

The Important of Youth Mental Well-being in the 4.0 Era

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Abstract: Mental well-being is an integral part of people's health. Mental well-being helps an individual to deal with emotions and overcome pressures of life, work productively, and able to contribute to the communities. This study aimed to seek the level of mental well-being in Aceh Province, Indonesia. The quantitative methods with survey techniques have been carried out on 400 Aceh youths (87 males and 313 females) using The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) to assess the level of mental well-being. Data analysis used descriptive statistics and the Chi-Square Test of Independence, the result shown that 66.3% (N=265) of Aceh youths were in high mental well-being which was satisfied in life, having a positive psychological function, self-acceptance, and have good relationships with others. It is also assumed that people with good mental well-being indicate the fulfillment of eudaimonic and hedonic aspects in their life.

1 INTRODUCTION

Indonesia has been entering the new globalization era called as Industrial Revolution 4.0 (4IR), which refers to a new phase in the industrial revolution that marked by the increasing connectivity, interaction, and other resources as the result of information and communication technology advancement in human life. According to Shwab (2016), the world has experienced four phases of revolution and the current revolution is Industry 4.0 which takes place in the 2010s through artificial intelligence and the internet of thing as the foundations of human and machine movement and connectivity. Industrial revolution 4.0 brings revolution on thinking way, life-changing, and fundamental connectivity to each other (Prasetyo & Trisyanti, 2018). Crnjac, Veža, & Banduka (2017) also mentioned that the development of science and technology in the 4.0 industry revolution one of which focuses on internet connection in every aspect of human life. Many people are not aware of those changing yet, in fact, those become challenges for youths (Kompasiana, 2019). In the industrial revolution era of 4.0, many challenges opposing people to keep moving quickly to follow the changes (Christensen; Riswandi, in Setiawan, Suud, Chaer, & Rahmatullah, 2018).

In the era of Industrial revolution 4.0 (4IR), the 4IR can bring advantages to certain areas in the aspect of life, make changes to people's lives, work,

also communication. Henceit will be a worrying time for the incoming generation because many of the jobs will become obsolete. The youth generation which is X and Y generations may survive the revolution, but generation Z and the following generations will face challenging times. Youth generation need to be prepared to adapt to the changes brought by the industrial revolution 4.0 (Talip, 2019). Specifically, in the rules of Indonesia's Law, the classification of ages of youth in Indonesian are 16-30-year-old (UU RI, 2009; Stancioiu, 2017).

Youths are more able to adapt quickly, inexpensively, sophisticatedly, openly in work fields to reach the company's target (Stancioiu, 2017; Setiawan, 2018). They become encouraged to gain a reward, ambitious, and brave to take a risk in working (Setiawan, 2018). According to the Global Youth Well-being Index (2017), youths in Indonesia like to be involved civically, yet the demand to have more access to technology and employment opportunities. On the other side, happiness is still a preference for each individual to have a more meaningful life. Happiness will be easy to have if reward in work meets expectations (Mackayova & Balazova, 2011). According to the term "happiness", Seligman (2002) mentioned that happiness is part of well-being, but the theory of well-being is more than happiness itself, it involves mood, mind, and meaning of life. According to the World Happiness

Report, the happiness index in Indonesia increases for 4 levels to be at the 92nd rank in the world in 2019 (Suwiknyo, 2019). Also, the Indonesia Central Bureau of Statistics (BPS) mentioned the level of happiness in Aceh in the 13 of 34 provinces in 2017 and also finds that people under 24-year-old have a higher happiness index than adults (BPS, 2017; Dariyanto, 2018). According to the Global Youth Well-being Index, Indonesian youths' well-being stood at 10 of 30 namely Australia, Sweden, Turkey, Thailand, Nigeria, and so on.

Well-being is living healthily and making a good daily decision (Nainggolan, 2018). Nowadays, well-being is also known as mental well-being which aims to increase the number of good-mental people and help individuals with mental disorders or depression, but not measure ones' depression (Warwick Medical School). Mental well-being has two perspectives, happiness and life meaningfulness (hedonic), it also consists of positive psychological functioning, good relationships with others and self-realization/ acceptance (eudaimonic) (Ryan & Deci, 2001). Mental well-being results in positive consequences in health and social cost and becomes preventive programs on the community (mental well-being). Mental well-being is a positive aspect of mental health.

Mental wellbeing and mental health are defined differently. 'Mental wellbeing' is defined as positive states of being, thinking, behaving and feeling, while 'mental health' is described as a condition from good mental health to bad mental health problems. Mental wellbeing is usually called 'positive mental health' or 'wellbeing' (Putz, et al, 2012). According to previous research, it is known that some factors could affect the level of an individual's mental well-being. Therefore, the researchers in this study aim to know more about the level of mental well-being in the industrial revolution 4.0 era on youths in Aceh. Besides, the researchers intend to know whether demographic data (sex, age, employment status, marital status, education, and religion) of the subjects correlates with the level of mental well-being of youths in Aceh.

2 LITERATURE REVIEW

2.1 Industry Revolution Era 4.0

The concept of Industry revolution 4.0 has its origins in Germany and has been recognized by other leading industrial nations, although it is known as "Connected Enterprise" in the United States and the

"Fourth Industrial Revolution" in the United Kingdom. In any case, Industry 4.0 is built on three preceding technological transformations: steam power, which was the transformative force of the nineteenth century; electricity, which transformed much of the twentieth, and the era of the computer beginning of the 1970s (Cordes & Stacey, 2017). Industry revolution era 4.0 is related to what is called the "smart factory" (Dutton, 2014). Also, physical systems can cooperate and communicate with each other and with humans in real-time, all enabled by the IoT and related services.

2.2 Mental Well-being

Mental well-being is defined as a positive form of mental health. Those who have mental well-being will feel good and act well. There are other calls of mental well-being namely positive mental health and flourishing. Two things that could influence the condition of mental health, namely external condition and the response of an individual toward it. Those with mental well-being will respond to demanding conditions from outside themselves with patience hence overcoming it. The conditions from outside or called external circumstances are various which results in the change of mental well-being. Ryan and Deci (2001) proposed a general framework of mental well-being which is a complex construct based on hedonic and eudaimonic perspectives (Ryan & Deci 2001; Stewart-Brown 2017):

Hedonic: it is about happiness and life satisfaction, in this term well-being, is described as gaining pleasure and avoiding pain.

Eudemonic: it is about having psychological well-being through potential fulfillment that functions at the optimal level or true nature of a person and how a person can function fully.

3 RESEARCH METHOD

A total of 400 Aceh youths (87 males and 313 females) with a range of ages 16-30-year-old were involved in this research. The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) composed by Tennant, Hiller, Fishwick, Platt, Joseph, Weich, Parkinson, Secker, and Stewart-Brown in 2007 was employed as an instrument in this study. WEMWBS was developed since the importance of mental well-being has been recognized in leading to positive consequences in terms of health and social costs and of preventive programs on the community. The

function of WEMWBS to screening the general population may allow identifying those people who are at risk of developing mental diseases (Bianco, 2012). This scale is not designed to measure depression, but a low score does relate to depression. The concept of mental wellbeing defined by WEMWBS is therefore much more than the absence of mental illness (The University of Warwick, 2015).

WEMWBS consists of 14 items which are arranged based on two well-being concepts, hedonic and eudaimonic. The 5-point Likert scale (none of the time, rarely, some of the time, often, all of the time) is used to answer the WEMWBS instrument. All items are positively worded and the total score ranges between 14 and 70, it means that the higher score subject gets, the higher the level of one's mental well-being and the lower score subject gets, the higher one's risk to suffer from depression and need for help. The reliability score of the WEMWBS instrument in this study is 8.41.

This study used descriptive statistics for analysis to seek the level of mental well-being of youths in Aceh. In addition, Chi-Square Test for Independence was used as an additional analysis to seek the correlation between the level of mental well-being with demographic's data such as sex, age, employment status, marital status, education, and religion by using SPSS 20.0 software analysis.

4 RESULT

Table 1 shows that most subjects were 21 to 25-year-old - 160 (40%). Their employment status was mostly student - 215 subjects (53.8%). Based on marital status, most subjects were single - 312 (78%). Most of the subjects' educations were senior high school - 205 (51.3%) and most subjects were Muslim - 396 (99%).

Table 2 shows that 66.3% subjects had a high level of mental well-being, 32.3% subjects were at moderate, and 6 (1.5%) subjects were at low. Mental well-being shows low risk to suffer from depression or psychological distress, the individuals with a low score of mental well-being could be at risk to suffer from depression or other psychological distress, while those with moderate scores of mental well-being should find help immediately (The University of Warwick, 2015). Therefore, It can be concluded that Aceh youths had good mental well-being which means that they were at low risk of suffering from depression or other mental disorders.

Table 1: Sociodemographic's data

Sosiodemographic data	N	%
Sex		
Male	87	21.8
Female	313	78.3
Age		
16-20	121	30.2
21-25	160	40
26-30	119	29.8
Employment Status		
In work	141	35.3
Unemployment	44	11
Student	215	53.8
Marital Status		
Married	88	22
Single/ Widowed/ Divorced	312	78
Education		
High School	205	51.3
Bachelor	144	36
Master/Doctor	51	12.8
Religion		
Moslem	396	99
Hindu	1	0.3
Buddha	1	0.3
Christian	2	0.5

Table 2: The level of Mental Well-Being of Aceh Youths

Score	Category's level	N	%
51-70	High	265	66.3
34-50	Average	129	32.3
14-33	Low	6	1.5

Conducting the Chi-Square Test of Independence was to seek the correlation between the level of mental well-being and sex, age, employment status, marital status, education, and religion on youths in Aceh. Chi-Square test of independence could be done by looking at Asymp. Sig. (2-sided), if the significance score of analysis results from less than 0.05 (<0.05), there is a correlation between variable (demographic data) and the level of mental well-being. However, if significance scores more than 0.05 (>0.05) its means that there is no correlation between tested variables (Machali, 2015). Based on the resulting test of demographic data and mental well-being, the significance score was .000 ($r=.000$) for a category such as age, employment status, marital status, and education. Meanwhile, the category of sex has shown that the p-value was .021 (<0.05). It means that those categories of demographic data were correlated with the level of mental well-being of youth in Aceh. Therefore, the category of religion shown that does not correlate

with the level of mental well-being, with p-value = .914 (>0.05).

Table 3: The Chi-Square Test of Independence

Chi-Square Test of Independence	Category (N=400)			
	Asymp. Sig. (2-sided)	High n (%)	Average n (%)	Low n (%)
Level of mental well-being *Sex	.021			
Male		65	19	3
Female		200	110	3
Level of mental well-being *Age	.000			
16-20		63	53	4
21-25		102	58	1
26-30		100	18	1
Level of mental well-being *Employment status	.000			
In Work		119	22	0
Unemployment		26	16	2
Student		120	91	4
Level of mental well-being *Marital status	.000			
Married		74	13	1
Single/ Widowed/ Divorced		191	116	5
Level of mental well-being *Education	.000			
Senior High School		110	91	4
Bachelor		111	31	2
Master/Doctor		44	7	0
Level of mental well-being *Religion	.914			
Moslem		261	129	6
Hindu		1	0	0
Buddha		1	0	0
Christian		2	0	0

5 DISCUSSION

This study is to see the level of mental well-being of Aceh youths by using the WEMWBS instrument. The instrument was developed because its mental well-being positively influences health and social costs as preventive for people. WEMWBS screens the population to identify people who are at risk of developing mental disorders (Bianco, 2012). Although it is not developed to measure depression, the score of which could relate to depression.

WEMWBS shows the mental well-being concept more than about the absence of mental illness (The University of Warwick, 2015).

The result has shown that 66.3% (N=265) of the subjects had a high category of mental well-being. The individuals with high of mental well-being have hedonic and eudaimonic perspective by which they provide positiveness (cheerfulness, optimism, and relaxation) and experience satisfying interpersonal relationships as well as positive functioning (personal development, competence, autonomy, self-acceptance, clear thinking, and energy) (Bianco, 2012). Hedonic is associated with feelings or emotional well-being which is shown into several positive or negative effects and life satisfaction, for instance, feelings could be variously manifested, they depend on circumstances that mostly out of control (Stewart-Brown, 2017). Meanwhile, eudaimonic is about how an individual functions individually or socially (e.g., psychological well-being, social well-being). It could be gained by developing character traits and behavior (Stewart-Brown, 2017). An individual who has good eudaimonic has had a sense of purpose and direction, is self-determined, and can make positive relationships with others (Ryff, 1989). An individual with social well-being tends to have a broader community, not only close friends and family, the relationships are frequently evaluated based on social criteria like community acceptance and one's contribution to the community (Keyes, 2002). People with high mental well-being are at low risk of suffering from a psychological disorder, and they could control social costs because of it (Bianco, 2012).

Mental well-being is the main focus of mental health and public policy, means that it is not only just becoming a good person without mental illness, however, a person should be an individual who feels good and has a good function with optimism, happiness, self-esteem, endurance, autonomy, agency, and good relationship with others (Stranges, Samaraweera, Taggart, Kandala, & Brown 2014). Brown and Jonmohamed (2008) also explained that mental well-being is the way of an individual to stay mentally healthy, more than curing or preventing mental illness. So, it concluded that mental well-being is the most important to describe an individual in a mental health perspective.

The individuals with a low level of mental well-being are at high risk of suffering from depression hence they need help or should be under a psychologist or psychiatrist monitor. The individual with mental disorders will experience mental well-

being when they are not at an unpleasant condition due to mental disorders (The University of Warwick, 2015). Previous studies reported that a low level of mental well-being was associated with mental illness (Lasser, Boyd, Woolhandler, Himmelstein, McCormick, Bor, 2000; Crawford 2001; White, Adamson, Chadwick, & Stamp, 2007).

The authors added data analysis on the correlation between the level of mental well-being and demographic data such as sex, age, employment status, marital status, education, and religion. The result showed that the level of mental well-being was correlated with sex, age, employment status, marital status, and education ($p=0.000$). Meanwhile, the result showed that there was no correlation between religion and mental well-being ($p=0.914$). The results reported that females had a higher level of mental well-being ($n=200$) than males ($n=65$). Nevertheless, previous studies consistently showed that there was no significant correlation between gender and well-being (Rothman, Kirsten, & Wissing, 2003). The high mental well-being of females in this study was caused by unequal data distribution between males and females.

The level of mental well-being of Aceh youths based on age in this study was mostly high. The result is supported by Easterlin (2006) on the study of the interpersonal well-being index, which showed that middle-aged individuals scored high, while old-age individuals scored low. Blanchflower and Oswald (2008); McManus, Chanfreau, and Lloyd (2013); Steptoe, Deaton, and Stone (2015) mentioned that mental well-being had a non-linear relationship with age. They were linked with good physical health and longevity among older adults. Therefore, an older-age could increase one's mental well-being. In the employment category, unemployed subjects had a lower level of mental well-being than employed subjects or students had. Stewart-Brown and Janmohamed (2008) also proved that unemployed individuals had a lower level of mental well-being than employed or studying ones. Diener (2009) explains that a job could become important and meaningful by which an individual will be satisfied in life. Satisfaction is an indicator of the hedonic mental well-being aspect.

Based on marital status, single subjects dominated the high level of mental well-being category. However, 74 married subjects ($n=88$) are at a high level of mental well-being. Several studies show that psychological advantage is one of the marriage advantages (Coombs, 1991), it also gives interpersonal (Shapiro & Keyes, 2008), community (Symoens, Van de Velde, Colman, & Bracke, 2014),

physical (Bookwala, Marshall, & Manning, 2014), and economic well-being. The study found that subjects with higher education had a high level of mental well-being. In the United States, the highly educated individual has a better relationship than the low educated one (Rentfrow, Mellander, & Florida, 2009). People with higher education have better physical (Marmot, Ryff, & Bumpass, 1997), psychological (Keyes, 2012), and economic well-being (Tsou & Liu, 2001) than those with lower education. The result showed that there was no correlation between the level of mental well-being and religion. It occurred because only one religion was dominant in this study and no items on an instrument related to spirituality (Stranges, et.al, 2014).

6 CONCLUSIONS

Generally, the result shows that Aceh Youth has a high level of mental well-being (66.3%). It means that many Aceh youths have good mental well-being, which can be seen from an individual's perspective for having positivity, optimism, cheerfulness, relaxation, satisfying interpersonal, and positive functioning (personal development, competence, autonomy, self-acceptance, clear thinking, energy) in their life. The individual with high mental well-being has no mental impairment and depressive symptoms. People with mental well-being feel good and function well, some people call this positive mental health.

This study has some limitations either due to the researcher's limitation or the process. First, the process of collecting data that was done online is possible to not research all people to participate in this study. Second, the subjects were unequal based on age. Even though all subjects are youths, the subjects in this study are less from other age groups like comparing youths at <16-year-old to <30-year-old. Future researchers should see the development of mental well-being in Aceh and conduct further analysis to keep good mental well-being and improve low mental well-being.

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