

# Relationship Locus of Control Towards Psychological Distress of University Students in Pandemic Situation

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## ABSTRACT

In order to prevent students from committing suicide or self-injuring due to psychological distress, the method can be done is knowing the orientation of individual locus of control. This study aims to determine the relationship between locus of control and psychological distress in students during the pandemic. Quantitative type research. Data collection was collected from November 2020 using a questionnaire. This study involved 273 participants. The data processing technique was using the Pearson correlation technique. The results showed a positive relationship between external locus of control (powerful others)  $p < 0.01$ ,  $r = 0.390$  and external locus of control (chance)  $p < 0.01$ ,  $r = 0.335$  with psychological distress. Meanwhile, the correlation between locus of control dimensions of internality and psychological distress showed no relationship  $p > 0.05$ ,  $r = -0.006$ . In other words, individuals who belief that their success is determined by external factors such as lecturers (powerful others), government regulation, thesis (fate and opportunities), will be more vulnerable to psychological distress, whereas individuals who belief that their success is determined by internal factors such as self-efficacy and one's own actions do not determine whether individual was vulnerable or not to psychological distress. The implication of this research is that students are able to recognize their locus of control orientation, so that students can be more alert to their weaknesses and strengths, so as to prevent experiencing psychological distress.

**Keywords:** *psychological distress, locus of control, college students, pandemic covid-19 and thesis*

## 1. INTRODUCTION

In 2020, the corona virus broke out and was declared a pandemic. A pandemic is an epidemic that develops simultaneously in all places, covering a wide demographic area [1]. The pandemic has also resulted in crises in various aspects of life such as work, business, and even education. On the education aspect, the government sets regulations to conduct distance learning, or online study. This condition adds to the challenges for individuals, especially college students.

College students are individuals who undergo a higher education level called a university or college [2]. Students are generally at the age of emerging adulthood, from the transition from high school to university or college [3]. Emerging adulthood is the end of the transition from adolescence to adulthood. Emerging adulthood is the age of 18 to 25 years [4]. Individuals tend to have the urge to find out who they are, what they want to achieve, so they need opportunities to explore their environment and try new things. Although emerging adulthood generally has a positive outlook on life experiences, individuals can experience increased stress at this stage of life, especially when facing uncertainty and chaos [5].

During the transition to adulthood, individuals usually have demands to develop skills and build new relationships both individually and professionally because during this time individuals will face situations where there are various changes, challenges and new situations [6]. One of the new situations is entering the university. In general, students are expected to be able to meet the academic demands of lectures which are much different when they are in school. Therefore, it is not uncommon for college students to experience difficulties in undergoing lectures compared to individuals who do not undergo lectures, due to the lack of academic structure and support which then has a significant impact on academic achievement and hampered relationships with people around them [6] and very vulnerable to psychological distress [6], [7].

Psychological distress often causes self-injury and suicidal behavior [8], [9]. Davis et al. [10] stated that suicide often occurs among students caused by psychological distress. There is a finding that depression, anxiety significantly and positively predict an individual to have strong suicidal thoughts and other risky behaviors [11]. Psychological distress is caused by psychological pressure and pressure in life [12], which are commonly referred to as stressors. With the threat, the fight-or-flight response becomes active, causing psychological distress [13], [14]. So it can be

concluded that stressors can be predictors of psychological distress. The way individuals respond to stressors can be seen through the locus of control.

Locus of control (LoC) was first described by Julian B. Rotter in 1954 [15]. Locus of control is an individual's standard of belief in responding to events that occur in his life. The theory of Julian B. Rotter was then added by Hanna Levenson into three dimensions, namely internal, powerful others, chance. This change lies in the external locus of control which is divided into two, namely powerful others and chance [16]. However, the relationship shown is not always consistent. There are two hypotheses in this study, the first is that there is a positive relationship between external locus of control and psychological distress. Second, there is a negative relationship between internal locus of control and psychological distress.

### **1.1. Related Work**

Kurtović et al. have conducted these two variables. [6] whose results state that external locus of control is more predictive of depression, anxiety, and stress, and internal locus of control is negatively correlated with depression, anxiety, and stress. In addition, the same thing was found in the study of Holder and Levi [17] which showed that individuals with internal locus of control had lower levels of psychological distress. Other studies have also shown that internal locus of control is negatively correlated with depression, while external locus of control is positively correlated with depression [18]. However, there are differences in the study of Jiménez et al. [19], who found that internal locus of control was positively correlated with depression and anxiety, which means that high internal locus of control can be associated with high depression and anxiety as well.

### **1.2. Our Contribution**

This research was conducted during the pandemic, which has never been done by other researchers on these two variables. Based on some of these studies, it shows that there is a relationship between the two variables. However, the relationship shown is not always consistent. So researchers are interested in examining the link between locus of control and psychological distress carried out on students during the pandemic.

### **1.3. Paper Structure**

The rest of the paper is organized as follows. Section 2 introduce the preliminaries used in this paper, which include psychological distress and locus of control. Section 3 presents a contribution and novelties from previous research. Section 4 presents a summary of the structure of the contents of this paper. Section 5 explain the definition of the variable, explain the result of the study and compare it with previous research. Finally, section 6 concludes the paper and present direct for future research.

## **2. BACKGROUND**

Psychological distress is a psychological or maladaptive stress on psychological functioning caused by stress in life [12]. Psychological distress has three dimensions, namely depression, anxiety, and stress [7], [20]. Depression according to Lazarus [21] is a complex emotional stress and is dominated by feelings of sadness, anxiety, anger, and guilt. According to Fernandes et al. [22], anxiety is considered a common mental disorder, but it can also develop into a pathological disorder. According to Fink [23] stress in behavioral sciences is emotional tension, discomfort and difficulty adapting as a response or individual perception of threats.

Research conducted on first-year students at 19 universities spread across eight countries, reported that about one-third of them experienced at least one of the criteria for a common disorder in the DSM-IV (Diagnostic and statistical manual of mental disorders), such as anxiety, mood, or substance disorders [24]. In addition, research by Shamsuddin et al. [25] in Malaysia, found that 506 university students showed symptoms of depression, anxiety, and stress as much as 37.2%, 63.0% and 23.7%, respectively. Psychological disorders usually also cause thoughts of suicide. The results of a study conducted by the Associated Press and mtvU in 2008 found that approximately 40% of college students across the United States reported feeling frequently stressed and another 10% reported having suicidal thoughts [26].

Emerging adulthood students are generally quite potential to experience depression, anxiety or stress due to new university situations, new ways of socializing, and other demands, even thoughts of suicide. However, with the pandemic conditions that cause additional changes in life, especially in the way of learning and socializing, the potential for emotional disturbances in students increases. This statement is supported by the results of research conducted by the University of Padjadjaran (UNPAD) on 1,465 students throughout Indonesia, showing that 47% of students experienced depressive symptoms during the corona pandemic [27]. Then the results of research by Cao et al. [28] showed that of the 7143 student participants at Changzhi Medical College in China, there were a total of 24.9% of students experiencing anxiety, of which 21.3% experienced mild anxiety, 2.7% experienced moderate anxiety, and 0.9% severe anxiety (severe anxiety) during the pandemic.

Psychological distress often causes self-injury and suicidal behavior [8], [9]. Data from research in China reported that 40.7% of students reported experiencing psychological distress. And 40.8% of suicidal behavior occurred in students who reported having moderate or high depression, while suicidal behavior in students who reported having no symptoms of depression was 4.1% [29]. In order to decreased number of suicidal behavior and prevented suicidal behavior, it is necessary to identify students who experience psychological distress.

Psychological distress is caused by psychological pressure and pressure in life [12], which are commonly referred to as

stressors. Stressors are all situations or circumstances that are considered threatening [13]. With the threat, the fight-or-flight response becomes active, causing psychological distress [13], [14]. So it can be concluded that stressors can be predictors of psychological distress. The way individuals respond to stressors can be seen through the locus of control. Locus of control (LoC) was first described by Julian B. Rotter in 1954 [15]. Locus of control is an individual's standard of belief in responding to events that occur in his life. There are two dimensions of locus of control, namely internal locus of control and external locus of control. Individuals who believe that events that occur cannot be controlled and are the result of external factors (environment, luck, destiny), this belief called external locus of control. While individuals with the belief that they are in control and all events are the result of themselves (their own actions or behavior, inner character) this belief called internal locus of control [30].

The theory of Julian B. Rotter was then added by Hanna Levenson into three dimensions, namely internal, powerful others, chance. This change lies in the external locus of control which is divided into two, namely powerful others and chance [16]. Levenson added this dimension with the consideration that individuals with external locus of control

who believe in chance or powerful others who are in control of their lives can have different meanings [31]. Individuals with the belief that they do not have control, but are controlled by the environment or external factors (external locus of control) are usually more at risk for depression [32], [18], [33]. In contrast to individuals who believe that they themselves have control over events that occur (internal locus of control) tend to have a healthier mental state [34]. The result analysis of this research was carried out with Statistical Product and Service Solution (SPSS) 15.0 software for windows application. Referring to table 1, it shows that the empirical mean is 17.39 which is smaller than the hypothetical mean, so it means that participants tends to have low psychological distress. Through the results of the processed data referring to table 2, the locus of control internality dimension shows the empirical mean of 35.80, this value is higher than the midpoint value of the measuring instrument or the hypothetical mean, so it means the majority of participants tends to have high internality orientation. In the dimension of powerful others, the empirical mean is 25.56, so it means the orientation of the powerful others tends to be high. In the chance dimension, the empirical mean is 27.01, so it means the chance orientation of the majority of participants tends to be high.

**Table 1** Psychological Distress Data Overview

Variable	Hypothetical mean	Empirical mean	SD
Psychological distress	31,5	17,39	7,802

**Table 2** Locus of Control Data Overview

Variable	Hypothetical mean	Empirical mean	SD
Locus of control (internality)	24	35,80	5,520
Locus of control (powerful others)	24	25,56	8,945
Locus of control (chance)	24	27,01	8,533

Researchers conducted a normality test to determine the correlation technique to be used in this study. Based on the results of the normality test using one sample Kolmogorov-Smirnov, the distribution of psychological distress data on the variable shows a value ( $p = 0.359 > 0.05$ ), which means the data is normally distributed. In addition, the results of the locus of control variables internality dimensions data distribution test ( $p = 0.199 > 0.05$ ), powerful others ( $p = 0.280 > 0.05$ ) and chance ( $p = 0.234 > 0.05$ ) also show that data are normally distributed.

After performing the normality test, it is known that the correlation test technique is the Pearson correlation technique. Through the results of data analysis using the Pearson correlation technique, and referring to table 3, it shows ( $p = 0.923 > 0.05$ ,  $r = -0.006$ ) which means that the locus of control internality dimension is not related to psychological distress. Based on the results of the analysis, it is shown that the second hypothesis is rejected because the data states that there is no relationship between individual internality dimensions and the level of psychological distress. In addition, the results of the data

analysis of the powerful others dimension showed ( $p = 0.000 < 0.01$ ,  $r = 0.390$ ), which means that the locus of control dimension of the powerful others was positively related to psychological distress. It can also be interpreted that the higher powerful others dimension in individual, the higher level of psychological distress. Similar to the powerful others dimension, the chance dimension also shows positive psychological distress ( $p = 0.000 < 0.05$ ,  $r = 0.335$ ), which means that the higher chance dimension in individuals, the higher psychological distress level will be. Based on the results of the analysis, it is stated that the first hypothesis is accepted, meaning that the higher the external locus of control (powerful others and chance), the higher the level of psychological distress.

The discussion from the results of the research analysis are that there is a relationship between external locus of control represented by the dimensions of powerful others, chance and psychological distress.

The locus of control dimension of powerful others shows a significance value of  $p = 0.000 < 0.05$ , and a correlation coefficient value of  $r = 0.390$

**Table 3** Locus of Control Variable Correlation with Psychological Distress

Correlation	Correlation coefficient (r)	Sig. (2 tailed) (p)
Internality – psychological distress	-0,006	0,923
Powerful Others – psychological distress	0,390	0,000
Chance – psychological distress	0,335	0,000

The p-value of significance is less than 0.05, indicating that there is a relationship between locus of control dimensions of powerful others and psychological distress. In addition, the r-value shows positive results, this indicates that there is a positive relationship between powerful others dimensions and psychological distress. Through this relationship, it can be explained that if powerful others dimension of the individual is high, the higher the individual's psychological distress, and vice versa. In pandemic conditions, it can be interpreted that when students believe that lecturers, lecturer regulations, lecturers' teaching methods (powerful others) are in full control or are the only determinants of the achievements, students will tend to be more at risk of experiencing psychological distress.

The results of the correlation between chance dimension and psychological distress showed a significance value of  $p = 0.000 < 0.05$ , and the correlation coefficient  $r = 0.335$ . The p-value of significance is less than 0.05, indicating that there is a relationship between locus of control on the chance dimension and psychological distress. In addition, the r-value shows positive results, this indicates that there is a positive relationship between locus of control on the chance dimension and psychological distress. In pandemic conditions, when students believe that with government regulations (not allow to do activities outside with friends, discuss), are the only things that can determine their happiness, pleasure, or freedom, students will tend to more at risk of experiencing psychological distress.

Based on the explanation above, it is stated that the hypothesis is accepted, namely that there is a positive relationship between external locus of control (powerful others and chance) on psychological distress. These findings are supported by a previous study conducted by Kurtović et al. [6]. In his research, he stated that pandemic conditions, lecturers, online learning, opportunities to meet friends (external locus of control) were more predictive of psychological symptoms in students. These results are supported by the theory which states that individuals who feel they have no control or little control can cause feelings of helplessness and hopelessness so that when they face problems, individuals tend to experience anxiety, depression and are at risk of experiencing other mental problems [35], [32], [6].

Kurtović et al. [6] in his research also reported that internal locus of control had a negative relationship with psychological symptoms in students. While the research results obtained by researchers by conducting a correlation test between locus of control internality dimensions with psychological distress showed a significance value of  $p = 0.923 > 0.05$ , and  $r = -0.006$ . The p value at significance is greater than 0.05, this indicates that there is no relationship between locus of control internality dimension and

psychological distress. It can also be interpreted that students' confidence in their own potential, ability to adapt to pandemic conditions, willingness to ignore distractions when online learning and willingness to apply self-discipline, in determining their success are not related to the level of psychological distress of students. So it is known that the results of this study are not in accordance with the results of previous studies.

The reason for this study is not in accordance with the results of research conducted by Kurtović et al. [6] presumably due to a lack of participants amount. Also, due to pandemic conditions, data collection must be carried out online which results in the potential for individuals to fill out questionnaire items less serious.

### 3. CONCLUSION

Based on the results of the analysis with the mean value, it is known that students psychological distress during the pandemic tends to be low, which means that students feel that they do not experience many psychological distress symptoms. In addition, the data shows that students powerful others dimension and chance tends to be high when compared to the hypothetical mean, but not as high as the locus of control in the internality dimension. This means students tend to respond to problems, events, success or failure by believing that it is the result of their own hard work, and their potential, and few students who respond by believing that it is an fate, presence of a more powerful person or the presence or absence of opportunity. Answering the first research question, the first hypothesis is accepted, namely the external dimension locus of control variable is positively correlated with the psychological distress variable, which means that if students believe that their success depends on outside influences such as fate or the presence of other people who are more powerful, then they are more likely to experience depression, stress, anxiety and depression. The second hypothesis is rejected, namely the locus of control variable internality dimension is not correlated or not related to the psychological distress variable, which means the belief that success can be achieved with self-potential does not affect the high or low stress, anxiety and depression of students.

Suggestions to future researchers who are interested in locus of control and psychological distress variables are to collect more participants, and balance between female and male participants. The researcher also suggested using offline questionnaires instead of online questionnaires to reduce the risk of participants losing focus and seriousness in answering the questionnaires. In addition, further research can also add different categories of participants, such as

university location, which semester they are currently undergoing add the participant's residence status such as living with parents, siblings, living alone, or others. It aims to enrich the analysis of research data.

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