one another [14]. Similarly, emotional attachment with peers becomes increasingly significant. Adolescence expect peers to fulfill their emotional needs more than parents. Study found an increase in the pattern of support provided by peers seen in higher age group compared to parents [13]. Cultural differences influence the way a person learn and interpret emotions. The coverage of emotion and cultural norms on subjects of expression relates to the capabilities of an individual to perceive and understand the emotions of others and self.

Parrigon et. al. [14], included 27 articles in examining the relation between attachment and emotion since 1999 - 2014. Findings indicate that children with secure attachment are more likely to have emotional competencies in recognizing, expressing, and controlling emotions. Emotional attachment is the beginning of the journey to recognize, understand, and control emotions. Therefore, it is thought that emotion is an interplay of various aspects in life which include attachment to significant figures, awareness of feelings, and the ability to control it that are intertwined and linked together. Individuals who are more capable to regulate stress and emotions tend to perceive their own emotions and the emotions of others more accurately. Therefore, emotional attachment is believed to influence the development of emotional awareness and emotion regulation. Social ability and capabilities to accurately perceive emotions adds resilience to mental illnesses and adversity in life, including life challenges faced by adolescence. Emotional awareness and emotion regulation assist an individual in controlling negative affect [15] associated with explicit undesirable emotion to be displayed in social context; which is also related to negative emotional states of depression and anxiety.

Emotional attachment with parents and peers, emotional awareness, and emotional regulation are therefore thought to have a complex, interlinked relationship. In understanding and becoming more aware of emotions, adolescence are allowed to catch social cues from their parents and peers. These social cues such as preferences towards a certain place or food potentially leads and individual to adapt by regulating their emotion in accordance to the situation at hand. Emotional attachment influence the ability of an individual to recognize, express, and control emotions; to be more stress- resistant against adversity [14].

It is thought that the influence of attachment on emotional awareness and emotion regulation is influenced by the degree to which an individual understand and are aware of the feelings of others and their own. Through the understanding of emotions, individuals are capable of providing selective attention to the situation in order to reduce negative emotions; an aspect of emotion regulation in attempt to regulate emotions. Emotions are actively influencing the behavior and attitude of a person by being aware of feelings in order to control it. Therefore, it is thought that emotion is an interplay of various aspects in life which include attachment to significant figures, awareness of feelings, and the ability to control it that are intertwined and linked together. It is believed that emotional attachment, emotional awareness, and emotion regulation is linked to one another in a dynamic relationship.

II. RESEARCH METHODS

A. Research Participants

The participants of this study are adolescence between the ages of 12 – 18 with prior experience of rejection and mild or higher emotional states of depression and anxiety in Indonesia. Data were collected through convenience sampling, obtained through self-reports in two different schools. 13.3% out of 897 respondents met the criteria of the participants, whereas 2 were removed due to incompleteness which results in a total of 116 participants.

B. Measures

Data were obtained through three self-report questionnaires, a). Inventory of Parent and Peer Attachment (IPPA-R), b). Emotional Awareness Questionnaire (EAQ), and c). Emotion Regulation Questionnaire (ERQ).

Inventory of Parent and Peer Attachment Revised (IPPA-R) were developed by Gullone and Robinson [16] which consists of three subscale which contain a total of 75 items; 25 items for each subscale. IPPA-R was used to assess emotional attachment designed to measure the quality of relationship a youth have with their mother, father, and peer; tested for internal consistency score ranging from 0.66 – 0.86 and convergent validity [16]. The original version of IPPA-R were translated into Bahasa Indonesia and checked for content validity by three expert judgment with a minimum degree of Masters in Psychology before used for data collection.

Emotional Awareness Questionnaire (EAQ) were used to measure emotional awareness with acceptable internal consistency score ranging from 0.65 – 0.73 [17] and content validity. Emotion Regulation Questionnaire (ERQ) were used to measure emotional regulation of children and adolescence with an average internal consistency score of 0.76, test-retest reliability over 3 months period of time with a score of 0.69, as well as reliable construct and convergent validity [18].
i. Statistical Analysis

Collected data were analysed using LISREL 8.80. Confirmatory factor analysis was conducted to analyse the construct validity of the data, followed by Path Analysis to test the hypothesis of this study.

III. RESULTS AND CONCLUSION

In accordance with CFA, items with factor loading < 0.5 were removed for the measurement used in this study to account for the construct validity of the items that were used in path analysis. IPPA-R. For mother subscale, a total of 8 items were removed, with a total of 17 items with factor loading which ranges from 0.49 – 0.76. For father subscale, a total of 10 items were removed, with a total of 15 items with factor loading which ranges from 0.59 – 0.88. For peer subscale, a total of 9 items were removed, with a total of 16 items with factor loading which ranges from 0.54 – 0.84. EAQ. Out of 30 items, 17 items remained with factor loading which ranges from 0.41 – 0.76. ERQ. A total of 6 items remained out of 10 items, item 4 yields 0.36 factor loading score. The rest of the item ranges from 0.57 – 0.87.

Table 1: CFA Summary

<table>
<thead>
<tr>
<th>IV/DV</th>
<th>Total Items Remained</th>
<th>Factor Loading Range</th>
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<tbody>
<tr>
<td>IPPA-R</td>
<td></td>
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<tr>
<td>Mother</td>
<td>17</td>
<td>0.49 – 0.76</td>
</tr>
<tr>
<td>Father</td>
<td>15</td>
<td>0.59 – 0.88</td>
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<tr>
<td>Peer</td>
<td>16</td>
<td>0.54 – 0.84</td>
</tr>
<tr>
<td>EAQ</td>
<td>17</td>
<td>0.41 – 0.76</td>
</tr>
<tr>
<td>ERQ</td>
<td>6</td>
<td>0.57 – 0.87</td>
</tr>
</tbody>
</table>

Path analysis for all three subscales indicate that the model and empirical data obtained are perfect fit (RMSEA=0.000, Chi-Square=0.00, P-value=1.000). Emotional awareness does not mediate emotional attachment with mother and emotional regulation (Sobel Test=0.63). Emotional awareness also does not mediate emotional attachment with father and emotional regulation (Sobel Test=0.46). However, finding indicate that emotional awareness does mediate emotional attachment with peers and emotional regulation (Sobel Test=2.6).

Figure 1: Path Analysis (Mother)

Figure 2: Path Analysis (Father)

Figure 3: Path Analysis (Peers)

It was hypothesized that emotional awareness mediate emotional attachment with mother, father, and emotional regulation. In contrary to the hypothesis, the result indicates that emotional awareness does not mediate emotional attachment with both parents and emotional regulation. Emotional attachment influence the ability of an individual to recognize, express, and control emotions in order to adapt and cope with difficulties [14]. Attachment teach a person about emotion and facilitates the direction of emotional growth. Mother-and-child attachment in particular, were believed to have significant influence on emotional regulation.

Individual differences contributes to the capability of an individual to learn, adapt, and deal with their situations and life challenges. Some were born with a calm disposition, while some were more easily irritable than another. These differences potentially influence the degree to which a person is willing to be aware of emotions. Particularly in younger adolescents with symptoms of depression and anxiety, Sendzik et al [19] found that they have greater difficulties with emotional awareness.

Generally, individual develop expectations of how others would treat them through how they are treated by their parents during early childhood. People were born with the potential to learn about emotions, but some might be born with greater potential on emotions than another. The course of development that are sometimes unpredictable leads the direction of emotional growth [11]. This is because different individuals experience different things and attribute different level of significance to different matters. To some children, being yelled at might make them feel anxious. A different child might consider yelling as a form of reminder. Dependent on how they have been treated, each individual might respond differently. However, individual differences may influence the attention given to emotion. Emotions might be important to some, and negligible to another. Therefore, individual differences might contribute to the results indicated in which null hypothesis is accepted.

Parenting styles may also influence the way a mother or father interact with their child. Previous research on attachment styles came out as statistically significant predictor of emotional intelligence [20]; [21]. Parent-and-child interactions are culturally sensitive [22] which influence the development of emotional attachment and emotional awareness. Manifested as an internal working model in forming and maintaining human relationship, people have expectation on how they would be treated. Particularly in Indonesia noted as a multicultural country, parenting style may influence the type of attachment between a mother or father and their adolescent child. Similarly, it might also influence affects, emotional awareness, responses toward emotions, and emotional...
regulation of adolescents with negative emotional states. However, both culture and parenting styles were not measured in this study.

In relation to parenting, emotional awareness, and emotional regulation, culture cannot be disregarded. Cultural differences and cultural diversity influence the expression of emotions and awareness of feelings of others. Communication is a part of human life that is deemed as essential in order to express emotion. Awareness on emotion allow adolescents to notice their feelings, to differentiate positive and negative emotions, and decide what to do with them. Understanding of their own feelings are then manipulated in order to adapt themselves in the presence of others. This was done through changing their feelings into a more positive experience in order to adjust to the demands of the society. The act of regulating emotions shows adaptability and the use of cognition to think for themselves. However, the dynamics of emotion in Asia may side towards suppression of both positive and negative emotions in order to avoid boasting and family conflicts. Cultural differences in turn potentially influence the role of emotional awareness in emotional attachment with parents.

Rieffe et. al. [23] noted that previous research indicates the presence of positive correlation between somatic complaints, depression, and anxiety. Individuals with depression and anxiety may experience physical discomfort, but be able to identify their feelings. However, they tend to have trouble in differentiating emotions and understanding why they are feeling the way they do. This potentially leads to suppression of emotions and unwillingness to dwell with them, especially when faced with interpersonal conflict [23]. The dynamics of emotional sensitivity, emotional affect, willingness to attend, and emotional control in adolescence with symptoms of depression and anxiety might also contribute to the result in which null hypothesis is accepted.

Willingness to attend, analyze, and express to emotions also influence the degree to which an individual is thought to have good emotional awareness [23] and therefore the capability to regulate and control it. Display rules and openness on the subject of emotions are culturally sensitive. It is possible that while attachment with parents are an essential aspect of learning and developing emotions, cultural rules and norms subconsciously prevent deeper level of awareness on emotions in order to prevent conflict to arise. This is because conflict may sprout from emotional outburst such as anger or dissatisfaction. As such, control over emotion was reign in which individual subconsciously suppress their emotions deep within in order to not hurt one another and maintain peace.

Adolescent may face the issue of power balance, especially against figure of authority such as parents. On one hand, they are required to establish themselves. On the other hand, they are required to stay connected and attached to them. Particularly in adolescents struggling with prolonged negative affect and major intrapersonal conflict, balance of emotional attachment with parents and autonomy which contradicts one another may hinder the opportunity to be emotionally aware. The developmental crisis may also impact their willingness to dwell on emotional awareness more than they already are, which also contribute to the result. In addition, by becoming unaware of their emotions when interacting with their parents, it is possible that expressive suppression may have been overly used.

It was hypothesized that emotional awareness mediate emotion attachment with peer and emotional regulation. Consistent with the hypothesis and conceptual framework, results indicate that emotional awareness mediate emotional attachment with peer and emotional regulation. The significance of peer relationship in this study is implied through the mediation of emotional awareness. Peer relationship and the degree to which adolescents are close with one another influence their abilities to dwell with emotions. This indicate that adolescence truly form emotional bond with their peers and strive to maintain good human relationship with them. Consistent with previous theory, this implies the shift of focus and emotional needs from parents to peers. Hence, emotional awareness may mediate emotional attachment with peer and emotional regulation due to the importance placed in peer relationship.

Personal values involving tradition and benevolence were found to be dominant in Indonesian adolescent [24] which potentially guide their views in life. Peer influence and peer attachment may have greater impact on some more than other. Parrigon et al [14] reviewed more than 20 studies on attachment and emotion. Grounded on attachment theory, 3 studies indicate that emotional regulation in adolescents influence competency in peer relationship [14]. Parents act as a figure of authority, while peers tend to act as comrade in arms. The difference in the role of attachment figures might also contribute to the statistical significance of peer attachment on emotional awareness as adolescents strive hard to fit in, belong, and form long-lasting friendship with their circle of friends by grasping accurate social cues and regulate their emotion. Intrinsic motivation to maintain peer relationship might also contribute to the result. The expansion of social world potentially leads to wider variety of emotional and social expression of emotions. Social interaction with peers could foster emotional expression and enhance emotional awareness that in turn elicit manipulation of emotion to express feelings in a socially desirable behavior. This includes further understanding and learning of nonverbal and verbal messages. For example, the learning of slang words representing emotions such as “baper” and the understanding of the word itself may be enhanced and more frequently used during adolescence. In relation to emotional states of their peers, understanding the feelings of others and oneself allow adolescence to direct selective attention on plausible causes of conflict. Appraisal of situation that minimize negative emotions as part of emotional regulation may also lead the adolescents to be able to be aware of their surroundings, regulate emotion, and maintain good human relationship. The ability to control their emotion in accordance with the situation and state of their peers may be a portrayal of adjustment in adolescents.

Although attachment in general follow a pattern of interaction that transfer from one situation to another, Bowlby [10] also noted that an individual could have multiple relationship with different patterns of attachment with different people. The development of attachment is a continuous progress that could change dependent on the
person who is involved [10]. Although early childhood interaction have a great influence on an individual, interaction in later stages of life are capable of influencing previous emotional experience. Emotions is an active and complex part of life that involves a variety of activities and response that is constantly progressing, changing, and active. People have the potential to influence one another and direct the course of development into a more positive direction. Particularly during adolescence, relationship with one another that are positive and reciprocal might foster emotional attachment, and therefore greater emotional awareness and emotional regulation

IV. CONCLUSIONS

In summary, individual differences, cultural difference, procedure of research, and the complexity of childhood development and interlinked relationship between emotional attachment, emotional awareness, emotional regulation, mild or higher level of negative emotional states, role of parents as figure of authority, and limitations potentially contribute to the results that contrast with previous findings. However, peer attachment in adolescents with mild or higher level of negative emotional states influence emotional awareness and their regulation of emotions. Adolescents are attached to their peers. This attachment leads the individual to be aware of the emotions of others and their own. By being close and aware of the emotion of others and their own, adolescents pay attention to their peers, the feelings of their peers, and their own feelings. They may be intrinsically motivated to adjust to their peers.

Despite prolonged negative emotional states and difficulties with emotional awareness, emotional awareness strengthens their ability to adapt and cope with their situation. The degree to which an individual is close with their peer potentially determine how much they know about their peer which in turn leads to manipulation of emotion in order to adapt and match oneself with their peer. Control over emotion is exerted as a method to direct their behavior in a way that maintain good human relationship which shows the significance of peers to them. This in turn indicate the importance of peer attachment, emotional awareness, and emotional regulation in influencing the dynamics of emotion that took place within peer relations. Intrinsic motivation to maintain peer relationship and overcome their developmental crisis may also lead to the mediation of emotional awareness on emotional attachment with peer and emotional regulation.

Published research on the complexity of emotions have mostly been conducted outside of Indonesia in individualistic countries or China and Japan. Emotion is a complex mechanism involving myriads of dynamic interaction between various factors such as age, lifestyle, emotional attachment, and emotional regulation which influence the output of reactions. This research was conducted with a small sample coverage through the use of time efficient convenience sampling technique. Data was also obtained by distributing the questionnaires, a total of 157 items, to be filled in one sitting which might also contribute to the results obtained in this research. The results were also obtained from questionnaires retrieved from the two schools in the same city. The participants of this research account for a limited community group that are present in the country. Although this research partially involves recruitment of Indonesian citizenships, it is not a whole portrayal of Indonesian culture. Therefore, this study may not represent Indonesian culture as a whole.

Future research is suggested to cover a broad range of location throughout Indonesia in order to obtain wider sample size and a more representative sample. The use of online questionnaires might be considered as data gathering method in order to reach wider area of research with more sample size that is more time efficient. Further and more research on the subject of emotional attachment, emotional awareness, and emotional regulation is required for more understanding. Causal relationship between all three variables may also be examined.

Future studies could also look into the significance of parental involvements in various developmental stages and its influence towards the development of emotion in various life stages. Emotional attachment with siblings may also be included in the research. Studies could also concern itself on cultural diversity, cultural differences, and cultural influences on the development of emotion and attachment in Indonesia. Future studies could also focus on the questionnaires used in the study, to further be psychometrically improved and assessed. Psychometric assessment of the translated questionnaire specifically conducted to evaluate, adapt, and improve the questionnaires used in this research might also assists in identifying the dynamics of emotions in adolescence more precisely.

REFERENCES


