
Factors Influencing Psychological Well-Being of Covid-19 Survivors in Tembalang District Semarang City

Vina Yakhyatul Viqroh ¹, Ni Made Ayu Wulansari ², Prita Adisty Handayani ³

¹ Bachelor of Nursing Study Program, Telogorejo Health College, Semarang

² Lecturer of Nursing Undergraduate Study Program, Telogorejo Health College, Semarang

³ Lecturer of the S-1 Nursing Study Program, Telogorejo Health College, Semarang

Email: made@stikestelogorejo.ac.id

Abstract. The Covid-19 pandemic has caused the emergence of social stigma that can provide inequality of access to Covid-19 survivors who are labeled negatively. This condition disrupts the psychological well-being of Covid-19 survivors. This study aims to determine the factors that influence the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City. This study is a correlational analytical study with a *cross-sectional* approach. This study uses an *accidental sampling technique*. The number of samples in this study was 65 respondents. Based on the *chi-square* test, the results of the study showed that there was a relationship between gender and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p = 0.008$), there was a relationship between age and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p = 0.003$), there was a relationship between employment status and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p = 0.025$), and there was a relationship between education level and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p = 0.046$). Therefore, it is recommended for health centers in the Tembalang District area to be able to improve psychological well-being, one way is by providing guidance and counseling for Covid-19 survivors to be able to get through the trauma caused by Covid-19.

Keywords: Psychological Well-being, Survivors, Covid-19



INTRODUCTION

Survivors are defined as individuals who survived, meaning they did not die, and were able to survive in a disaster situation (Wiryasaputra, 2016). One of the survivors who experienced physical and psychological problems was a Covid-19 survivor. The combination of physical and psychological problems makes Covid-19 survivors vulnerable to emotional problems (Singh et al., 2020).

Covid-19 survivors not only experience physical health problems, but also receive negative stigma (Aslamiyah, et al. 2019). The Covid-19 Report Survey with the Social Intervention Interest Group of the Faculty of Psychology, University of Indonesia (2020), found that stigma still occurs in Covid-19 survivors. 55% of Covid-19 survivors admitted to having been the talk of the town. 33% admitted to having been ostracized and 25% had been labeled as carriers of the virus. In addition, Covid-19 survivors also became the subject of gossip by neighbors, even though they had tested negative for the virus.

Covid-19 is a virus that attacks the respiratory system caused by the *Severe Acute Respiratory Syndrome Coronavirus 2* (SARS-CoV-2) virus. Covid-19 can cause disorders of the respiratory system, acute pneumonia, and even death. Covid-19 was first discovered in the city of Wuhan, China, at the end of December 31, 2019. Covid-19 is contagious and has spread to other regions in China and to several countries, including Indonesia (Sa'diyah and Amirudin, 2020).

The Covid-19 pandemic has caused social stigma to emerge which can lead to unequal access for Covid-19 survivors who are labeled negatively. In the case in Mexico, a group of doctors and nurses were denied access to public transportation because they were considered to be carrying Covid-19. In Indonesia, there was a case where a survivor was laid off from work due to the long treatment time due to Covid-19 (Kurniawan and Susilo, 2021). Covid-19 survivors also

experience psychological problems, including post- *traumatic stress disorder*, confusion, anxiety, frustration, fear of infection, despair, deep sadness, sleep problems, helplessness, feeling helpless, and lack of psychological well-being (Sa'diyah and Amirudin, 2020). Covid-19 is the main enemy of humans and worries the world because it can claim the lives of many people, although there are also patients who have recovered or are called Covid-19 survivors (Abbas, 2020).

Covid-19 survivor data according to the *World Health Organization* (WHO) as of September 23, 2021, was 252,312,317 people. Covid-19 survivors in Indonesia based on data from the Ministry of Health of the Republic of Indonesia as of September 23, 2021, were 4,102,323 people. One of the areas in Indonesia that has Covid-19 problems is Central Java Province, with 451,419 people recorded. Covid-19 in Central Java Province places Semarang City, Demak Regency and Kudus Regency as the areas with the highest spread of Covid-19 (Ministry of Health of the Republic of Indonesia, 2021). Data as of September 23, 2021, recorded 68,194 Covid-19 survivors. Based on data from the Semarang City Health Service (DKK), Tembalang District is the district with the highest spread of Covid-19, namely 37 people, followed by West Semarang District with 29 people, and Banyumanik District with 27 people (Semarang City Health Service, 2021).

Covid-19 survivors receive negative stigma that has a significant impact on the survivor's functioning in daily life. This condition disrupts the psychological well-being of Covid-19 survivors (Taylor, 2019). Ryff in Papalia et al. (2018) conveyed the concept of psychological well-being is abstracted from the concept of psychological health. Psychologically healthy individuals are individuals who are able to positively assess themselves and others. Individuals are able to make their own decisions and regulate their behavior, and are able to choose or change the environment to suit themselves.



Psychologically healthy individuals will have a purpose so that their lives feel more useful and they will be motivated to seek and develop their potential. Positive mental health includes a feeling of psychological well-being that goes hand in hand with a healthy feeling about themselves. Dewi (2019) stated that psychological well-being is often interpreted as how individuals evaluate themselves.

Psychological well-being consists of six dimensions that are important for Covid-19 survivors. Ryff and Keyes (2017) describe six dimensions of psychological well-being, namely self-acceptance, positive relationships with others, autonomy, environmental mastery, life purpose, and personal growth. So it can be concluded that lack of psychological well-being is a problem that can be an obstacle for Covid-19 survivors in living their days after recovering from Covid-19. Covid-19 survivors can experience feelings of depression and being unable to blend in with their environment.

Psychological well-being in Covid-19 survivors is inseparable from the personal characteristics of the survivor, such as gender, age, employment status and level of education. Huppert (2019) stated that gender is closely related to a person's happiness. Gender affects the level of psychological well-being because women and men have different strategies for dealing with a problem. The results of a study by Li and College (2014) entitled "*Psychological capital and well-being among teachers-A study on gender differences*". This study aims to assess the influence of *gender* on *psychological capital* and psychological well-being among male and female teachers. The results of the study showed that there was a significant difference between female and male teachers in their level of well-being, where female teachers had higher well-being than male teachers. The results of the study showed that women had higher psychological well-being than men.

Huppert (2019) also stated that age influences a person's psychological well-being. Well-being is seen as an aspect that develops with increasing age. As Prabowo's research (2016) shows that environmental mastery and autonomy increase with increasing age. At the same time, life goals and personal development show a dramatic decline with age. So it can be concluded that the rate of decline in life goals and personal development will decrease along with the decline in cognition at increasing age.

Psychological well-being is also closely related to an individual's employment status. Ryff and Singer (2018) stated that psychological well-being is influenced by employment status. Astuti and Indrawati (2017) in their research stated that working mothers have a greater influence on psychological well-being compared to non-working mothers. Ryff and Singer (2018) stated that psychological well-being is influenced by education level. A higher level of education is related to the competence/expertise possessed and determines the ability to face problems, pressures and challenges of life. A low level of education can lead to a decrease in psychological well-being. So it can be concluded that the level of education affects the psychological well-being of Covid-19 survivors.

Based on the results of initial data collection through the *Ryff's Scale of Psychological Well-Being questionnaire* on 10 Covid-19 survivors in Tembalang District, Semarang City, it was found that 7 people (70%) of Covid-19 survivors showed low psychological well-being as seen from indicators of poor self-acceptance, namely feelings of worthlessness, feeling isolated and frustrated, and fear of being rejected by the environment. Covid-19 survivors in Tembalang District, Semarang City after successfully recovering from Covid-19 were initially emotional and annoyed with the Health Service which prohibited the subject from doing activities outside the home.



Indicators of positive relationships with other people are also still lacking, namely Covid-19 survivors in Tembalang District, Semarang City felt disappointed and sad about the attitude of neighbors or friends who kept their distance and viewed them as someone who was vulnerable to transmitting Covid-19.

Based on the background above, the author is interested in knowing "Factors That Influence the Psychological Well-being of Covid-19 Survivors in Tembalang District, Semarang City".

RESEARCH METHODS

This type of research is correlational analytical research, which is research that aims to reveal the correlation relationship between *independent variables and dependent variables*. This research design uses a *cross-sectional time approach*, namely data is collected momentarily or data is obtained at this time (Sugiyono, 2015).

The population in this study was 636 Covid-19 survivors in Tembalang District, Semarang City. The sampling technique is a sampling determination technique. This study uses an *accidental sampling technique*. The number of samples in this study was 65 Covid-19 survivors who met the inclusion and exclusion criteria in the study. The data collection tool used the RPWB (*Ryff's Scale of Psychological Well-Being*) Questionnaire . Data analysis was carried out using the *Chi Square* test to determine the relationship of each factor to the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City.

RESEARCH RESULT

The results of research conducted on 65 respondents in Meteseh Village, Tembalang District, Semarang City showed the following results:

Table 1
Frequency Distribution of Respondent Characteristics by Gender to Covid-19 Survivors in Meteseh Village n:65

Gender	Frequency (f)	Percentage (%)
Man	30	46.2
Woman	35	53.8
Total	65	100

Based on table 1, it is known that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are male, 30 people (46.2%) and female, 35 people (53.8%). Most of the Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are female.

Table 2
Frequency Distribution of Respondent Characteristics by Age in Covid-19 Survivors in Kelurahan Meteseh n:65

Age	Frequency (f)	Percentage (%)
20-25 Years	31	47.7
26-30 Years	34	52.3
Total	65	100

Based on table 2, it is known that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are aged 20-25 years as many as 31 people (47.7%) and aged 26-30 years as many as 34 people (52.3%). Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are mostly aged 26-30 years .

Table 3
Frequency Distribution of Respondent Characteristics Based on Respondents' Employment Status in Covid-19 Survivors in Meteseh Village n:65

Employment Status	Frequency (f)	Percentage (%)
Work	36	55.4
Not Working/Not Working	29	44.6
Total	65	100

Based on table 3, it is known that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City have working status of 36 people (55.4%) and unemployed status of 29 people (44.6%). Most of the Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City have working status.

Table 4



Frequency Distribution of Respondent Characteristics Based on Education Level in Covid-19 Survivors in Meteseh Subdistrict n:65

Level of education	Frequency (f)	Percentage (%)
High School/Equivalent D3/S1/S2	34	52.3
Total	65	100

Based on table 4, it is known that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City with a high school/equivalent education level are 34 people (52.3%) and survivors with a D3/S1/S2 education level are 31 people (47.7%). Most of the Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City have a high school/equivalent education level.

Table 5
Frequency Distribution of Respondent Characteristics based on Level of Psychological Well-being in Survivors Covid-19 in Meteseh Subdistrict n:65

Level of Psychological Well-being	Frequency (f)	Percentage (%)
Tall	13	20
Currently	47	72.31
Low	5	7.69
Total	65	100

Based on table 5, it is known that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City with a high level of psychological well-being are 13 people (20%), survivors with moderate psychological well-being are 47 people (72.31%), and survivors with low psychological well-being are 5 people (7.69%). Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City mostly have moderate psychological well-being.

Table 6
The Relationship Between Gender and Psychological Well-being of Covid-19 Survivors in Tembalang District, Semarang City

No	Gender	Tall		Currentl y		Low		p-value
		f	%	f	%	f	%	
1.	Man	1	1.5	26	40	3	4.6	0.008
2.	Woman	12	18.5	21	32.3	2	3.1	

chi square test, the Pearson Chi-Square significance value (p-value) was obtained. = 0.008 (p < 0.05) then Ha is accepted, which states that there is a relationship between gender and the psychological well-being of Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City .

Table 7
The Relationship Between Age and Psychological Well-being of Covid-19 Survivors in Tembalang District, Semarang City

No	Age	Tall		Currentl y		Low		p-value
		f	%	f	%	f	%	
1.	20-25 Years	1	1.5	26	40	4	6.2	0.003
2.	26-30 Years	12	18.5	21	32.3	1	1.5	

chi square test, the Pearson Chi-Square significance value (p-value) was obtained. = 0.003 (p < 0.05) then Ha is accepted, which states that there is a relationship between age and the psychological well-being of Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City .

Table 8
The Relationship between Employment Status and Psychological Well-being of Covid-19 Survivors in Tembalang District, Semarang City

No	Employment Status	Tall		Currentl y		Low		p-value
		f	%	f	%	f	%	
1.	Work	11	16.9	24	36.9	1	1.5	0.025
2.	Not Working/Not Working	2	3.1	23	35.4	4	6.2	

chi square test, the Pearson Chi-Square significance value (p-value) was obtained. = 0.025 (p < 0.05) then Ha is accepted, which states that there is a relationship between employment status and the psychological



well-being of Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City .

Table 9
The Relationship between Education Level and Psychological Well-being of Covid-19 Survivors in Tembalang District, Semarang City

No	Level of education	Tall		Curren tly		Low		p- value
		f	%	f	%	f	%	
1.	High School/Equivalent	4	6.2	29	44.6	1	1.5	0.046
2.	D3/S1/S2	9	13.8	18	27.7	4	6.2	

chi square test, the Pearson Chi-Square significance value (p -value) was obtained. = 0.046 ($p < 0.05$) then H_a is accepted, which states that there is a relationship between education level and psychological well-being of Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City .

DISCUSSION

Respondent Characteristics

The results of the study showed that most of the Covid-19 survivors in Tembalang District, Semarang City were female. The results of this study are in line with Hasibuan's (2021) study that out of a total of 72 Covid-19 survivors, most were women. New research identifies certain groups of women who are potentially at higher risk of contracting Covid-19. Specifically, research from the University of Birmingham found that women with polycystic ovary syndrome were 51 percent more at risk of contracting the disease than women without the condition.

The results of the study showed that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City were mostly aged 26-30 years. The results of this study are in line with research conducted by Elviani, et al. (2019) that as of October 4, 2020 revealed that of the total 303,498 Covid-19 cases, 65.4% of them were under 45 years old. The details are 2.5% aged 0-5 years, 7.7% aged 6-18 years,

24.3% aged 19-30 years, and 30.9% aged 31-45 years. And as information from BPS, 51% or the majority of people aged 17-30 years ignore health protocols because there are no government sanctions. Elviani, et al. (2019) further explained that the age range of 26-35 years indicates that this age is a productive age. At productive age, the possibility of getting Covid-19 will be greater, this is due to high mobility and activities outside the home. The frequency and social interaction of productive groups are also higher.

The results of the study showed that most of the Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City were working. The results of this study are in line with the findings of Styawan (2020) that positive cases of Covid-19 in Indonesia are dominated by people of productive and working age. This is possible because they tend to have high mobility, especially for work purposes. This high mobility causes people of productive age to come into contact with outsiders more often and come into contact with public places, so they are more susceptible to exposure to Covid-19. This finding is in line with other studies which also prove that young/productive age people dominate positive cases of Covid-19 (Cortis, 2020; Davies et al., 2020).

The results of the study showed that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City mostly had a high school/equivalent education level. Research conducted by Permatasari, et al. (2017) showed that aspects of high-level thinking skills in individuals with high school education reviewed from Bloom's taxonomy, include the ability to analyze (C4), evaluate (C5) and create (C6). Therefore, individuals with a high school/equivalent education level should have been able to analyze, evaluate an incident or event, so that they can demonstrate appropriate behavior.

The results of the study showed that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City mostly had moderate



psychological well-being. Moderate psychological well-being means that Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City have quite positive things about themselves that are cognitive and effective, so that Covid-19 survivors in Meteseh Village are quite able to positively assess themselves and others and can be used to develop their potential.

Relationship between Variables

The results of the study showed that the working hypothesis (Ha) was accepted, as indicated by the *Pearson Chi-Square* significance value (p-value). = 0.008 ($p < 0.05$). This proves that there is a relationship between gender and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City. The results of this study are in line with the opinion expressed by Ryff and Singer (2018) who stated that factors that influence individual psychological well-being, one of which is gender.

The results of the study showed that the working hypothesis (Ha) was accepted, as indicated by the *Pearson Chi-Square* significance value (p-value). = 0.003 ($p < 0.05$). This proves that there is a relationship between age and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City. The results of this study are in line with the opinion expressed by Ryff and Singer (2018) who stated that factors that influence individual psychological well-being, one of which is age. Well-being is seen as an aspect that develops with increasing age. Psychological well-being is the full achievement of one's psychological potential and a state in which an individual can accept life goals, develop positive relationships with others, become an independent person, be able to control the environment, and continue to grow personally.

The results of the study showed that the working hypothesis (Ha) was accepted, as indicated by the *Pearson Chi-Square* significance value (p-value). = 0.025 ($p <$

0.05). This proves that there is a relationship between employment status and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City. Results This study is in line with the opinion expressed by Ryff and Singer (2018) who stated that factors that influence individual psychological well-being, one of which is employment status. The results of this study are in line with the findings of previous research from Astuti and Indrawati (2017) in their research stating that working mothers have a greater influence on psychological well-being compared to non-working mothers. Ryff and Singer (2018) stated that psychological well-being is influenced by the level of education. A higher level of education is related to the competence/expertise possessed and determines the ability to deal with problems, pressures and challenges of life. A low level of education can lead to a decrease in psychological well-being.

The results of the study showed that the working hypothesis (Ha) was accepted, as indicated by the *Pearson Chi-Square* significance value (p-value). = 0.046 ($p < 0.05$). This proves that there is a relationship between education level and psychological well-being of Covid-19 survivors in Tembalang District, Semarang City. The results of this study are in line with the opinion expressed by Ryff and Singer (2018) who stated that factors that influence individual psychological well-being, one of which is education level. Education is one factor that can influence *psychological well-being*. The higher the education, the easier it will be for the individual to find solutions to the problems they face compared to individuals with low education. This education factor is also closely related to the dimensions of individual life goals (Ryff, in Sa'diyah and Amirudin, 2020).

CLOSING Conclusion



From the results of the research and discussion that has been carried out, the following conclusions can be drawn:

1. Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are mostly female, which is 53.8%. The age of Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City is mostly 26-30 years old, which is 52.3%. Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City are mostly employed, which is 44.6%. Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City mostly have a high school/equivalent education level, which is 52.3%. Covid-19 survivors in Meteseh Village, Tembalang District, Semarang City mostly have moderate psychological well-being, which is 72.31%.
2. There is a relationship between gender and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p=0.008$).
3. There is a relationship between age and psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p=0.003$).
4. There is a relationship between employment status and the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p=0.025$).
5. There is a relationship between education level and psychological well-being of Covid-19 survivors in Tembalang District, Semarang City ($p=0.046$).

Suggestion

Based on the results of the research that has been conducted, the researcher has several suggestions that the researcher would like to convey regarding the factors that influence the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City, these suggestions are:

1. For Health Centers in Tembalang District

For Health Centers in the Tembalang District Area who are aware of Covid-19 survivors in the community, it is hoped that they can improve psychological well-being, one way is by providing guidance and counseling, as well as stress management for Covid-19 survivors to be able to get through the traumatic period due to Covid-19.

2. For Educational Institutions

Educational institutions, especially Stikes Telogorejo, should be able to improve the development of psychiatric nursing science, especially regarding mental health, especially those related to the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City.

3. For Further Researchers

It is hoped that further researchers can continue the research by looking in depth at each factor that influences the psychological well-being of Covid-19 survivors in Tembalang District, Semarang City, such as interpretation factors, family social support and life experiences, stress, emotional regulation, personality traits, values, coping strategies, social comparison processes, physical health, intimate interpersonal relationships and popularity and closeness with peers.

BIBLIOGRAPHY

- Abbas, EW (2020). *Writing in the era of covid-19 : Managing psychological trauma to avoid psychosomatics* . <https://repository.uin-suka.ac.id/handle/123456789/14066> . Accessed on October 14, 2021.
- Astuti, D., and Indrawati, ES (2017). Psychological well-being reviewed from the employment status of working and non-working mothers in students at Hidayatullah Islamic High School. *Empathy Journal* , 6(1), 111-114.
- Davies, NG, Klepac, P., Liu, Y., Prem, K., Jit, M., Pearson, CAB, ... Eggo, R.M. (2020). Age-dependent effects in the



- transmission and control of COVID-19 epidemics. *Nature Medicine* , 26(8), 1205–1211.
<https://doi.org/10.1038/s41591-020-0962-9> .
- Semarang City Health Office. (2021). *Semarang city covid-19 data dashboard* .
<https://siagacorona.semarangkota.go.id/halaman/covid19> . Accessed on November 18, 2021.
- Elvina, R., Anwar, C., and Sitorus, RJ (2021). Age profile of covid-19 cases. *JMJ* , Volume 9, Number 2 May 2021, Pages: 204-209.
- Huppert, F.A. (2019). Psychological well-being: Evidence regarding its causes and consequences. *applied psychology: Health and Well-Being* . Matter. 137-164.
<http://www.don-c.com/psy423/documents/Psychological%20Well%20being%20-%20%28public%20free%20domain%29.pdf> Accessed on January 5, 2022.
- Kurniawan, Y., and Susilo, MN (2021). Recovering After Infection: Dynamics of Resilience in Covid-19 Survivors. *Philanthropy Journal of Psychology* , Vol 5 Number 1 (2021), 131-156.
- Li, M.A., & College, D.A.V. (2014). Psychological capital and well-being among teachers-a study on gender differences keywords nayanika singh aadi garg. *Indian Journal of Applied Research* , 4(November), 426 - 428.
- Papalia, DE, Old, SW, and Feldman, RD (2018). *Human Development: Human Development* . 10th Edition. Book 2. Translated by: Brian Marwinsky. Jakarta: Salemba Humanika.
- Permatasari, Anggita., Warton, and Kusairi, S. (2017) . Analysis of high-level thinking skills of high school students. Pros. Seminar on Science Education, Postgraduate Program, UM. Vol. 2, 2017, ISBN: 978-602-9286-22-9.
- Ryff, C. D., and Singer, B. H. (2018). Know Yourself and Become What You Are: A Eudaimonic Approach to Psychological Well-Being. *Journal of Happiness Studies* . Vol. 9. No. 13. Pg. 13-39. Springer.
<http://ioa126.medsch.wisc.edu/midus/findings/pdfs/692.pdf> . Accessed November 17, 2022.
- Sa'diyah, K., and Amirudin. (2020). The importance of *psychological well being* during the covid-19 pandemic, *Kariman* , 08(02) .
- Styawan, DA (2020). Covid-19 Pandemic in Demographic Perspective. National Seminar on Official Statistics 2020: Statistics in the New Normal, A Challenge of Big Data and Official Statistics.
- Wiryasaputra , Totok S. (2016). *Why creative grieving manages feelings of grief* . Yogyakarta: Kanisius.

