CHAPTER III
RESEARCH METHOD

A. Research Object and Subject

According to Sugiyono (2018), the object of research is an attribute or value of people or activities that have certain variations determined by researchers to be studied and concluded. The object of this research is SMA Muhammadiyah in Yogyakarta.

According to Sekaran & Bougie (2016), research subjects are the sole members of a sample. The research subject is a part that will be a source of information in research. The research subjects of this study were employees at SMA Muhammadiyah inYogyakarta City.

B. Kind of Data

The type of data that will be used in this study is primary data. According to Sekaran & Bougie (2016), primary data is data that collected from the first source or original source for more specific research purposes.

This research will use quantitative research methods. According to Sekaran & Bougie (2016), quantitative research methods are the use of data in the form of numbers that are generally collected through structured questions.

C. Population, Sample, and Sampling Technique

According to Sekaran & Bougie (2016), population is a group of several people, events or events, or something that has certain characteristics that make a researcher want to examine it deeper. The population used in this study were employees of SMA Muhammadiyah in Yogyakarta City.

Table 3. 1
Population of Employees at Yogyakarta Muhammadiyah High School

No	School Name	Employees Population
1	SMA Muhammadiyah 1 Yogyakarta	60 people

2	SMA Muhammadiyah 2 Yogyakarta	60 people
3	SMA Muhammadiyah 3 Yogyakarta	30 people
4	SMA Muhammadiyah 4 Yogyakarta	30 people
5	SMA Muhammadiyah 5 Yogyakarta	15 people
6	SMA Muhammadiyah 6 Yogyakarta	30 people
7	SMA Muhammadiyah 7 Yogyakarta	30 people
Total Employees		255 people

According to Sekaran & Bougie (2016), sample is a part of the population to be studied that can represent all existing populations. To determine the number of samples in this study using the Slovin formula:

$N / 1 + N e^2 = 255 / 1 + 255 (0.1)^2 = 255 / 2.55 = 100$

This study requires respondents of at least 100 employees at SMA Muhammadiyah in Yogyakarta City. The total sample obtained by researcher in this study were 206 employees of SMA Muhammadiyah in Yogyakarta City.

According to Sekaran & Bougie (2016), sampling technique is the process of selecting the right individual, object, or event as a representative for the entire population. The sampling technique used in this study is Non-probability sampling, with the determination of purposive sampling. According to Sekaran & Bougie (2016), Non probability sampling is design, elements in the population that do not have the inherent probability of their being chosen as sample subjects. Purposive sampling has its own requirements, where not everyone can be chosen for this sampling. This sampling has certain types of people who can provide some information. In this study, the requirements used and must be fulfilled by respondents are: people who have worked at SMA Muhammadiyah in Yogyakarta City with a minimum of two years of work and not contract employees referring to the research conducted by Biswas, Varma, & Ramaswami (2013).

D. Data Collection Techniques

Data collection techniques that used in this study were by distributing questionnaires. According to Sekaran & Bougie (2016), a questionnaire is a formula prepared and written by researchers, a set of questions that will be given to respondents, and then to be analyzed. There are two types of questionnaires to be distributed, namely offline and online with Google Forms. The reason why the author uses two types of questionnaires is that respondents are not only millennial, but also non millennial whose technology mastery is not as good as millennial generation, so it is feared that it will cause confusion for respondents from non millennial generation.

The scale that used in this study is the rating scale, which is the Likert scale. According to Sekaran & Bougie (2016), the Likert scale is designed to test how strong the subject is to agree or disagree with the author's statement in the questionnaire on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 3. 2
Likert Scale

Score	Explanation
1	Strongly Disagree
2	Disagree
3	Netral
4	Agree
5	Strongly Agree

E. Operational Definitions of Research Variables

According to Sekaran & Bougie (2016), variables are anything that can have different or varied values. In this study there are three variables, namely the independent variable, the dependent variable, and the moderation variable.

1. **Independent Variable**

According to Sekaran & Bougie (2016), independent variables are variables that can influence the dependent variable positively or negatively. In this study, the independent variables are distributive justice, procedural justice, and religiosity.

Table 3. 3
Dimensions of Independent Variables

Variable	Definition	Dimension
Distributive Justice (X1)	Results that received by employees of the organization. The results themselves can be in the form of fair salary, fair promotion, fair career development, and so on. The results received must be the same as the employee's contribution to their organization. (Cropanzano & Mitchell, 2005)	1. Equity 2. Equality 3. Need (Cropanzano & Mitchell, 2005; Colquitt, et al., 2013)
Procedural Justice (X2)	Fairness that can be felt by employees from the process that can be used to determine the best gifts or resources for the employees themselves. (Cropanzano & Mitchell, 2005)	1. Consistency 2. Impartaility 3. Accuracy 4. Representativeness 5. Correctability 6. Ethical Standard

		(Cropanzano & Mitchell, 2005; Colquitt, et al., 2013)
Religiosity (X3)	A set of behaviors that indicate the value of one's beliefs or religion. (Glock, 1972)	1. Experiental 2. Ideological 3. Ritualistic 4. Intellectual 5. Consequential (Glock, 1972)

2. **Dependent Variable**

According to Sekaran & Bougie (2016), the dependent variable is the main variable in the study. In this study, the dependent variable is employee engagement.

Table 3. 4
Dimensions of Dependent Variables

Variable	Definition	Dimension
Employee Engagement (Y)	When employees feel involved or united with their organization. Not only their physical, but also their hearts and minds are involved with their organization. (Kahn, 1992)	1.Vigor 2. Dedication 3. Absorption (Bakker, Schaufeli, Leiter, & Taris, 2008)

3. **Moderation Variable**

According to Sekaran & Bougie (2016), moderating variables are variables that strengthen or weaken the influence of independent variables on the dependent variable. In this study, the moderating variable is millenials-non millenials.

Table 3. 5
Dimensions of Moderation Variables

Variable	Definition	Scale
Millenial-Non Millenial	Non-millennial generation are people born in 1944 - 1964 (Baby Boomers) and 1965 - 1979 (Gen X). Millennials are people born in 1980 - 1994 (Millennial) and 1995 - 2015 (Gen Z). (Soeib, Othman, & D'Silva, 2015)	Split sampling Millennial, if the respondent is less than 40 years old. Non Millennial, if the respondent has more than 40 years of age. (Ning & Alikaj, 2019)

F. Instrument Quality Test

In this study, the instrument quality test used a validity test and a reliability test. Good research must have validity and reliability tests as important provisions. By using a valid and reliable instrument in data collection, it is expected that research results will be valid and reliable.

1. Validity Test

According to Sekaran & Bougie (2016), a validity test is a test to test how well an instrument developed the measures of the particular concept that want to measure. Validity test related to whether the author uses the right concept. Validity test can measure the validity of the questions in the questionnaire. A valid questionnaire can

be said to be valid, if the questionnaire is in accordance with what we want to measure. The instrument validity test in this study used the Kaiser-Meyer-Olkin Measure from the Adequacy Sampling (KMO MSA) method. The desired value must be > 0.50 to be able to analyze the factors (Ghozali, 2012).

2. **Reliability Test**

According to Sekaran & Bougie (2016), a reliability test is a test that serves to measure the extent to which it is without bias (error free) and to ensure consistent measurements across time and across various items in the instrument. Reliability test is an indication of stability and consistency of the instruments that can be used to measure concepts and help assess the goodness of an action. Reliability test in this study used Cronbach Alpha (α). Variables are said to be reliable if they provide a Cronbach Alpha value > 0.70 (Nunnally, 1994) in (Ghozali, 2012).

G. **Classic Assumption Test**

After test the instrument quality with the Validity Test and Reliability Test, the Classic Assumption Test was conducted to avoid bias in this study. The Classical Assumption Test consists of:

1. **Normality Test**

Normality test is a test that aims to test whether in the regression model the confounding or residual variables have a normal distribution (Nunnally, 1994) in (Ghozali, 2012). In this study, the author used Kolmogorov Smirnov's One Sample with a cut-off value > 0.05.

2. **Multicollinearity Test**

Multicollinearity Test aims to test whether the regression model found a correlation between independent variables. A good regression model is there is no correlation between independent variables (Nunnally, 1994) in (Ghozali, 2012). In

this study, researcher looked at whether there was multicollinearity or not with a tolerance value of > 0.10 and Variable Inflation Factor (VIF) with a value of ≤ 10.

3. **Heteroscedasticity Test**

The Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from one observation to another. If the variance from one observation residual to another observation is fixed, then it is called homoscedasticity, and if it is different is called heteroscedasticity. In this study the author used the Glejser Test to determine residual values with independent variables (Nunnally, 1994) in (Ghozali, 2012). Heteroscedasticity does not occur if the significance value is more than 0.05.

H. **Hypothesis Test and Data Analysis**

According to Sugiyono (2018), data analysis is the process of systematically searching and collecting data that obtained from interviews, field notes and questionnaires, so they can be easily understood, and can be shared with others. The author do the data analysis by organizing data, describing it into units, choosing which is most important to learn and making conclusions that can be shared with others.

To test hypotheses 1, 2, and 3 (testing the effect of independent variables on the dependent variable) proposed in this study, researcher used the Regression Analysis technique operated by the SPSS Program.

The model that used in Regression Analysis according to Ghozali (2012), namely:

$EE = a_0 + b_1 DJ + b_2 PJ + b_3 R + \varepsilon$

Explanation:

EE = Dependent Variable (Employee Engagement)

DJ = Independent Variabel (Distributive Justice)

PJ = Independent Variable (Procedural Justice)

R = Independent Variable (Religiosity)

$\varepsilon = 0$

In this study, the author used a confidence level of 0.05, which means that if the result is less than 0.05, the hypothesis can be accepted. But, if the result is more than 0.05, the hypothesis is rejected.

To test hypotheses 4, 5, and 6, the role of moderation on the influence of independent variables on the dependent variable, the researcher conducted a split sample, Millennial and Non Millennial with the Multiple Regression analysis technique, with the equation model:

$$EE = a_0 + b_1DJ + b_2PJ + b_3R + \varepsilon$$

Explanation:

EE = Dependent Variable (Employee Engagement)

DJ = Independent Variable (Distributive Justice)

PJ = Independent Variable (Procedural Justice)

R = Independent Variable (Religiosity)

$\varepsilon = 0$