Managing Mental Health and Factors Related to Developing a Productive Workplace for Migrant Workers in Jakarta

by T Herry Rachmatsyah

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Abstract

Mental illness or mental health has significantly increased nowadays, including and not limited to employees in Jakarta. If the factors that affect Mental Health can be identified, better treatment can be made. The aim of this study is to find the right treatment for people in the workplace who are mentally ill, by knowing the factor that mostly affect them and how to manage that in such a manner so that it will not cause more severe illness. Method employed in this study was two step clustering method and then analyzed with regression and classification tree. The variables that characterize the mental health illness are worry, anxiety, sadness, like solitude, swing emotion, crying without reason, live in fantasy, preferring to be alone, inferiority, passion, feel strange, anger, strange voices, lazy, desire to sleep, followed by shadow, and uselessness. By these variables, respondents are categorized into low and high level. The variables that thought affect are gender, parents' marriage, family problems, using gadgets, disappointment, trauma, low economic, extrinsic and intrinsic factors, and smartphone addiction. This study has pointed out that the variable that most influences is disappointment and others are using gadgets, smartphone addiction, low economic, and parent marriage.

1. Introduction

Mental health has becoming a thing that requires attention nowadays. Life challenges are getting tougher, causing many people to experience decreased mental health or even mental illness. From existing observations, psychologists, psychiatrists and counselors accept more patients who need to be consulted. Mental health is a condition in which individuals are aware of their own abilities, can deal with normal stress in life, work productively and produce results, and can also contribute to their surroundings (World Health Organization, 2005). When these things are absent or disturbed in a person's life, it is possible that the individual is experiencing mental health problems.

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2. Literature Review

According to the National Institute of Mental Health (NIMH), mental disorders are defined as disorders that affect mental, behavioral, or emotional states and their effects range from mild, moderate, or even severe damage. In Indonesia, there was an increase in mental disorder patients by 3.8% from 6% in 2013 to 9.8% in 2018 (Indonesian Ministry of Health, Basic Health Research, 2018). The number of people with mental disorders in 2018 is estimated to be experienced by more than fourteen million Indonesians. This is truly matter which requires attention.

Employees who work in big cities, such as Jakarta, must experience the pressure life and hard work. Thus driving a mental health problems. Mental health disorder or mental illness is a health condition that changes a person's way of thinking, feeling, or behave, causing a person to experience difficulty in carrying out their functions in daily routines (National Institutes of Health U.S., 2017). Indications of amental health disorder can be seen from symptoms such as worry, anxiety, sadness, like solitude, swing emotion, crying without reason, live in fantasy, preferring to be alone, inferiority, passion, feel strange, anger, strange voices, lazy, desire to sleep, followed by a shadow, and uselessness. From these variables, mental health groupings of respondents can be made.

There are many things that can affect the mental health level of respondents. The variables that are thought to affect the level of mental health of the respondents are gender, parent marriage, job, family problem, gadget usage, disappointment, trauma, low economic, intrinsic factor, extrinsic factor, and smartphone addiction. If the variables that significantly affect the mental health level of the respondent and also the profile of the mental health level of the respondent based on the variables that significantly affect the mental health level can be identified, then better treatment can be done for respondents who have mental disorders. This will be the primary aim of this study.

The following variables were used in this study.

1.   Mental Health Level, states the severity of a person experiencing mental illness, a health condition that changes a person's mindset, feelings and behavior, causing a person to experience difficulty in carrying out their functions in everyday life (National Institutes of Health, U.S., 2017). It can be difficult to detect whether someone has a mental health disorder, this is because often the changes that occur are not visible from their appearance nor physical appearance (Disabled World, 2019). Therefore, the diagnosis of mental health disorders needs to be done by recognizing the symptoms that occur in each individual (National Institutes of Health, U.S., 2017). In this study the symptoms that arise from mental disorders include worry, anxiety, sadness, like solitude, swing emotion, crying without reason, live in fantasy, preferring to be alone, inferiority, passion, feel strange, anger, strange voices, lazy, desire to sleep, followed by a shadow, and uselessness. From the data of these variables, a Two Step Clustering analysis was carried out to group the respondents into two categories called the low and high level mental health categories.

2.   Gender, is the sexuality of the respondents who were categorized into male and female.

3.   Parent marriage, is the condition of the parent's marriage known by the respondent. This variable consists of harmonic, quarrelling, separated or divorce, and one dies.

4.   Job, is a job that is being carried out by an employee when the survey is conducted. This variable is a categorical variable with the categories of: government employee, private employee, entrepreneur, not working, and others.

5.   Family problem, is the problem that exists in family life such as problems with parents, parent's unemployment, death of a family member, domestic violence, financial

problems, illness, and so on. This variable is categorized into "yes" and "no". If the respondent feels disturbed due to family problems, the respondent will answer "yes". Whilst, if they do not, then they will answer "no".

6.   Gadget usage, is the duration the respondent uses gadget in a day. This is a categorical variable consisting of < 3 hours a day, > 3 - 5 hours a day, > 5 - 8 hours a day, and more than 8 hours a day.

7.   Disappointment, is the opposite of optimism, hopeful anticipation, and joy. Someone feels disappointed when something they've hoped for or expected doesn't occur (Cox, 2020). This variable is a categorical variable with the "yes" and "no" categories. If the respondent feels disappointed, the respondent will answer "yes". Whilst, if they do not, then they will answer "no".

8.   Trauma, is a painful event that can have different effects if experienced by different people. Some people can take important lessons from there and the rest are at risk of feeling the negative emotional impact that is hard to forget (Lewis & Young, 2019). This variable is a categorical variable with the "yes" and "no" categories. If the respondent feels that they have experienced a traumatic event, then they will answer "yes". Whilst, if they have not, then they will answer "no".

9.   Low economic, according to the Central Bureau of Statistics (BPS), the low income group is if the average income is below than IDR 1,500,000.00 per month. Individuals belonging to low economic groups are individuals who tend to be unable to make ends meet or have less income than society in general. This variable is a categorical variable with the "yes" and "no" categories. If the respondent has an income of less than 2 million / month, the respondent will answer "yes". Whilst in contrary they will answer "no".

10.   Extrinsic and Intrinsic religion factor, is defined as a means of achieving some self-serving end, as a tool that promotes social support, comfort and self-esteem, whereas intrinsic religion is defined as being an ultimate end in itself, for those involved in this type of religion. These people are mainly encouraged by a promise for personal spiritual development and for a deeper, more meaningful relationship with God (Mibtadin, 2023). Intrinsic orientation refers to a mature form of religious feeling which serves as the main motivation and drives for the individual's way of life, while extrinsic orientation refers to immature faith that enables the achievement of selfish goals (Trinka, 2020). These two variables are measured by a Likert scale using the measurement of the "Age Universal" I-E Scale.

11.   Smartphone addiction, is the tendency for individuals to become attached to smartphones. It can be said that individuals who experienced smartphone addiction cannot live without a smartphone. This variable is measured with a Likert scale using the MOBILE PHONE PROBLEMATIC USE SCALE measurement.

Based on the above background, this research has the following objectives.

a.   Analyze the description of the Mental Health Level of DKI Jakarta employee based on the symptom of the respondents

b.   Analyze the profile of the DKI Jakarta employee's mental health level based on some demographic variables

3. Methodology

1.   Population and samples

The population of this study is employees in DKI Jakarta. 272 Samples were taken using the online snowball sampling method using google-form.

2.   Two Step Clustering is a method for classifying respondents into several groups based on continuous variables or categorical variables. Grouping is carried out based on the Log Likelihood distance. The optimal number of groups is calculated based on the BIC value. The optimal number of groups is the group that has the greatest BIC value

3.   Regression and Classification Tree

The classification tree is used to see which variables most influence the dependent variable and also other variables that also affect the dependent variable. In the classification tree, the dependent variable is a categorical variable. From the classification tree, the respondent's profile can be searched for each category of the dependent variable. The classification tree is composed of nodes and branches. The nodes in the classification tree are divided into three parts, namely the root node, the intermediate node, and the terminal node. The root node is where the classification process begins. Each node will divide into more homogeneous nodes based on certain variables. The division of a node makes the resulting node more homogeneous than the initial node. To determine which variable is best for splitting, in the sense that the resulting node is the most homogeneous, it is done using the Gini Index. The Gini index values range from 0 to 1. The next step is to calculate the goodness of split criteria from the classification tree using values. Suppose a node of t, by the variable of s, splits into two nodes, namely the right node (R) and the left node (L).

4. Results and Discussion

1.   Reliability and Validity

Some of the variables used in this study are continuous variables measured by a Likert scale. Because it is necessary to evaluate the reliability and validity of items from the indicator variables. The variables are Extrinsic, Intrinsic and Smartphone Addiction. The Cronbach Alpha coefficient for Extrinsic is 0.527, Intrinsic is 0.813, and smartphone addiction is 0.890. From these results all measuring instruments are reliable. With the Spearman correlation, it was found that all indicators for Extrinsic, Intrinsic and Smartphone Addiction are item valid.

2.   The formation of the Health Mental Level group was based on these variables: worry, anxiety, sadness, like solitude, swing emotion, crying without reason, live in fantasy, preferring to be alone, inferiority, passion, feel strange, anger, strange voices, lazy, desire to sleep, followed by shadow, and uselessness. The method used is Two Step Clustering and the following results are obtained.

Clusters

Input (Predictor) Importance
▮ 1.0 ▮ 0.8 ▮ 0.6 ▮ 0.4 ▯ 0.2 ▯ 0.0

Cluster	2	1
Label		
Description		
Size	53.3% (145)	46.7% (127)
Inputs	OftenWorry Yes (72.4%)	OftenWorry No (98.4%)
	Anxiety Yes (52.4%)	Anxiety No (100.0%)
	OftenSad No (54.5%)	OftenSad No (96.9%)
	LikeSolitude Yes (66.9%)	LikeSolitude No (81.1%)
	SwingEmotion No (50.3%)	SwingEmotion No (91.3%)
	CrayingWithout Reason No (60.7%)	CrayingWithout Reason No (96.9%)
	LiveInFantacy No (63.4%)	LiveInFantacy No (96.1%)
	Quite No (64.8%)	Quite No (95.3%)
	Inferiority No (50.3%)	Inferiority No (85.0%)
	Passion No (76.6%)	Passion No (100.0%)
	FeelStrange No (71.7%)	FeelStrange No (97.6%)
	Anger No (64.1%)	Anger No (92.9%)
	StrangeVoice No (77.2%)	StrangeVoice No (98.4%)
	Lazy No (73.1%)	Lazy No (96.1%)
	MoreSleep No (68.3%)	MoreSleep No (90.6%)
	FeelUseless No (80.7%)	FeelUseless No (96.9%)
	FoolowedbyShadow No (81.4%)	FoolowedbyShadow No (96.9%)

Figure 1 Two Step Clustering

From the results of Two Step Clustering, it was found that respondents could be grouped into 2 groups based on their mental health symptoms. From the results, Group 1 will be called the group with high mental health and group 2 will be called the group with low mental health.

The frequency description for the low-level mental health group was 53.3% and the high-level mental health group was 46.7%.

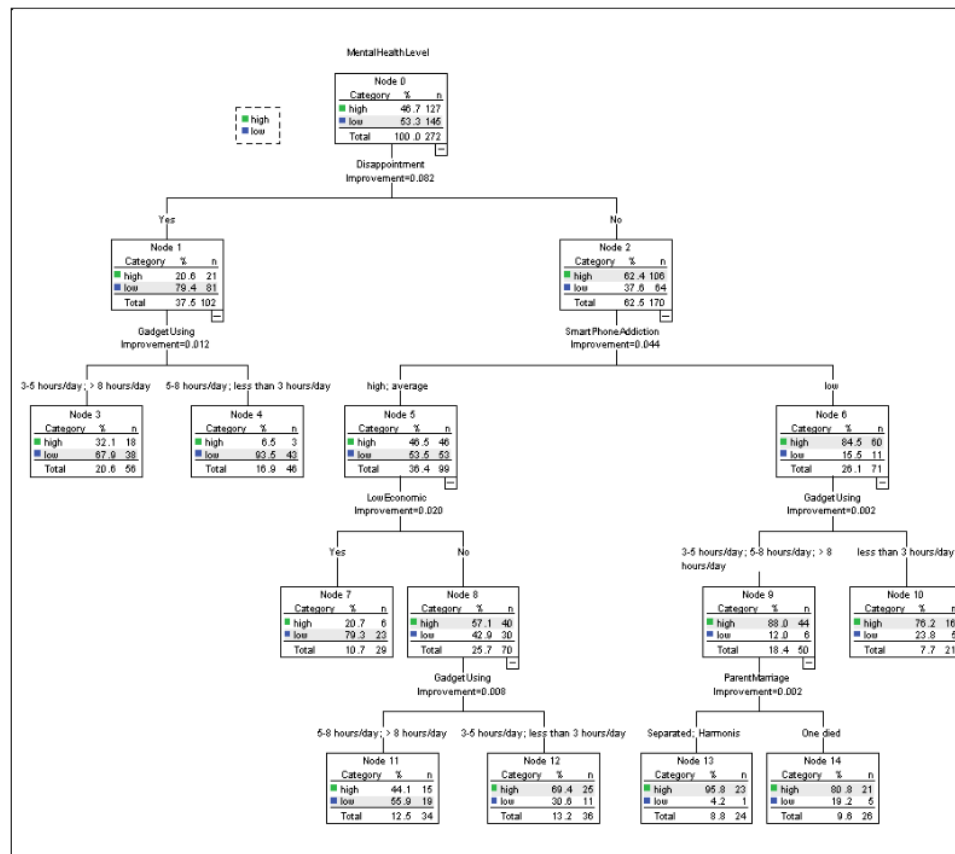3. The classification tree resulted is as follow:

Figure 2 Classification Tree

From the classification tree, it is found that the variable that most influences Health Mental Level is Disappointment. Respondents who have a disappointment will have low levels of mental health, whilst those who do not experience disappointment will have high mental health.

Other variables that affect mental health levels are using gadgets, smartphone addiction, low economic, and parents' marriage.

Profiles of respondents with low mental health (experiencing mental disorders) are:

•   Experienced of disappointment

•   Did not experience disappointment, mid or high level of smartphone addiction, and from low economic family background

•   Did not experience disappointment, mid or high level of smartphone addiction, originally not from low economic family background, and gadget usage duration of more than 5 hours a day.

In this study, it was found that the most dominant factor causing a decline in one's mental health was the disappointment factor. Disappointment is a behavior, condition, or mental state that can cause negative feelings or emotions that can impact a person's mental health (Maramis, 2009). One of the causes that can trigger the increase of disappointment in a person is the difference between expectations and reality. Employees who work in big cities, including in DKI Jakarta, certainly have high hopes for several things, including high income, promising career paths, office scholarships for further studies, and other expectations. But in reality, these expectations can be different, where income does not increase significantly, career paths are held back, there is no further education support, etc. can disturb moods and thoughts and have an impact on one's mental health.

Disappointment is the most dangerous symptom of the soul because it fundamentally attacks one's mind and soul. This condition can create pressure, depression, or a decrease in one's mental health (WHO, 2012). This mental condition will affect many things, including decreased physical health, lack of morale, being unproductive, lots of negative thinking, and other negative behaviors. Thus, disappointment is the most crucial mental symptom that can destroy the entire human condition or condition, including the employees at work. On the other hand, it was also found that someone who has no disappointment, but has medium and high levels of smartphone addiction, and comes from a family with low economic conditions can experience mental disorders. Thus, a person's mental health can also be affected by two other things, namely smartphone addiction and low economics condition. Smartphone addiction can trigger a decline in one's mental health (Meita et al., 2019). Smartphone addiction is a symptom of a person's soul in the form of anxiety or fear of losing or living without a smartphone. In other terms it is called nomophobia. A person who has smartphone addiction mental symptoms seems to have no other world and will be mentally disturbed when they lose their smartphone. By owning a smartphone, they owns their social world, gets various information, builds friendships, forms networks, even their sex life. The results of other studies also concluded that smartphone addiction is associated with psychiatric symptoms, such as somatization, sensitivity, depression, anxiety, aggression, phobias, and psychosis (Alavi S.S. et al., 2011). With smartphone addiction, a person invests most of their time surfing in cyberspace not in reality.

Mental health can also be caused by low economic conditions or family circumstances. Low income and high family needs are a combination of problems that have an impact on mental health. Economic and mental health aspects are interrelated (Knapp & Wong, 2020). The economy refers to the activities of production, distribution and consumption, both in the form of goods and services. When a person has low ability in the economic aspect, there is a disruption in their consumption activities and this situation can cause fear, anxiety, and worry that can have an impact on a person's mental health. Employees who have low incomes tend to experience mental health problems, due to disruption of consumption aspects and other economic problems. Thus, mental illness can affect employees who have no disappointment, but have medium and high levels of smartphone addiction, and come from low economic families background.

This study also found that someone who is without disappointment, but has medium or high level smartphone addiction, does not come from a low economic family, and gadgets usage of more than 5 hours a day will be affected by mental disorders. Technology is used to facilitate human work, including gadgets. Some devices that can be categorized as gadgets are cellular phones, laptops, tablets, digital cameras, and headphones. Tools that are categorized as gadgets in the modern world are necessities that must be owned. However, when the use of these gadgets exceeds the time, it can cause stress in the form of mental illness.

Gadgets are electronic items that can affect the human body, one of which is vision. Almost all electronic devices emit radiation to varying degrees. The light emitted by gadgets and caught in the eye for a long time has an impact on eye health, brain, nerves, and causes depression, especially when it is used at night (Krishnan, 2014). In addition, prolonged use of gadgets can disrupt a person's social life. They feel more comfortable interacting with gadgets, rather than the humans around them. They can be an antisocial human, does not care about their environment, and does not pay attention to their own health. These factors are part of the decline in one's mental health from the aspect of excessive use of gadgets. Employees who work in offices in the millennial era cannot be separated from using gadgets for a certain length of time. Jobs that require the use of technology to complete the job. However, it is necessary to pay attention so that the usage time can be adjusted in such a way. Therefore, to maintain mental health, every employee must be disciplined in using gadgets in all work activities. Thus, employees who are without disappointment, but have medium or high level smartphone addiction, do not come from low economic families, and use gadgets for more than 5 hours a day may be exposed to mental illness.

5. Conclusions

This study shown that 53.3% of respondents who are employees in Jakarta have a low level of mental health and 46.7% have no problem with mental illness. The variables that most influence mental illness are disappointment, and other factors that also affect mental illness are smartphone addiction, low economy, and duration of gadget usage. The profiles of employees who have mental illness include respondents who have disappointments or do not have disappointments but have medium or high smartphone addiction and come from low economic families. Other mental illness profiles are respondents who have no disappointment, medium or high smartphone addiction, do not come from low economic families but have a duration of gadget usage of more than 5 hours a day.

Based on the conclusions of this study, the researchers submitted several suggestions related to mental health with disappointment factors, smart phone addiction, low economics, and the duration of gadget use as follows.

1.   Have positive and realistic thoughts about all life events. Realistic and positive thinking will prevent employees from being exposed to mental illness. If what is expected is different from reality, then stay optimistic so that you have the enthusiasm to face life in the future.

2.   Smartphones are useful for helping work processes to be faster, more efficient, and effective. However, smartphones can also be used for other things, such as entertainment, recreation, and time killing activity. Employees must be able to sort wisely in terms of using these technological tools in order to avoid the stress of mental illness.

3.   Employees must optimize and develop their potential in order to have a positive influence on their career and welfare income. By having the potential and capacity that continues to grow, employees will have the opportunity to fill better job opportunities and of course their income will increase. So, that by having higher income can prevent them from the stress of mental illness.

4.   The use of various gadgets, such as laptops, tablets, and so forth in a work environment is a must. However, to avoid stress on the mental, the usage duration must be arranged in such a way and with high discipline. Employees who can discipline themselves in the context of gadget usage time will maintain their mental health.

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