Correlation Between Personality, Locus of Control, and Knowledge About Stunting with Mother's Responsibility Behavior Considering Toddlers at Posyandu

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ABSTRACT

Stunting is a failure to thrive due to chronic malnutrition, psycho-social stimulation, and exposure to repeated infections, especially in the first 1,000 days of life. Can be eliminated if growth from newborn to toddler is always monitored. Data from the Kebayoran Baru District Health Center as of December 31, 2018, there were 19% of infants did not weigh themselves regularly. The low participation of mothers in weighing their toddlers regularly every month at Posyandu is a problem in itself. It is necessary to examine and examine further personality, Locus of control, and mother's knowledge which will influence the behavior of the mother's responsibility to regularly weigh her child every month. This research is analytically descriptive with a total of 360 mothers who have toddlers in the working area of the Kebayoran Baru Health Center, data were collected using a questionnaire with the big five personality variables, Locus of control, and knowledge about stunting, data were processed using The analysis was performed with a statistical test using correlation test Pearson's. The results showed that education level 60% graduated from high school, 54.4% were aged 25-34 years, and 52.2% had high knowledge about stunting. The biggest personality type (187 people) is agreeableness, 83% have an Internal Locus of Control. There is a correlation between neuroticism personality type and responsible behavior for weighing toddlers (p=0.005) but there is no correlation between Locus of Control (p=0.067) and level of knowledge with responsible behavior for weighing toddlers (p=0.088).

Keywords: Personality, Locus of Control/LoC, Knowledge, Stunting, Responsibility

https://doi.org/10.33860/jik.v17i3.2420

INTRODUCTION

Stunting is a chronic malnutrition problem caused by a lack of nutritional intake for a long time, thus disrupting the growth of a child's height which causes the child to be shorter than the standard age have an impact on cognitive impairment, concentration making it difficult to learn, susceptible to non-communicable diseases as adults. Children are classified as stunted if their length or height is below minus two standard deviations (-2 SD) for children their age 1. Globally, according to WHO2, there were 144 million children under five were stunted. in the SIGIZI ePPGBM report (20 January 2021) from 34 provinces of 11,499,041 toddlers whose nutritional status was measured based on height for age (TB/U) were 1,325,298 toddlers with TB/U < -2 SD or 11.6%. toddlers are stunted. From the graph, it can be seen that the province with the lowest percentage of stunting under five is Bangka Belitung Islands 4.6%, and the highest is in the province of NTT 24.2%

Factors that influence the low coverage of weighing for infants and toddlers in
Posyandus are low Knowledge and Education of Housewives. The incidence of chronic stunting in toddlers should be monitored and prevented if the monitoring of toddler growth is carried out routinely and correctly. Monitoring the growth of toddlers at the Posyandu is a very strategic effort to detect early growth disorders so that stunting can be prevented.

Personal responsibility is defined as the ability to regulate thoughts, feelings, and behavior together with a willingness to take responsibility for choices made and the impact or consequences on the environment and oneself. Ma’mun added that human responsibility towards the individual is to fulfill physical and spiritual needs to maintain personal integrity. The body that requires food and drink, clothing, shelter, health, and so on is fulfilled as well as possible. Personality is a permanent pattern of traits with unique characteristics that give both consistency and individuality to a person's behavior.

According to Goldberg in Pervin, personality is divided into five major dimensions which are abbreviated as Big Five OCEAN, namely: Openness (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), and Neuroticism (N) with the following details:

<table>
<thead>
<tr>
<th>Traits</th>
<th>Dimensions</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>Fantasy 1. Aesthetics 2. Feelings 3. Actions 4. Ideas 5. Values Individuals with very open personalities are generally cultured, generate new and interesting ideas, and have created, with a level of imagination and intellectual curiosity. They are open-minded and think independently and not traditional</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>Anxiety 1. Depression 2. Impulsiveness 3. Hostility 4. Vulnerability to stress 5. Self-consciousness Emotionally unstable individuals tend to experience negative emotions, such as anxiety, depression, irritation, and vulnerability in everyday situations, and their mood changes frequently</td>
<td></td>
</tr>
</tbody>
</table>

Source: Rotter stated that Locus of Control (LoC) or locus of control is a general belief that someone can/cannot control their destiny, known as internal LoC if they believe that the success or failure experienced is personal responsibility or is their effort. Whereas individuals with external LoC believe that it is only luck or fate, success or failure is determined by forces that are outside of themselves. According to George and Jones, differences in opinions or perceptions of each individual are determined.
by their LoC. Because LoC is a person’s perception of why something happened to him, or what power pushed him to do something\textsuperscript{11}.

In the world of health locus of control can be classified as internal (individuals believe they are responsible for their health), external (individuals believe that others are responsible for their health), or coincidental (individuals believe that their health depends on chance)\textsuperscript{12}.

Knowledge is the result of scientific activities or thoughts that combine basic sensations. is the result of a complex process in which external objects stimulate the five or more senses that cause changes in the organs of the body. Humans seek knowledge in the hope that knowledge can be useful to help solve life problems they face.

**METHOD**

The type of research used is descriptive-analytic with a cross-sectional study approach, and the sample is determined randomly. The data was obtained by giving questionnaire sheets to the respondents to be filled in immediately, if the respondent had difficulties, the enumerator was assisted by an enumerator to explain the intent of the questions in the questionnaire. The questionnaire contains questions from all variables of Personality, Locus of Control, and Knowledge about stunting. The number of respondents is 360 mothers who have toddlers.

SPSS software was used to perform the statistical analyses. The data obtained were then analyzed using Pearson Test with a significance level of p<0.05. The protocol of this study was approved by the Research Ethics Committee of the Ethics Commission of Poltekkes Kemenkes Jakarta II, Number LB.02.01/II/KE/33/909/2022. Written informed consent was obtained from all respondents.

**RESULTS**

In this study, 360 respondents were housewives who had babies and toddlers living in the working area of the Kebayoran Baru District Health Center. The distribution of respondents based on general characteristics can be seen in Table 2 below:

**Table 2. Distribution of Characteristics of Respondents Based on Education, Age, and Income.**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N=(Total Sample)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary/junior high school graduate</td>
<td>89</td>
<td>24,7</td>
</tr>
<tr>
<td>High school graduate/ equivalent</td>
<td>218</td>
<td>60,5</td>
</tr>
<tr>
<td>Diploma/Post Graduate</td>
<td>52</td>
<td>14,4</td>
</tr>
<tr>
<td>Under Graduate / Doctor</td>
<td>1</td>
<td>0,3</td>
</tr>
<tr>
<td><strong>Ages (Year)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 - 54</td>
<td>4</td>
<td>1,1</td>
</tr>
<tr>
<td>35 – 44</td>
<td>123</td>
<td>34,1</td>
</tr>
<tr>
<td>25 – 34</td>
<td>196</td>
<td>54,4</td>
</tr>
<tr>
<td>18 - 24</td>
<td>37</td>
<td>10,3</td>
</tr>
<tr>
<td><strong>Working</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>73</td>
<td>20,3</td>
</tr>
<tr>
<td>No</td>
<td>287</td>
<td>79,7</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; Rp 4 million/month</td>
<td>248</td>
<td>68,9</td>
</tr>
<tr>
<td>Rp 4 million/month until Rp 8 million/month</td>
<td>85</td>
<td>23,6</td>
</tr>
<tr>
<td>&gt; Rp 8 million/month</td>
<td>11</td>
<td>3,1</td>
</tr>
<tr>
<td>Missing</td>
<td>16</td>
<td>4,4</td>
</tr>
</tbody>
</table>

From the type of personality possessed by housewives, most of them are agreeableness or friendly, which is the character of Indonesian people in general.

![Figure 1. Personality Types of Housewives in the Kebayoran Baru-South Jakarta](image-url)
The LoC variable used a questionnaire made by Rotter with 29 questions, the results are as shown below:

![Figure 2. Locus of Control of Housewives in the Kebayoran Baru – South Jakarta](image1)

The level of knowledge of housewives about stunting is 72% already high (Fig. 3)

![Figure 3. Knowledge about stunting of Housewives in the Kebayoran Baru – South Jakarta](image2)

### DISCUSSION

The characteristics of housewives in education obtained 60% (216 respondents) are high school graduates/equivalent. This level of education will generally affect the ability to receive information and its application in everyday life. As stated by Devenport et al\(^\text{13}\), the ability to digest and explore the information obtained will be easier if someone has a high level of education, then a mother with this level of education will have better knowledge and will apply it to the health of her family. In another study, it was found that the level of the mother's education affected the mother's knowledge and understanding of stunting\(^\text{14}\). It is known that the lower the mother's education, the greater the chance of finding a stunted child\(^\text{15}\).

Maternal educational status and stunting of Children were found to be significantly positively associated; children from mothers with no formal education, primary and secondary education increased the odds of getting stunting by 3.07 times (AOR = 3.07, CrI 2.79, 3.39), 2.62 times (AOR = 2.62, CrI 2.38, 2.88) and 1.86 times (AOR = 1.86, CrI 1.69, 2.04) than children born to mothers with higher educational levels\(^\text{16}\).

When viewed from the age of 196 people (54.4%) are aged 25-34 years, are of productive age, and in good stamina, so they still have optimal ability to maintain family health. At this age, it is also a mature adult age, and mothers already can sort out useful information or knowledge to protect their families and prevent their children from stunting.

Adequate nutrition can be met by the intake of foods rich in fat, protein, and carbohydrates. The provision of nutritious food must be supported by the purchasing ability of the community. Most (68.9%) of respondents with a family income of less than Rp 4 million/month. The results of the study by Sagita and Tri (2022)\(^\text{17}\) found that families with low incomes had a five times higher risk of experiencing stunting compared to high incomes. In this study, it was found that 20.3% of mothers worked outside the home to supplement the family income, thereby
increasing purchasing power and meeting family needs. Housewives have the potential to give a contribution to household income, especially in poor households. 

Personality is a distinctive way of thinking, feeling, and behaving, includes moods, attitudes, and opinions, and is most clearly expressed in interactions with others, encompassing the behavioral characteristics, inherent and acquired, that distinguish one person from another and can be observed in people's relationships with the environment and social groups. Most of the 187 respondents have an Agreeableness personality. Highly extroverted individuals are assertive and sociable people, often self-confident, and talkative and they like to be in the community and social environment. Conformity / Friendly and 180 respondents with Extra-version personalities. This type of personality is characteristic of the Indonesian people, namely people who are assertive and easy to get along with, often confident, and talkative and they like to be in the community and social environment. These personality types are personality types that are easy to accept change and willing to change, this can be the basis for changing the mother's behavior to regularly monitor the growth of her child, which only needs to be encouraged by reinforcing the form of increasing knowledge and personal approach.

In this study, it was found that most of the housewives had an internal locus of control, which means that the health of their families was caused by the behavior of mothers to maintain the health of their families. As stated by Sunhwa and Leo, the internal health locus of control in adults helps reduce mental health problems, and it acts as a factor in improving health behavior. This can be a force for increasing visits by mothers to bring their children to Posyandu because mothers believe that their family's health is in their control, even though Wardle found that health locus of control is associated with socioeconomic factors. As it is known, internal locus of control describes perception which refers to an individual's tendency to believe that health outcomes are primarily caused by the individual's behavior and within their control. In contrast to external Locus of Control, they refer to an individual's tendency to believe that health outcomes are primarily caused by other people or chance factors. Other research also proves that ethnic groups will also affect the external locus of control. The results of other studies also get such health locus of control is associated with socioeconomic factors. 

Knowledge is a crystallization of various information obtained formally and informally and will be seen in one’s behavior. The mother's understanding of the occurrence of stunting, its consequences, and how to prevent it will form a more permanent behavior compared to just imitating without a good understanding. In this study 172 people (47.8%) mothers had low knowledge about stunting, causing mothers not to feel the need to routinely come to the Posyandu to monitor the growth and development of their children. Improving mothers' knowledge about stunting is one way to make mothers want to visit Posyandu regularly. Research by Indah, et al found that there was a relationship between maternal knowledge about nutrition and the incidence of stunting in toddlers in the Puskesmas Sawan 1 area, Buleleng Regency, Bali. The same thing from Salsabila research, et al, found that there was a relationship between a mother's knowledge about nutrition and the incidence of stunting. The level of knowledge of the mother will also determine how the parenting style of the mother is in the growth and development of the child. The results of research by Sukmawati et al found that parenting parents play an important role in the occurrence of stunting in toddlers. This emphasizes the importance of paying attention to good parenting practices that support the growth and development of children.

A person's level of knowledge is also influenced by age, some opinions state that with increasing age, the level of mental maturity is getting better, and intelligence for learning and abstract thinking is also getting better, in this study, some respondents were aged 25-34 years which is a productive age for seeking knowledge and add insight, as well as the level of education, most of whom have graduated from high school. Of all the variables tested statistically with the responsible behavior of the mother taking her child to the Posyandu, only the neuroticism personality type affected the mother's responsible behavior in this case (sign value 0.005) while the other variable's Sign value > 0.005).

The neurotic personality type is characterized by negative emotions such as
anxiety, worry, and insecurity. So mothers with high neuroticism personalities will have high anxiety and worry about their children's health if they do not take their children to Posyandu. So there is a correlation between the personality of neuroticism with the behavior of being responsible for monitoring the health of their children to the Posyandu. On the other hand, mothers with low neuroticism personalities make the mother quite satisfied with what she currently gets, so their motivation to improve their child’s health becomes less because the mother feels that what she has done for their child’s health is enough.

CONCLUSION

From this study, it can be concluded that to improve the behavior of housewives to bring their children to the Posyandu, an appropriate approach model is needed to increase the personality of neuroticism and motivation so that the mother's knowledge about stunting increases, the mother will be responsible for routinely bringing her child, to the Posyandu.

ACKNOWLEDGMENTS

The authors extended their deep gratitude to the Politeknik Kesehatan Kemenkes Jakarta II and Nutrition in Puskesmas Kecamatan Kebayoran Baru and all Kader Posyandu. To support this research.

CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

REFERENCES

15. Laksono AD, Wulandari RD, Amaliah


