The Effect of Level of Parenting Stress towards Mother-Child Interaction Quality: A Study on Mothers with Toddler from Poverty Family

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Abstract
This research was conducted to depict the effect of level of parenting stress towards mother-child interaction quality in mothers with toddler form poverty family. This research used the mixed method design for collecting data. Quantitative method used in order to analyzed the effect of level of parenting stress towards mother-child interaction quality. Level of parenting stress was measured by Parenting Stress Index-Short Form (PSI-SF) and mother-child interaction quality was measured by Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO). Qualitative method executed by observation and interview in order to obtain the comprehensive overview about mother-child behavior. The participants of this research are 71 pairs of mothers and children age 12 – 36 months who came from poverty families. The main results of this research showed that level of parenting stress did not significantly affect the quality of mother-child interaction (F = 0.518, p>0.05, insignificant at L.o.S 0.05) because of several factors.

Keyword: Parenting stress level, mother-child interaction quality, poverty family, toddler.
Introduction

Back in 2014, Indonesia experienced an increase in poverty. Based on data from Statistics Indonesia (Badan Pusat Statistik or BPS), in 2014, the percentage of poor population in Indonesia increased by 11.37% which was marked by the increased numbers of poor population from 28,070,000 people to 28,280,010 people (bps.go.id). Being in poverty causes someone’s life to be nonoptimal. Inconstant incomes, inability to fulfill needs, living in unsupportive area, no health guarantee, low education, and the increase of violent and criminal acts are impacts of poverty (Jefriyando, 2014). Not only adults, but children from poor family backgrounds also have nonoptimal lives. Children in poverty conditions tend to undergo late cognitive, affective, and psychomotor developments. That is caused by their parents’ limitations in fulfilling living costs and children’s educations, also not well enough parenting, like lack of stimulation and rough treatments by parents (pspk.ugm.ac.id).

American Academy of Child and Adolescent Psychiatry (2012) states that poverty does indeed have effects towards parenting of children. Poverty causes the emergence of various challenges for parents to be able to take care of their children with full attention. Those challenges are also related with limitations in accessing resources, such as nutrition, health service, and security, and inabilities in fulfilling basic needs, educational cost, healthcare, and recreation (Halpern, dalam Davis, 2003; McClelland, dalam Ahmed, 2005; Santrock, 2013).

In Indonesia, parents also experience challenges in taking care of children. That condition causes parents to care less about the development of children by showing behaviors that are not sensitive and responsive enough towards children. Thus children from poor families are faced with a few risks, like bad health and late development, due to lack of response, sensitivity, and also stimulation from parents (Noordianti, Hakimi, & Wibowo, 2011).

World Health Organization or WHO (2004) explains that parents’ ignorance towards children and lack of close relationship with children happen because poor parents tend to have been exposed to things that cause them stress. Katz, Corylon, La Placha, and Hunter (2007) prove this through their statement which says that someone who already has a child and situated in poverty is actually prone to mental health disturbance like high level of stress or even depression.

Poor parents’ life experience which is full of pressure and difficult situation happens because they cannot provide the needs of their children and themselves. This causes them to feel they are unable to fulfill their parental role. Thus parents are very vulnerable towards stress which involves parenting children. This has negative impacts which is the increase of parenting stress level as the stress experienced by parents builds up (McClelland, in Ahmed, 2005; Helkenn, 2007). On that note, Lavee, Sharlin, and Katz (in DeGenova, 2008) mention that parents’ income becomes one of the factors that affect the level of parenting stress, in which lower income correlates with higher parenting stresses level.

McCubbin and Figley (in Shaffer, 2012) explain that parenting stress may result in negative impacts towards both parent and child. Abidin (in Shaffer, 2012) says high level of parenting stress may cause the emergence of problem on parent’s health and
the lack of recognition and self-esteem in their roles as a parent. Next, parenting stress also has negative impacts towards children which are the low quality of children’s language, children’s showing inattentive, impulsive, and aggressive behaviors, rebellions against parents, criminality, difficulty in adapting to social environment, and the lack of physical and mental health (Morgan, Robinson, and Aldridge, 2002; Ayoub, in Nix, 2013).

Besides the effects that parenting stress has towards parents and children, it is also found that parenting stress has effects towards parenting and the interaction between parents and children (Abidin, 1990). A mother with high level of stress or undergoing depression tends to lose the joy of parenting a child. This will interfere in positive mother-child interaction. She will also show less happy feelings, often too busy with herself, careless towards children, behave insensitively, have authoritative manners, and behave roughly (NICHD, 1999; Gelfrand & Teti; Rade-Yarrow, Waxler, Richardson, Susman, & Martinez, in Davis, 2003; Haskett, Ahern, Ward, & Allaire, 2006).

The research of Mckay, Pickens, and Stewart (1996) proves that parents with high level of stress in parenting usually show low level of interaction between parents and children. Parenting stress is very much connected with the characteristics of negative parenting like the lack of affectionate reciprocal relationship between mother and child, unhealthy parenting style, and the application of rough discipline. In the end, these behaviors cause a lack of interaction between mother and child or even a bad one (Haskett, Ahern, Ward, & Allaire, 2006).

Parent-child interaction is a reciprocal process when both parties sensitively observe and adjust according to the behaviors of the other party (Davis, 2003). WHO (2004) also states that the attitude of parents in feeding, taking care of children while sick, giving stimulation for children development, and fulfilling children’s needs according to what the children require are parts of parent-child interactions. Those are examples of parents’ sensitive and responsive behaviors that are connected with the health and development of children, especially children of young age.

Parents’ behaviors that are sensitive and responsive can give positive experience to children. In this case, Taulbut and Walsh (2013) say that the experiences which children get when they are young have long term effects towards their physical and mental health and also towards children’s well-being, which can be carried until adolescence or even adulthood. The National Institute of Child Health and Human Development or NICHD (1999) says that the critical development period is started from the first until the third year of children’s lives. In this period, children also show some significant cognitive progresses (Santrock, 2013). However, the development of toddler in Indonesia is not maximal.

Based on research conducted by the United Nations International Children’s Emergency Fund (UNICEF) Indonesia (2012), it is found that one of three children that is younger than five years old experiences obstacles in development and growth. This is due to a few factors. One of which is poverty and inadequate parenting. Syaodih (2006) says that once a child has a problem in his or her development, that problem in one area will spread to other development areas.
Children’s development can be optimal with the presence of parents, like by having good quality parent-child interaction. This is proven by researches of McAnarney, Lawrence, Ricciuti, Polley, and Szilagyi (1986) also Nix (2013) which report that the quality of parent-child interaction actually affects children’s cognitive development. NICHD (1999) adds that parent-child interaction is the most important indicator to see the development of children. This is supported by the finding of Nix which says that parent-child interaction positively correlates with children’s language development. Due to presence of stimulation provision, the children’s language development gets better, and children can think logically.

Roggman et al. (2013) say that autonomy support which is given by parents is important in supporting the cognitive development of toddlers who are active in exploring their worlds. Siu and Yuen (2010) also say that parent-child interaction positively correlates with children’s social behaviors. Parents’ affection may decrease tantrum on children and make children become more discipline and able to well regulate themselves. Parents’ response is also important so the children can maintain positive relationships with other people, maintain communication, and be more self-confident.

On the note of parenting and interaction between parent and child, Duvall and Miller (1987) say that a mother holds the most important role in both domestic work and parenting children. A mother who takes good care of her children can affect their successful developments when they become adults. Thus mother-child interaction is considered to be important for the development of children. Based on some of the explanations above, it can be said that mother-child interaction is very much needed since one year old.

The importance of this mother-child interaction has made some researchers turn it into their research topic. One of the research groups which discuss this is McKay, Picken, and Stewart (1996) who research about parenting stress and parent-child interaction. They use the Marschak Interaction Method (MIM) as a measuring device for parent-child interaction quality. The result of that research shows that parents with high level of parenting stress have low quality of interaction with child.

Although there is an earlier research using MIM, this time the researchers are interested in researching about the effects of parenting stress level towards mother-child interaction using the measuring device of Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO). PICCOLO measures interactions between parent and child aged toddler. It has four domains which are affection, responsivenesss or parents’ behaviors which response to and sensitive with the needs and intererests of children, encouragement or autonomy support which is given by parents to children, and teaching or giving stimulation to children. There are a few separated researches that explain the contributions that high parenting stress level has towards things that are related to each mother-child interaction domains.

Abidin (in McKelvey et al. 2009) says that high scores in P-CDI subscale within PSI-SF measuring device may indicate the minimum amount of affectionate interaction. In addition, mothers with high level of stress tend to be careless and behave insensitively toward their children more often (Rade-Yarrow, Waxler, Richardson, Susman, & Martinez, in Davis, 2003). Coon (2007), also says that parents with high level of
parenting stress may cause disorder towards the cognitive development of children. That can happen because they do not give enough support to the children in positive parent-child interaction. Insensitive behavior, minimum amount of affection, and minimum support towards children can be connected with the affection, responsivity, and encouragement domain at the PICCOLO measuring device.

Other than the effects that parenting stress level has towards mother-child interaction domain, poverty also contributes towards the quality domain of teaching. Bornstein and Bradley (2003) also explain that children from poor families often times experience academic failures because their parents rarely give them stimulation. One indicator of poverty is the low level of education. When the parents’ education level is low, most of them do not consider children’s education to be important. This causes them to be reluctant to give stimulation and education to their children. Because of this, the researchers are more interested in using PICCOLO measuring device which has affection, responsivity, encouragement, and teaching domain. Thus the researchers can know the quality of poor parents in giving their children affection, the type of response mothers give to children, the giving of autonomy towards children, and how mothers stimulate children.

**Theoretical Review**

**Parenting Stress**

Parenting stress is a psychological phenomenon which appears when parenting obligation is considered to exceed someone’s resources and abilities. This happens when the caregiver finds it hard to fulfill his/her role as a parent (Abidin, 1990). This means the stress that is experienced in parenting stress is not all the stress which is experienced in life but only the stress which is experienced when a parent is parenting (Shaffer, 2012).

Parenting stress can be measured by using three subscales. The first is Parental Distress (PD) which includes the assessment of how far a parent experiences stress in exercising his/her role as a parent and the assessment of a parent’s competency in parenting a child. The second is Parent-Child Dysfuncytional Interaction (P-CDI) which assesses how far a parent believes that his/her child does not fulfill his/her expectations and that the interaction between them is not satisfying. Last but not least is Difficult Child (DC) which assesses a parent’s understanding of a child’s characteristics (Haskett, Ahern, Ward, & Allaire, 2006).

**Mother-Child Interaction**

Davis (2003) states that the interaction between mother and child is a reciprocal process when both sides sensitively observe and adjust themselves according to the personal behaviors of the other parties. There are four domains which can measure the quality of mother-child interactions. They are affection, responsiveness or the behavior of responding sensitively to the child’s needs and interests, encouragement or the support of autonomy, and teaching or the giving of stimulation.
Research Methods

The method of data collection is mix method which means collecting data quantitatively and qualitatively. The used methods of data analyzing are descriptive statistics and linear regression. The research instruments which are used in this research are:

Measuring Tool of Parenting Stress Level

The measuring tool of parenting stress level that is used in this research is Parenting Stress Index-Short Form (PSI-SF) which is a self-report inventory and consists of 36 items. PSI-SF has three subscales which are Parent Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC).

Measuring Tool of Mother-Child Interaction Quality

The measuring tool of mother-child quality that the researchers used is Parenting Interaction with Children: Checklist of Observation Linked to Outcomes (PICCOLO). It is an observation measuring device that consists of 29 items over four domains (affection, responsiveness, encouragement, and teaching).

Research Results

Characteristics of Research Subject

The participants of this research are 71 pairs of mother and child age toddler who are of poor family background. The following is the general statistics of the research participants:
Table 1. Demographic Data of Mother and Child (N=71)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother’s Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teens</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Young adult</td>
<td>54</td>
<td>76</td>
</tr>
<tr>
<td>Middle age</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td><strong>Mother’s Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>63</td>
<td>89</td>
</tr>
<tr>
<td>Working</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td><strong>Mother’s Last Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>27</td>
<td>38</td>
</tr>
<tr>
<td>Junior high school</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Senior high school or equivalent</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Uneducated or did not graduate</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>elementary school</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mother’s Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>70</td>
<td>99</td>
</tr>
<tr>
<td>Divorced or widowed</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Child’s Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>42</td>
<td>59</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>41</td>
</tr>
<tr>
<td><strong>Child’s Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 – 23 months old</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>24 – 36 months old</td>
<td>33</td>
<td>46</td>
</tr>
<tr>
<td><strong>Child’s Birth Sequence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An only child</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Oldest</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Youngest</td>
<td>45</td>
<td>64</td>
</tr>
</tbody>
</table>

According to table 1, the majority of mother participants are mothers of young age (76%), work as a housewife (89%), last educated at elementary school level (38%), and married (99%). On the other hand, the majority of child participants are male (59%), age 12 – 23 months old (54%), and the youngest child (64%).

Main Results and Additional Research

In this research, the researchers try to find out the research participants’ level of parenting stress and quality of mother-child interaction. It is found that the majority of participants have normal level of parenting stress (67,6%) and low quality of mother-child interaction (64,8%).

On the calculation of parenting stress level’s effect towards mother-child interaction, it is found that the level of parenting stress does not have enough significant prove towards mother-child interaction (F=0.518, p>0.05). The effect of parenting stress is only 0.7% towards the quality of mother-child interaction, whereas the other 99.3% is affected by other variables. Because parenting stress level does not have enough significant prove to be affecting mother-child interaction, the researchers did not continue the analysis to which parenting stress level has the biggest impact to the quality of mother-child interaction.
As an additional analysis, the researchers also tested the quality of each mother-child domains on participants who have high level of parenting stress.

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affection</td>
<td>N = 4</td>
<td>N = 6</td>
<td>N = 0</td>
</tr>
<tr>
<td></td>
<td>% = 40</td>
<td>% = 60</td>
<td>% = 0</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>N = 3</td>
<td>N = 4</td>
<td>N = 3</td>
</tr>
<tr>
<td></td>
<td>% = 30</td>
<td>% = 40</td>
<td>% = 30</td>
</tr>
<tr>
<td>Encouragement</td>
<td>N = 6</td>
<td>N = 4</td>
<td>N = 0</td>
</tr>
<tr>
<td></td>
<td>% = 60</td>
<td>% = 40</td>
<td>% = 0</td>
</tr>
<tr>
<td>Teaching</td>
<td>N = 10</td>
<td>N = 0</td>
<td>N = 0</td>
</tr>
<tr>
<td></td>
<td>% = 100</td>
<td>% = 0</td>
<td>% = 0</td>
</tr>
</tbody>
</table>

Table 2. Quality of Mother-Child Interaction Domains on Participants Who Have High Parenting Stress Level (N=10)

According to the table above, participants with high level of parenting stress have medium quality of affection and responsiveness. In addition, participants with high level of parenting stress have low quality of encouragement and teaching.

Conclusions

1. Both level of parenting stress and parenting stress domains have no effect towards mother-child interaction.
2. Most participants with high level of parenting stress have medium quality of affection and responsiveness and low quality of encouragement and teaching.

Discussion

Unlike the previous research, the results of this research show that the level of parenting stress does not have enough prove that significantly affects either the quality of mother-child interaction or each mother-child interaction domains. The researchers assume this happens due to several factors. In this research, it is found that the majority of participants have normal level of parenting stress (67.6%). However, this result contradicts the result of the previous research which states that mothers of poor family are supposed to have high level of parenting stress, and in the end, it will affect the quality of mother-child interaction. The researchers assume that this can happen due to various causes.

According to Wodtke, Elwert, and Harding (2012), the level of parenting stress can be affected by social support. Unlike in Western lifestyle, Indonesian people tend to live collectively, so it is very possible that participants in this research have high social supports. It can be seen in this research through the confessions given by almost all participants. They state that they are very close to their husband and family. Mother participants also feel the closest neighbours can help them in taking care of their children. Thus the participants do have a lot of social supports.

Morgan, Robinson, and Aldridge (2002) also say that parent’s characteristics, such as must be married, are some of the predictors of parenting stress level. In this research, 99% of mother participants are married. This certainly affects the parenting stress level because usually it is found that single mother tends to have higher level of
parenting stress compared to married ones. Other than marital status, some parenting stress researchers say that family’s income does not have any effect towards level of parenting stress (Morgan, Robinson, & Aldridge, 2002). Baker (in Morgan, Robinson, & Aldridge, 2002) also suspects that parenting stress level will increase as the received income does. Although parents who have high income do not have financial problems, many of them do not know how to fulfill the needs of children and how to raise children properly.

The age of mother is suspected to cotribute towards the normality of parenting stress level that most participants of this research have. As it can be seen, most mother participants of this research are mothers in the young adult category. Chang and Fine (2007) state that teenage mothers tend not to be mature and ready enough to care for a child. This causes teenage mothers to be more likely to have many difficulties in taking care of a child and to have high level of parenting stress.

Other than parents’ characteristics, Morgan, Robinson, and Aldridge (2002) say the child’s characteristics are also some of the predictors of parenting stress level. One of these is birth sequence. Morgan, Robinson, and Aldridge (2002) say parenting stress level of a mother can be affected if her child is the oldest child. However, in this research, only 33% of child participants are the oldest child in the family, while the rest is the youngest child. This is suspected to have caused the parenting stress level of most mother participants to be normal. Because they have experience of taking care of a child before, they do not find many difficulties in taking care of the child participants.

One of the other possible factors is faking. What can prove the researchers’s suspicion about faking is the mother participants’ statements when answering the questionnaire. Many of them said, “Taking care of a child is hard,” and, “This child is very naughty and fussy.” On the other hand, they tend to response with “Disagree” when filling out no. 20 of the questionnaire (My child is not able to do as much as I expected). Even when answering no. 33 of PSI-SF questionnaire (Think carefully and count the number of things which your child does that bother you.), the mother participants tend to response with only “1-3x” or “4-5x”. These responses show that mother participants do not feel disturbed by their children’s behaviors as the frequency of a child disturbing his/her mother is considered to be low.

The researchers also assume that the stresses which experienced by mother participants are not only stress from taking care of a child, but there are also other factors that cause them. Ahmed (2005) says that someone who lives in poverty often experiences stress in life because he/she finds it hard to fulfill life needs, struggles to pay for needs, like food, shelter, and health, and struggles in balancing life demands. Poor families are also at high risk to experience high level of life stress due to having low level of self-esteem, having feelings of inferiority, and feeling different compared to other people who have enough in fulfilling their needs (Ridge, 2009; Batty & Flint, 2010).

The researchers also feel there is a contradiction between the results of this research with the ones from other researches and literature sources. The research conducted by Davis (2003) in Australia states that mothers with high level of parenting stress are supposed to have low level of affection domain which is marked by the lack of desire
to meet face-to-face with the child, being less gentle, and having no desire to be with the child. It is different with this research where there are only 40% of mother participants with high level of stress who have low level of affection. The researchers realise that there is a difference between Western and Indonesian culture which is the fact that most mother participants are physically very close with their children, and that the quantity of face-to-face meeting between mother and child is quite abundant. Based on the researchers’s observations, even though the way mother participants talk is full of stresses, and they often let the children go wherever they want, they still look physically close by hugging, kissing, and carrying their children. That is believed to be a reason why they have high quality at the affection domain.

The researchers also find that the score of mother-child interaction is classified as low. As much as 64.8% of mother and child participants have low score of mother-child interaction. The researchers suspect that the quality of mother-child interaction tends to be low because of a few things. The first is mothers’ low education level which causes them to have minimum knowledge about children development. The second is environmental factors such as neighbourhood that pushes mothers to inappropriately take care of their children.

In this research, it can also be seen that all mother participants with high level of parenting stress have low quality in encouragement and teaching. Coon (2007) explains that parents who have high level of parenting stress can cause disturbance towards children’s cognitive development. This can happen because of the minimal support which is given by parents to children in positive parents-children interaction. Additionally, Coon also states that parents with high level of parenting stress will act passive towards children. Most mother participants do indeed seem to let their children play without guiding them to do anything. In this research, mother participants with high level of parenting stress also seem to bearly offer any help or give advices to children when they are playing.

Suggestions

There are some methodological suggestions that will be useful for the next researchs. Those suggestions are the following:

1. The next research can compare the effect of parenting stress level towards mother – child interaction quality in high & low income parents
2. The next research can compare mother – child interaction quality in well & less educated mothers
3. The next research can measure the effect of life stress towards mother – child interaction
4. On the PSI-SF questionnaire or at the interviews, an additional question is needed which is, “Is there anything that causes stress other than taking care of a child?”
References


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