



#### Research Article

# How can Women Working in Mining Achieve a Flourishing Life

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#### Abstract.

Mining is a high-risk field of work, especially for women. A work environment that is prone to accidents is the basis for the application of strict work rules. This risk causes concern and has an impact on the individual's process of achieving a flourishing life. Although, individual personality considerations also play a role in achieving flourishing. This study aims to determine the relationship between the big five personalities and development. This research is nonexperimental quantitative research with a correlational approach. The research respondents were 32 female employees who worked in the mining company. The age of the respondents was in the range of 20-54 years. The majority of respondents had a bachelor's degree. As many as 68.75% of employees work in the office and 31.25% work in the field. The scale used is the Ten-Item Personality Inventory (TIPI) and the Flourishing Scale (FS). The analysis was performed with multiple linear regression. The results showed that big five personalities simultaneously does not affect flourishing (R = 0.515; P > 0.05). However, partially agreeableness and conscientiousness influence flourishing (R = 0.493; P < 0.05). That is, women who work in mining with agreeableness and conscientiousness tend to flourish more easily than extraversion, emotional stability, and openness to experience. However, the personalities of the big five were not an important consideration in achieveing a flourish life for women who work in mining company.

Keywords: big five personalities, flourishing, mining female employees

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# 1. BACKGROUND

Working women are not difficult to find nowadays. A qualitative study of 13 women with leadership positions in university-level organizations states that the superiority and dominance possessed are directly proportional to the self-esteem of women among the group of people around them in leading [1]. In line with that, research on 168 female students showed a tendency for individuals who considered themselves to have independent self-concepts. This is related to the ratings given by people around them, such as parents and friends [2]. A character like this is in line with the focus of positive psychology studies on mental health.

The American Psychological Association reveals that working in the mining sector is a high-risk job [3]. Because the process continues 24 hours without stopping, a

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shift work system is needed for employees. Working shifts, long working hours, long work trips, and excessive workload have been shown to increase fatigue, work stress, and threaten psychological well-being [4]. The mining work environment is also known to be very high-risk. Therefore, there are very strict rules such as complete personal protective equipment, prohibition of using cell phones, and things that have the potential to become a distraction while working. This information was obtained from the results of interviews with one of the employees who described the conditions and situation of the work environment.

Based on interviews conducted with one of the mining workers, it is known that it is not uncommon to encounter cases of work accidents ranging from mild to fatal. Even though many protocols have been implemented for safety needs, negligence, and human error can still occur. With all the risks that lurk, information is needed to find out why individuals still persist in working in this field. Of course, with all the possibilities that will happen, there are bound to be worries every time you go to work. Things like this will be a factor that affects the welfare of employees. Some of the employees interviewed mentioned that even though they have been working in this field for a long time, they still have concerns. For this reason, all safety regulations have been implemented in order to minimize the risks involved.

Even so, there are still some employees who violate the applicable rules. Violations committed include smoking during working hours until sleeping. Phenomena like this can be difficult to avoid, especially with the condition of companies that implement a shift work system. Nature naturally regulates the periodization of work and rest time, which during the day with the sun and bright conditions causes human instincts to work and be active, and instincts to rest when it's dark at night [5]. With these "upside down" living conditions, it becomes important to know individual possibilities for flourishing.

The goal of psychology is flourishing. Flourishing is a high level of mental well-being [6]. It is known that flourishing is influenced by age and individual ethnicity. The older a person is, the more flourishing they will be. Meanwhile, the values of certain ethnicities also have an impact on a person's perspective in supporting their mental health [7]. The term local wisdom also explains that cultural values are passed down from generation to generation to foster individual wisdom.

Individuals with high well-being will be better able to control their emotions and deal with various events in life better. Meanwhile, individuals with low well-being despise their lives and consider events that occur as unpleasant, and therefore unpleasant emotions arise such as anxiety, depression, and anger [8]. In line with that, it is stated that individuals are said to have high well-being when they are satisfied with their



living conditions, often experience positive emotions, and rarely feel negative emotions. Furthermore, feelings of happiness, well-being, satisfaction, and positivity will have an impact on better conditions of health, performance, social relations, and ethnic behavior [9].

Flourishing has eight aspects according to the concept of [8], namely: purpose and meaning, positive relationships, involvement, social contribution, competence, self-acceptance, optimism, and self-esteem. There are several factors that can affect individual well-being which is divided into two, namely internal and external factors, where internal factors include satisfaction with the past, optimism for the future, and happiness in the present. While external factors include money, marriage, social relations, and demographics (age, health, education, gender, race, and religion) [8,10].

Based on the explanation above, this study aims to determine the influence of the big five personalities on the flourishing of female mining employees. Theoretically, the benefits of this research are expected to increase knowledge in the field of positive psychology regarding the influence of personality on the flourishing that occurs in female employees, especially in mining company. While the practical benefits are expected to provide information for working women so they can find out about the relationship between their personality and flourishing so that they can help develop individual psychological well-being and grow as happy people. Then, the expected results of the research can be used as institutional considerations in making policies related to female mining employees.

## 2. RESEARCH METHODS

## 2.1. Variables or concepts studied

The variables in this study are the big five personalities as independent variables (X) and flourishing as dependent variable (Y). The Big Five personalities are the unique traits possessed by individuals which are represented by the five dominant factors consisting of Extraversion, Agreeableness, Conscientiousness, Emotional stability, and Openness to experience, each of which has its own characteristics in establishing interpersonal relationships. Flourishing is the extent to which individuals be able to control positive feelings and function effectively in their lives.



# 2.2. Sampling Method

The research respondents were 32 female employees who worked in mining company. The method used in sampling is accidental sampling. That is, the subject is a respondent who met and suitable with the criteria. The age of the respondents was in the range of 20-54 years. The majorities of respondents have a bachelor's degree (46.87%) and senior high school degree (40.63%). The number of respondents who have marriages is 78.13% and respondents who have no marriages are 21.87%. As many as 68.75% of employees work in the office and 31.25% work in the field. Most of the respondents are staff (81.25%) and the rest are leaders (18.75%). Respondents consist of multi-ethnic, like Bugis, Jawa, Dayak, Banjar, Toraja, Sunda, Minang, Palembang, Kutai, and Batak.

## 2.3. Research subject

The research subject contains the research subject followed by an explanation of the demographic characteristics of the research subject. In qualitative research, the researcher explains in detail and briefly, the research design, which includes data collection strategies (a brief description of who the researcher is, who the participants/data sources are, and the relationship between participants and researchers; also explains how to recruit and select participants)

#### 2.4. Research Instruments

Measurements in this study used the Flourishing Scale (FS) which consisted of 8 adapted items [8]. The scale reliability coefficient is 0.85. Also, the Ten-Item Personality Inventory (TIPI) consists of 2 items per each of the big five personality types, namely: extraversion (0.85), agreeableness (0.79), conscientiousness (0.71), emotional stability (0.74), and openness to experience (0.75) [11]. All of measurements used Likert scale with 7 responses from strongly disagree to strongly agree.

# 2.5. Research design

This study uses a quantitative approach. Use of non-experimental correlational methods. That is, measurements were carried out on participants to determine the interrelationships between the variables studied. This research is used to see the influence of the big five personalities on flourishing.



### 2.6. Data Collection Procedures

The research step begins with preparing an instrument in the form of a research scale in the form of a Google form. The research was conducted online. The second stage is research conducted by distributing the measurement form link through the employee WhatsApp group. The results of the study were then analyzed using statistical software.

## 2.7. Data analysis technique

The data analysis used in this study is multiple linear regression. This statistical test is used to see predictions of personality types simultaneously and partially on flourishing. Analyzed using statistical software named JASP.

## 3. RESULT

The research results are presented in 2 models of multiple regression analysis which shows the hypothesis test shown in table 1. Previously, result of the normality test used Shapiro-Wilk showed that all of variables are normal with p>0.05. Model 1 in Table 1 showed in partially agreeableness ( $\beta$ =0.329; p>0.05), and conscientiousness ( $\beta$ =0.268; p>0.05) can not predict flourishing. However, they can predict flourishing in simultaneously (R=0.493; p<0.05). Based on the determinant coefficient, it is also known simultaneously that the effective contribution of the agreeableness and conscientiousness to flourishing is 24.3%.

TABLE 1: Multiple Regression Analysis.

Variabel		R	R <sup>2</sup>
Model 1		0.493*	0.243
agreeableness	0.329		
conscientiousness	0.268		
Model 2 extraversion	-0.081	0.515	0.265
agreeableness	0.272		
conscientiousness	0.317		
emotional stability	0.097		
openness to experience	-0.094		

<sup>\*</sup>p < 0,05; \*\*p < 0,01

Meanwhile, model 2 in table 1 showed that big five personalities can not predict flourishing in simultaneously (R=0.515; p>0.05) and partially: extraversion ( $\beta$ =-0.081;



p>0.05), agreeableness ( $\beta$ =0.272; p>0.05), conscientiousness ( $\beta$ = 0.317; p>0.05), emotional stability ( $\beta$ =0.097; p>0.05), and openness to experience ( $\beta$ =-0.094; p>0.05) were not able to predict flourishing. It means the hypothesis in this study was not accepted. There was no effect of big five personalities to flourishing on female mining employees.

## 4. DISCUSSION

The results showed no significant influence of the big five personalities to flourishing. Then, it is known that the influence of agreeableness and conscientiosness personality types was significant (p<0.05) on flourishing in simultaneously. Meanwhile, extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience personality types in partially did not significantly affect flourishing (p>0.05. It means that the big five personalities were not able to predict flourishing. However, agreeableness and conscientiosness can predicted flourishing in simultaneously with effective contribution was 24,3%.

Several previous studies have shown that personality is related to mental health [12–15] and psychological well-being [16]. In general, it is explained that an individual's character is one of the determinants of their mental health. This supports and differs from the research results obtained. The results of this research clearly show that agreeableness and conscientiousness can predict flourishing.

However, it is also known that the results shown in model 2 table 1 show that the big five personality cannot be a predictor of simultaneous flourishing. Furthermore, there are no big five personality types that can partially predict flourishing. This contrasts with other studies showing personality traits, such as extraversion, agreeableness, openness to experience, conscientiousness, neocriticism, and honesty-humanity have a relationship with flourishing [17–20].

In line with that, previous research explained how the role of personality in shaping one's emotions. That is, positive and negative feelings can change and develop according to the tendencies of one's personality type. These feelings will affect individual actions in everyday life [21]. Furthermore, it was explained that individuals who are confident in their abilities to complete their daily work are directly proportional to flourishing [9].

Agreeableness and conscientiousness personality types show individuals with a trustworthy, helpful, obedient, disciplined, and organized. It means that individuals can work well both personally and teams [11]. So that female employees with these characteristics tend to be able to work in climate of mining company that have strict



rules and a high level of work risk. However, the big five personalities cannot predict the flourishing of female mining employees. It showed that trustworthy, helpful, obedient, disciplined, and organized characteristics can be formed and obtained through work experience. So, person no need to have certain personality to be flourishing female mining employees. Individuals can enhance theirselves to have these characters in order to achieve flourishing even though they work in a mining company.

This study enriches previous research. Research conducted by HalilEkşi ibrahimAlbayrak, FüsunEkşi [?] showed that extraversion, agreeableness, conscientiousness, and neoritism personality types significantly predict flourishing. Furthermore, they also explained that extraversion personality type was the strongest predictor compared to other personality types to flourishing. Their research was conducted on medical, architectural, and dentistry students in Turkey. These conditions showed a different demographics with our study. Therefore, demographics have an important role in the effect of personality on flourishing.

In the end, women working in mining company can improve their welfare through personality development, especially agreeableness and conscientiousness personality types. Based on this research, as working women in mining company, individuals need to grow by having a combination of good life experiences, positive feelings, and being able to function optimally in interaction with their environment. This can support their performance at work. Then it is known, one of the things that can be done in increasing flourishing with trustworthy, helpful, obedient, disciplined, and organized characteristics. This is not only beneficial for their own lives; it also helps them perform optimally at work. This research has some limitations. First, not many participants in this study and only from one mining company. Second, measurements were taken using an online form so that researcher were not able to check the possibility of faking by participants when filling out the scale.

## 5. CONCLUSION

Flourishing of female minimg employees was related to agreeableness and conscientiousness personalities of big five. Then, flourishing was no related to big five personalities in simultaneously. It means that working women at mining company who have trustworthiness, helpful, obedient, organized, and diciplined tend to be flourish. Even though, the personalities of the big five were not an important consideration in becoming a flourish for women who work in mining company.



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