COPING SELF EFFICACY AND RESPONSE TO UNCERTAINTY IN THE COVID-19 PANDEMIC

COPING SELF EFFICACY DAN RESPON TERHADAP KETIDAKPASTIAN SAAT PANDEMI COVID-19

Septi Mayang Sarry1, Nila Anggreiny2, Mafaza3, Ulzhalgas Bikenovna Adilbayeva4

123Psychology, Faculty of Medicine, University of Andalas
4Al-Farabi Kazakh National University, Almaty, Kazakhstan
1septimayangsarry@med.unand.ac.id

Abstract
The COVID-19 pandemic creates uncertainty in various aspects of people's lives, especially when they enter adulthood with more complex roles and responsibilities. This study aims to measure the relationship of coping self-efficacy and individual responses in facing uncertainty. This study was conducted on 204 participants in the range of early adulthood (M = 27 years) which were taken based on quota sampling technique. The instrument used in this research is The Uncertainty Response Scale and Coping Self-Efficacy Scale. Based on the results of the analysis, Pearson Product Moment, it is found that there was a significant relationship between the response to uncertainty and coping self-efficacy. The relationship between the two variables is explained based on the three dimensions of the response to uncertainty: there is a significant negative relationship between the response to emotional uncertainty and coping self-efficacy; there is a significant positive relationship between cognitive uncertainty and desire for change and coping self-efficacy. The dimension of cognitive uncertainty showed stronger relationships while the dimension of desire for change showed weak relationships with coping self-efficacy.

Keywords: coping self-efficacy; COVID-19; response to uncertainty

INTRODUCTION
Based on data from the World Health Organization (WHO) regarding the timeline of COVID-19, on December 31, 2019 in Wuhan City, Hubei Province, China, the case of pneumonia caused by a new type of Coronavirus was firstly identified (WHO, 2020). In the beginning, this
virus was an endemic disease in China. However, WHO declared a global health emergency because this outbreak could become a worldwide pandemic in February 2020. In Indonesia, the first COVID-19 case was officially announced on March 2, 2020, when a mother and her daughter living in the Depok area, West Java were infected by the virus (Ihsanuddin, 2020). Furthermore, the development of COVID-19 cases grew rapidly with the number of patients being confirmed positive, patients recovering, and patients dying whose number fluctuates every day.

The impact caused by the COVID-19 outbreak is felt by the community in various sectors of life such as the economy, education, and health. In the economic field, people have difficulty meeting their needs due to reduced income (Wicaksono, 2020), difficulty finding work (Nursaniyah, 2020), the higher number of layoffs (Makki, 2020), and the increasing number of unemployed (Fauzia, 2020). On the other hand, in the field of education, the policy of learning from home or online has resulted in students, educators, and education providers having to be able to adapt (Mansyur, 2020) and find effective solutions to reduce negative impacts (Firman, 2020). Meanwhile, in the health sector, the impact felt by the community is the limited access to health services, especially for vulnerable groups (Pradana et al., 2020) and the decline in the physical and mental health conditions of medical personnel (Rosyanti & Hadi, 2020). In addition, the public also experiences doubts about accessing reliable information due to the large amount of hoaxes that are distributed with unclear sources of truth (Juditha, 2020).

Furthermore, the public still does not know how long this pandemic will end (Putri, 2020), where the number of positive cases of COVID-19 cannot be predicted and could increase again at any time (Li et al., 2021). In addition, understanding of this disease is still limited and the available treatments and vaccines are less effective. This condition makes people feel uncertainty, as shown by the results of Durodié's research (2020). Uncertainty is something that arises from ignorance or is considered as a lack of information at the level of consciousness (Carleton, 2016). In the face of the uncertainty of the COVID-19 pandemic, individuals generally tend to give negative psychological responses such as feelings of fear, anxiety, and stress (WHO, 2020). However, according to Taylor (2019), a person's psychological reaction to a pandemic is a complex thing, ranging from feeling stressed to being resilient, or in some people even feeling very distressed.

According to Greco dan Roger (2003), the response to uncertainty can be explained in three dimensions, namely emotional uncertainty which is a maladaptive response such as psychological distress. Individuals who respond emotionally will show anxiety, sadness, high levels of neuroticism, low self-esteem and inability to handle stressful situations. The next dimension is cognitive uncertainty which shows a response to uncertainty by planning, classifying and gathering information as a strategy to reduce uncertainty. Another dimension is the desire for change which shows the individual's response in the form of enthusiasm to change and live in new experience.

When individuals view uncertainty as a challenge, the individual may have more positive responses that lead to efforts to change and adapt. Casanova et al (2019) stated that the way people deal with uncertainty begins with analyzing how the individual interprets or interprets an uncertainty, then uses strategies that can focus on emotions or problems. A person's difference in dealing with an environment of uncertainty is also associated with the extent to which individuals feel confident in their ability to cope with uncertainty (Pushkarskaya & Usher, 2010). A person's belief in his ability to be able to produce something is a belief in a sense of ability which is in accordance with the theory of self-efficacy from Bandura's (1997). Meanwhile, Chesney et al (2006) focused on how a person's confidence in his ability to deal with a problem effectively.

Previous research found a link between coping self-efficacy and psychological distress among survivors of partner violence (Lambert et al., 2013); among nurses (Pisanti, 2012); and among disaster survivors (Benight, 2000). The higher a person's coping self-efficacy, the problem-solving orientation will focus on handling the task rather than being emotionally oriented (Kraij, 2002).

Previous studies have discussed the relationship between coping self-efficacy and uncertainty responses such as during the entrepreneurship process (Engel et al., 2014). In addition, some researches focus on intolerant responses such as in academic settings (Ujun & Karataş, 2020). However, the response to uncertainty in a disaster situation is a different matter and needs to be studied separately because the response to the situation is unpredictable or unprecedented (Etemad, 2020). Therefore, the researcher aims to determine the relationship between uncertainty responses and coping self-efficacy in the COVID-19 pandemic. This research is important to gain an understanding of individual reactions in the face of uncertainty due to COVID-19 so that it is expected to help individuals manage their emotions, thoughts, and actions.

**METHOD**

The research method used in this study is quantitative research method with a correlational design to determine the relationship between the two variables. Data was collected from the results of self-report of research measuring instruments using Google Forms distributed through WhatsApp Group or social media. The participants in this study were people in the province of West Sumatra who were at the stage of adult development (M = 27 years). The population in this study are people in the province of West Sumatra. The sampling technique was done by quota sampling, by setting a sample limit based on Cohen's approach about the number of samples originating from an unknown population (N = 204, women = 146 people and men = 58 people).

**Research Instruments**

The two measuring instruments in this study have been adapted from the original scale with adjustments in the context of language and culture. The steps taken are back translation,
professional judgment and testing of measuring instruments. The research scales used after the trial are explained below.

The Uncertainty Response Scale

This scale was developed by Greco dan Roger (2001) and consists of 48 items distributed in three factors. The first factor is the emotional uncertainty with 15 items (reacting to uncertainty with anxiety and sadness, which is considered as pressure, $\alpha = 0.89$) with the example of the item such as "I feel anxious when facing this uncertainty condition". The second factor is cognitive uncertainty with 16 items (as the need to plan, clarify and collect information to reduce uncertainty, $\alpha = 0.85$), with the example item "when faced with uncertainty, I will act very carefully until I get clear information regarding the situation". The third factor is desire to change (as a feeling of pleasure and desire for change, $\alpha = 0.90$), with the example of the item "I can easily adapt to new things". This scale uses a four-point Likert scale response format i.e. never, sometimes, often, and always.

Coping Self-Efficacy Scale

This scale was developed by Chesney et al (2006). This scale consists of 26 items ($\alpha = 0.963$) which contains self-confidence to overcome a problem and threat. Research participants will be asked when something makes him or her uncomfortable, or when her or she has a problem, how confident a person is when he or she is able to do a certain task. The person will be asked to rate it on 10 points which he or she believes he or she can do. The behaviors that are important in dealing with problems such as asking them to rank what can be changed and what cannot be changed, sorting unresolved problems into small parts, being able to see the good in a negative situation, and getting emotional support from friends, friends and family. The scale points are 0 (cannot do it), 5 (half sure can do) and 10 (sure can do). The overall score of coping self-efficacy is generated by adding up the rating item scores that have been obtained.

Data Analysis Techniques Data processing was carried out statistically using the software called Statistical Package of Social Science (SPSS) version 23.0 for MacIntosh computer. Data processing will see the relationship between the response variable to uncertainty and coping self-efficacy. Likewise, to find out some of the demographic differences of coping self-efficacy on uncertainty responses. In this study, the assumption test will be carried out first in the form of a normality test (one sample Kolmogorov–Smirnov) and a linearity test. The researcher then compiled and analyzed the data from the psychological scale using the Pearson Product Moment correlation method to test each dimension of the response to uncertainty with coping self-efficacy.

RESULTS AND DISCUSSION

Descriptive Analysis

Overview of Research Subjects
In this study, the average age of the subjects was 27 years which was included in the category of adult developmental period. The following is a description of the research subjects by gender and level of education.

Table 1. Overview of Research Subjects

<table>
<thead>
<tr>
<th>Overview of</th>
<th>Number (Persons)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58</td>
<td>28.4</td>
</tr>
<tr>
<td>Female</td>
<td>146</td>
<td>71.6</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100%</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2 (Master)</td>
<td>33</td>
<td>16.2%</td>
</tr>
<tr>
<td>S1 (Undergraduate)</td>
<td>128</td>
<td>62.7%</td>
</tr>
<tr>
<td>D3 (Associate Degree)</td>
<td>6</td>
<td>2.9%</td>
</tr>
<tr>
<td>SMA (High School)</td>
<td>37</td>
<td>18.1%</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100%</td>
</tr>
</tbody>
</table>

Description about Response to Uncertainty

The description about response to uncertainty is explained in each aspect, namely (1) emotional uncertainty i.e. reacting to uncertainty with anxiety and sadness, considering it as pressure; (2) cognitive uncertainty or cognitive uncertainty i.e. the need to plan, clarify and gather information to reduce uncertainty), and (3) desire for change or desire to change i.e. feelings of pleasure and desire to face change) (Greco and Roger, 2001).

Table 2. Description of Response to Uncertainty

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Total (People)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Uncertainty</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>36</td>
<td>17.6</td>
</tr>
<tr>
<td>Low</td>
<td>168</td>
<td>82.4</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Cognitive Uncertainty</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>177</td>
<td>86.8%</td>
</tr>
</tbody>
</table>
Based on the data obtained, the emotional uncertainty among the research subjects was in the category of low for 82.4% and high for 36%. A higher frequency indicates that the uncertainty caused by COVID does not elicit a response in the form of high anxiety and sadness and can still manage the emotions felt when faced with uncertainty. Furthermore, the response to cognitive uncertainty which is in the high category is 86.84 and the low is 13.2%. This shows that most of the subjects did planning, searching for information, and clarifying information. Third, the desire for change or a strong desire to deal with change is generally in the high category, i.e. 65.7% of the subjects showed enthusiasm to make changes and face change, while 34.3% were not excited to face change.

Overview of Coping Self Efficacy

The description of coping self-efficacy is described in 2 categories, namely high and low. High Coping Self Efficacy indicates that individuals feel confident that they are able to overcome problems, feel able to control their emotions, and believe that they have support from various parties when faced with problems (Chesney et al., 2006). On the other hand, low coping self-efficacy indicates lack of confidence in one's ability to deal with problems and uncertainties. Based on the processed research data, it can be seen that most of the research subjects have high coping self-efficacy, which reached 81.4%.

<table>
<thead>
<tr>
<th>Overview of</th>
<th>Number (Persons)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>166</td>
<td>81.4</td>
</tr>
<tr>
<td>Low</td>
<td>38</td>
<td>18.6</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100%</td>
</tr>
</tbody>
</table>

Inferential Analysis

Correlation between Emotional Uncertainty and Coping Self-Efficacy

The correlation Pearson test was conducted to see the relationship between variables emotional uncertainty and coping self-efficacy. The results showed that there was a significant
negative relationship between emotional uncertainty and coping efficacy, $r = -0.411, p < 0.001$. The correlation coefficient indicates the strength of the relationship between both variables in the medium category or in the middle level.

Correlation between Cognitive Uncertainty with Coping Self Efficacy

A Pearson correlation test was conducted to see the relationship between the variables of cognitive uncertainty with coping self-efficacy. The results showed a significant positive relationship between emotional uncertainty and coping self-efficacy, ($r = 0.454, p < 0.001$. This indicates that the higher the tendency of individuals to plan, collect and clarify information as a form of response to reduce uncertainty the higher the individual's self-confidence that he or she is able to overcome the uncertainty situation. Conversely, the greater the individual's self-confidence in his or her ability to overcome all problems, the higher his or her tendency to respond to these problems by involving cognitive processes. The correlation coefficient shows that the strength of the relationship between the two these variables are in the medium or medium category.

Correlation between Desire for Change and Coping Efficacy

The correlation Pearsontest was conducted to see the relationship between the variable desire for change and coping efficacy. The results showed that there was a significant positive relationship between desire for change and coping-efficacy, $r = 0.357, p < 0.001$. This indicates that the higher the spirit and enthusiasm of individuals when facing change, the greater their confidence in facing uncertainty. Conversely, the greater the individual's sense of self-confidence in his ability to overcome all problems, the higher his enthusiasm and enthusiasm in dealing with changes as a result of the uncertainty. However, in contrast to the relationship between the two aspects of the response to previous uncertainty and coping self-efficacy which is in the moderate category, the strength of the relationship in this aspect tends to be weak.

The results of this study indicate that there is a significant negative relationship between coping self-efficacy and emotional uncertainty, which means that the higher one's coping self-efficacy, the lower the emotional response to uncertainty. This was also found in several previous studies which showed a negative relationship between coping self-efficacy and psychological distress, such as emotional exhaustion and somatic complaints (Pisanti, 2012); anxiety and depression (Benka et al., 2014; Jones et al., 2011); and numbness (Benight et al., 2000).

This can be explained by Bandura's theory (1997, 1999) which states that a person will tend to act according to the level of ability he believes. When he or she feels capable, then his or her attention will focus on the efforts and actions that can be taken to solve the problem. In addition, he or she will feel that he or she is in control of the situation at hand so that it will create a feeling of security and not pressure. Conversely, when a person feels unsure of his or her abilities, he or she loses control of the situation. This can lead to anxiety and various other negative emotions.
Furthermore, the research results show that there is a significant positive relationship between coping self-efficacy and cognitive uncertainty. This shows that the higher a person’s belief in his ability to solve a problem, the greater his effort to plan, clarify and collect information to reduce uncertainty. The relationship between coping efficacy is also found in several research results such as the ability to plan and consider the risk of impacts that will occur in the future (Azizli et al., 2015); individual functioning in determining appropriate behavioral choices, seeking various problem-solving efforts with persistence (van der Bijl & Shortridge-Baggett, 2001); success in carrying out planning when faced with challenges (Preffer & Strovach, 2018); maintaining effort in a longer time span until successfully achieving goals, never giving up, and developing good planning and strategies (Shane et al., 2003); able to make efficient problem solving strategies (Hoffman, 2010).

Bandura (1999) suggests that when a person feels confident and believes in his or her ability to deal with various situations, including threatening situations, the individual will interpret it not as a threat but as a challenge. This causes the process of organizing thoughts, to be more effective cognitive restructuring, and problem solving exploration. Furthermore, the individual will be committed to implementing the results of his thoughts to the fullest. In addition, Pintrich (2000) states that self-efficacy acts as an adaptive emotional belief that can be used to develop problem-solving strategies.

The results also show a significant positive relationship between desire for change and coping self-efficacy. This indicates that individuals who have confidence in their abilities will be eager to face change. Previous research has also found similar associations, such as a desire to gain new experiences and an interest in experimenting (Sánchez-Cardona et al., 2012; Markowska & Wiklund, 2017); adjustment that is consistent with change (Engles et al., 2014); readiness to make changes (Emsza et al., 2016). A person will evaluate changes depending on a personal assessment of his or her competence (Hornung and Rousseau, 2007).

As explained by Bandura's theory (1997), when a person who has confidence in his or her abilities is faced with a new situation, he or she will not focus on the possibility of failure but his or her attention will focus more on what things can make him or her successful in facing the challenges. Therefore, he or she will be more courageous when faced with new situations and show more flexible and adaptive behavior. However, in this study it was found that the relationship between coping self-efficacy and desire for change showed a weak relationship. This can be caused by changes that occur in this study referring to the negative impact caused by the pandemic of COVID-19. The individual's perception of the impact caused by the change will be the initial assessment of the individual that underlies their response to the change, whether he or she will be eager to change or vice versa (Yılmaz & Kılıçoğlu, 2013). Thus, even though he or she has the confidence to be able to deal with change, he or she tends to be less enthusiastic due to the unfavorable impact (Rautiainen, 2017).
CONCLUSION

The results showed that there was a relationship between the response to uncertainty and coping self-efficacy. The response to this uncertainty can be explained through three dimensions, namely emotional uncertainty, cognitive uncertainty, and desire for change. There is a significant negative relationship between emotional uncertainty and coping self-efficacy. Meanwhile, a significant positive relationship was found in the dimensions of cognitive uncertainty and desire for change. However, the three relationships are not in a strong category where emotional uncertainty and cognitive uncertainty are in the moderate category and desire for change shows a weak relationship. Furthermore, in general, coping self-efficacy is in the high category which shows self-confidence to be able to deal with the impact of conditions of uncertainty.

Based on the finding and discussion, some suggestions can be given for future research. Firstly, the future research can collect demographic data or limit the characteristics of participants in order to get a deeper understanding. Secondly, further research can be developed to look at the factors that influence how individuals respond to uncertainty. In addition, the public can be aware about the importance of self-confidence in order to face situations of uncertainty, especially during the pandemic such as confidence to plan and solve problems that occur due to conditions of uncertainty.

REFERENCES


