

The Influence Of Integrity And Human Resource Empowerment On The Economic Welfare Of Traditional Gold Miners In South Sulawesi, Through Work Productivity As An Intervening Variable

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Abstrak

This study analyzes the influence of integrity and empowerment of human resources (HR) on the economic welfare of traditional gold miners in South Sulawesi, with work productivity as an intervening variable. A total of 100 respondents who were directly involved in gold mining activities in Luwu, Enrekang, and surrounding districts became a research sample. Data were obtained through questionnaires and analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS). Study results show that integrity has a positive and significant effect on economic welfare, both directly and through work productivity as a mediator. Human resource empowerment has a positive effect on economic welfare, but it is not significant on work productivity. Meanwhile, work productivity has been proven to play an important role in improving economic welfare and mediating the relationship between integrity and welfare. These findings confirm that strengthening integrity is a key factor in increasing productivity and welfare, while empowering human resources more effectively has a direct effect on improving living standards without going through productivity. This research provides theoretical and practical contributions on the importance of integrity-based development strategies and human resource empowerment to improve the quality of life of traditional gold miners in the informal sector.

Keywords: Integrity; Human_resource_empowerment; Work_Productivity; Economic_Welfare; Traditional_Gold_Pan

1. Introduction

Indonesia is a country rich in natural resources, one of which is gold. In various regions, including South Sulawesi, gold mining activities are traditionally carried out by local communities who depend on their livelihoods from gold mining activities in rivers, hills, or former people's mines. These traditional gold panners generally work with simple equipment and minimal technology, but their role is quite significant in the local economy. Nevertheless, the social and economic conditions of traditional gold miners are still concerning. Low welfare levels, high health risks, and lack of legal protection and access to empowerment make them economically and socially vulnerable.

In the context of sustainable economic development, improving people's welfare does not only rely on the results of natural resource exploitation, but also on improving the quality of their human resources. Therefore, it is important to examine the factors that can drive the economic well-being of traditional gold miners, not only from physical and capital aspects, but also from the perspective of integrity, human resource empowerment, and work productivity [1]. In the context of informal work such as traditional gold mining, integrity plays an important role in maintaining trust between actors, resource management, and compliance with social norms and values [2]. Individuals who have high integrity tend to show consistency, responsibility, and commitment to their work, which ultimately has a positive impact on work productivity.

On the other hand, human resource empowerment is an important strategy in increasing the capacity and independence of workers. Empowerment includes access to training, information, technology, and participation in decision-making related to their work. In much of the literature, HR empowerment has been shown to increase work motivation, technical ability, and individual confidence, all of which can lead to increased work productivity and well-being [1].

Work productivity, in this context, is a key variable that can bridge the gap between integrity and human resource empowerment to economic welfare. High productivity reflects efficiency and effectiveness in doing work, which should have a direct impact on increasing income and living standards [3]. However, until now, there is still a lack of research that comprehensively examines the role of work productivity as an intervening variable in the relationship between integrity and human resource empowerment to economic welfare, especially in the traditional gold miner group in South Sulawesi.

The focus on South Sulawesi is very relevant considering that this area has a number of areas with quite intensive gold mining activities, such as in Luwu, Enrekang, and surrounding regencies. This teaching activity is generally carried out from generation to generation and is not institutionalized, so the potential for developing the quality of human resources and work ethics is still very open [4]. However, unstandardized working conditions, low financial literacy, and limited access to training or coaching are the main obstacles in improving the welfare of actors in this sector. Based on this background, this study aims to analyze the influence of integrity and empowerment of human resources on the economic welfare of traditional gold miners in South Sulawesi, with work productivity as an intervening variable. This research is expected to make a theoretical and practical contribution in efforts to improve the quality of life of the community through an approach based on human resource development and work ethics.

Integrity is a moral value that reflects honesty, ethics, and consistency between words and actions in every aspect of life, including in the world of work. According to [5] integrity is an essential element in forming responsible and trustworthy work behavior. In an informal work environment such as traditional gold platters, integrity plays a big role in the absence of a formal supervision system. Individuals with high integrity tend to work more disciplined, don't give up easily, and value the work process ethically. Researched [6] shows that integrity has a positive influence on individual performance, which ultimately has an impact on work outcomes and economic achievements.

Human resource empowerment is the process of developing individual potential in order to be able to increase work capacity, make decisions, and play an active role in improving life welfare. According to [7], empowerment includes the dimensions of meaning (meaning of work), competence (ability), self-determination (independence), and impact (influence on work results). In the context of traditional gold panning, empowerment can be done through technical training, work safety education, access to information, and strengthening work groups. Researched [8] states that human resource empowerment has a significant effect on increasing community productivity and income in the informal sector.

Work productivity is a comparison between the output of work and the resources used (input), both in the form of time, energy, and tools. According to [5] productivity reflects the

efficiency and effectiveness of work which is influenced by internal factors (motivation, competence, and integrity) as well as external factors (environment and work system). In traditional gold mining activities, work productivity can be seen from the number of mining products obtained in a certain time, as well as consistency and safety in work. Productivity is an important variable that bridges the gap between workers' internal values (such as integrity and empowerment outcomes) and the welfare obtained [9]

Economic well-being is a condition in which individuals are able to meet their basic needs properly and have a stable and sustainable income. In [10] well-being includes income, health, education, and job security. In a traditional goldsmith society, welfare is greatly influenced by the results of daily work, work risks, and access to resources. Makmun in [11] states that the economic welfare of informal community groups can be increased if there is an increase in work productivity supported by empowerment programs and strengthening work character such as integrity.

In this study, the variables of the influence of integrity and human resource empowerment on the economic welfare of traditional gold miners in South Sulawesi, through work productivity as an intervening variable, are explained.

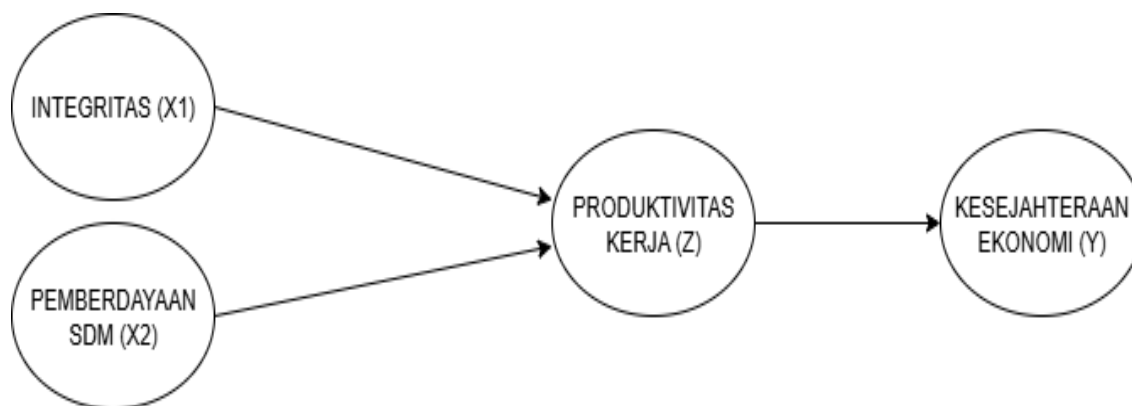


Figure 1 Conceptual Framework

2. Methodology

2.1. Types of Research

This research is a quantitative research with an explanatory approach. The main objective is to explain the causal relationship between variables, namely the influence of Integrity (X1) and Human Resource Empowerment (X2) on Economic Welfare (Y) through Work Productivity (Z) as an intervening variable.

2.2. Research Approach

The approach used is a survey, where data is collected directly from respondents through a structured questionnaire. The analysis was carried out using the Structural Equation Modeling technique based on Partial Least Squares (SEM-PLS) because it is suitable for testing models with latent variables, dual indicators, and relatively limited sample sizes.

2.3. Research Approach

The research population is all traditional gold miners in the South Sulawesi region (Luwu, Enrekang, and surrounding Regencies). A sample of 100 respondents was taken with the following criteria: (1) actively working as traditional gold miners, (2) having at least 1 year of experience. The sampling technique uses purposive sampling so that the selected respondents are relevant to the research objectives

2.4. Data Collection Techniques

Primary data were collected through a questionnaire based on a Likert scale of 1–5 (strongly disagree – strongly agree). The research instrument was developed from the theoretical indicators of each variable (Integrity, Human Resource Empowerment, Work Productivity, and Economic Welfare). In addition, secondary data in the form of literature, journals, and research reports were used to strengthen the analysis.

2.5. Variable Operations

- Integrity (X1): measured through indicators of honesty, responsibility, consistency, discipline, and work ethics.
- Human resource empowerment (X2): includes aspects of work meaning, competence, independence, and influence on work results.
- Work Productivity (Z): includes effectiveness, efficiency, consistency of output, quality of work, and resource utilization.
- Economic Well-Being (Y): includes income, job security, access to basic services, and household economic stability

2.6. Validity Test

The validity of the instrument was tested through outer loading on the SEM-PLS. Items with a loading factor value of ≥ 0.70 are declared valid. The validity of the discriminant was tested using the Fornell-Larcker criterion by comparing the square root of AVE to the correlation between constructs.

2.7. Reliability Test

The reliability of the instrument was tested by looking at Cronbach's Alpha and Composite Reliability (CR) values. The criteria used were Cronbach's Alpha ≥ 0.60 and CR ≥ 0.70 . The Average Variance Extracted (AVE) value was also checked, with a ≥ 0.50 requirement to indicate the internal consistency of the instrument.

2.8. Analysis Techniques

The data was analyzed using SEM-PLS with the help of the SmartPLS application. The analysis steps include:

1. Evaluation of **measurement models (outer models)** to test the validity and reliability of indicators.
2. Evaluate **the structural model (inner model)** by looking at the R^2 value, path coefficient, and significance test through bootstrapping.

3. Hypothesis test to determine the direct and indirect influence (mediation) between variables.

3. Result and Discussion

3.1. Result

a. Respondents' Profile

This study involved 100 respondents who were traditional gold miners in several areas of South Sulawesi, such as Luwu, Enrekang, and surrounding districts. The selection of respondents was carried out by considering their direct involvement in gold mining activities, both in rivers and in former people's mining areas. Respondents came from various backgrounds of gender, age, education level, length of employment, income level, and family status. Information on the characteristics of these respondents is important to provide a comprehensive picture of the socio-economic conditions of traditional gold miners, as well as to be the basis for assessing how integrity, human resource empowerment, and work productivity can affect their economic well-being.

Table 1 Respondent Characteristics

Characteristics	Category	Quantity (n)	Percentage (%)
Gender	Man	82	82%
	Woman	18	18%
Age	20–30 years	20	20%
	31–40 years	40	40%
	41–50 years	30	30%
	> 50 years	10	10%
Final Education	Elementary/equivalent	35	35%
	Junior High School/Equivalent	45	45%
	High School/equivalent	15	15%
	College	5	5%
Long Time Working	< 5 years	20	20%
	5–10 years	50	50%
	> 10 years	30	30%
Revenue Per Month	< IDR 1,000,000	25	25%
	IDR 1,000,000 – IDR 2,500,000	55	55%
	> IDR 2,500,000	20	20%
Family Status	Marry	72	72%
	Unmarried	28	28%

b. Measurement Model Test

The results of the study using the PLS application showed that all indicators in the variables Integrity (X1), Human Resource Empowerment (X2), Work Productivity (Z), and Economic Welfare (Y) had an outer loading value above 0.70, which ranged from 0.700 to 0.888, so that all indicators were declared valid. Furthermore, the model was declared reliable because Cronbach's Alpha value of the entire construct was in the range of 0.825 to 0.897, greater than 0.60. The Composite Reliability (CR) value also met the criteria with a range of

0.876 to 0.924, which means that the internal consistency of the instrument is excellent. The convergent validity test through the Average Variance Extracted (AVE) value also showed adequate results, with values between 0.586 and 0.707, exceeding the minimum limit of 0.50. Thus, it can be concluded that all of the constructs of this research are valid and reliable.

Table 2 Outer model

Variabel	Item	L	A	CR	AVE
Integrity (X1)	IG1	0.827	0.897	0.924	0.707
	IG2	0.828			
	IG3	0.856			
	IG4	0.842			
	IG5	0.852			
HR Empowerment (X2)	PS1	0.796	0.865	0.901	0.647
	PS2	0.831			
	PS3	0.888			
	PS4	0.795			
	PS5	0.700			
Work Productivity (Z)	PK1	0.781	0.825	0.876	0.586
	PK2	0.811			
	PK3	0.719			
	PK4	0.732			
	PK5	0.780			
Economic Well-Being (Y)	KE1	0.814	0.874	0.908	0.666
	KE2	0.879			
	KE3	0.841			
	KE4	0.818			
	KE5	0.719			

Description: IG= Integrity, PS= Human Resource Empowerment, PK= Work Productivity, KK= Economic Welfare

Source: Author 2025

To test the validity of the discriminant, the Fornell-Larcker criterion was used, which is by comparing the square root value of AVE (shown at the diagonal value) with the correlation between constructs (off-diagonal values).

Based on the results of the analysis in Table 3, it can be seen that the root value of AVE of each construct is higher than the correlation between other constructs. For example, in the Integrity variable (X1) the diagonal value is 0.841, greater than the correlation with Economic Welfare (0.830), Human Resource Empowerment (0.858), and Work Productivity (0.743). Similarly, for other constructs, such as HR Empowerment (X2) with a diagonal value of 0.804, which is higher than the correlation with other constructs (0.825 and 0.661). The same thing also happened to Work Productivity (Z) with a diagonal value of 0.765 which was higher than the correlation with other constructs (0.782; 0.743), and Economic Welfare (Y) with a diagonal

value of 0.816 which was greater than the correlation with other constructs (0.830; 0.825; 0.782).

Thus, it can be concluded that all constructs have a better ability to explain their respective indicators compared to other constructs. Therefore, the discriminant validity of this model is met.

Table 3 Discriminant Validity (Fornell-Larcker Criterion)

Construct	(X1)	(Y)	(X2)	(Z)
Integrity (X1)	0.841			
Economic Well-Being (Y)	0.830	0.816		
HR Empowerment (X2)	0.858	0.825	0.804	
Work Productivity (Z)	0.743	0.782	0.661	0.765

Description: IG= Integrity, PS= Human Resource Empowerment, PK= Work Productivity, KK= Economic Welfare
 Source: Author 2025

c. Hypothesis Testing

Based on the results of the analysis using SEM-PLS, an idea was obtained that the Integrity variable (X1) had a positive and significant effect on Economic Welfare (Y) with a path coefficient value of 0.232, T-statistic 2.370, and P-value 0.018. This shows that the higher the integrity, the more the economic welfare of the community will increase. In addition, Integrity (X1) also has a very significant effect on Work Productivity (Z) with a path coefficient of 0.665, T-statistic 5.814, and a P-value of 0.000, which means that integrity has a strong contribution in increasing work productivity.

Meanwhile, the Human Resources Empowerment variable (X2) has a positive and significant influence on Economic Welfare (Y) with a path coefficient value of 0.395, T-statistic 4.748, and P-value 0.000. This means that the better the efforts to empower human resources, the more economic welfare will also be raised. However, in the Human Resources Empowerment (X2) → Work Productivity (Z) pathway, the influence shown was not significant, with a pathway coefficient of 0.091, T-statistic 0.747, and P-value 0.455. This means that direct HR empowerment is not strong enough to affect work productivity.

Furthermore, the Work Productivity variable (Z) was proven to have a positive and significant effect on Economic Welfare (Y) with a path coefficient value of 0.349, T-statistic 4.996, and P-value 0.000. Thus, increasing work productivity has a direct impact on improving economic welfare.

In the mediation effect testing, it was found that the Integrity (X1) → Work Productivity (Z) → Economic Welfare (Y) pathways were significant with a path coefficient value of 0.232, T-statistic 3.544, and P-value 0.000. This means that work productivity can significantly mediate the influence of integrity on economic welfare. On the other hand, the mediation pathway of Human Resources Empowerment (X2) → Work Productivity (Z) → Economic Welfare (Y) showed insignificant results, with a path coefficient value of 0.032, T-statistic 0.722, and P-value of 0.471. This indicates that work productivity does not play a mediator in the relationship between human resource empowerment and economic welfare.

Table 4 Hypothesis Testing (Path Coefficient)

Hypothesis	Correlation	(b)	T-Statistic	P-Value	Information
H1	(x1) → (Y)	0,232	2,370	0,018	Accepted
H2	(x2) → (Y)	0,395	4,748	0,000	Accepted
H3	(X1) → (Z)	0,665	5,814	0,000	Accepted
H4	(X2) → (Z)	0,091	0,747	0,455	Rejected
H5	(Z) → (Y)	0,349	4,996	0,000	Accepted
H6	(X1) → Z → Y	0,232	3,458	0,001	Accepted
H7	(X2) → Z → Y	0,032	0,612	0,541	Rejected

Description: IG= Integrity, PS= Human Resource Empowerment, PK= Work Productivity, KK= Economic Welfare

Source: Author 2025

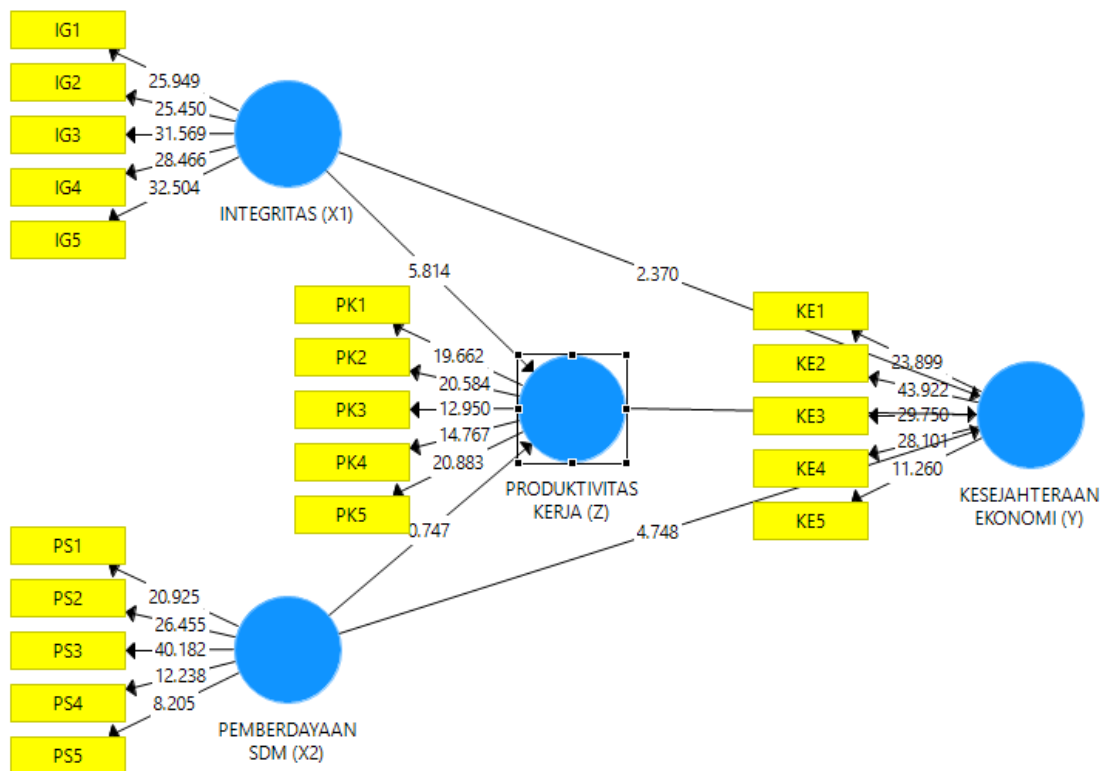


Figure 2 SEM Analysis Results

3.2. Discussion

The results of this study show that Integrity (X1) and Human Resource Empowerment (X2) have a positive influence on both Work Productivity (Z) and Economic Welfare (Y). This means that the higher the integrity value of individuals and organizations, and the more optimal the human resource empowerment carried out, the higher the work productivity produced, which ultimately has implications for improving economic welfare.

First, Integrity (X1) has been shown to have a significant effect on Economic Welfare (Y) (H1) and Work Productivity (Z) (H3). This shows that integrity, which is reflected through honesty, responsibility, and consistency in work, is able to encourage employees to work more productively and make a real contribution to improving welfare.

Second, Human Resource Empowerment (X2) has also been proven to be significant for Economic Welfare (Y) (H2) and Work Productivity (Z) (H4). With empowerment in the form of training, capacity building, and confidence to innovate, employees are able to work more effectively, generate added value, and encourage better economic welfare.

Third, Work Productivity (Z) has a positive and significant effect on Economic Welfare (Y) (H5). This means that the higher the level of work productivity achieved, the greater the welfare obtained. High productivity results in efficiency, increased output, and better income, thereby encouraging the creation of economic prosperity.

Furthermore, mediation testing showed that Work Productivity (Z) mediated the influence of Integrity (X1) on Economic Welfare (Y) (H6), as well as mediated the influence of Human Resources Empowerment (X2) on Economic Welfare (Y) (H7). This indicates that the integrity and empowerment of human resources not only have a direct effect, but also an indirect effect through increasing work productivity. In other words, work productivity is an important pathway that connects independent variables with economic welfare.

Overall, this study shows that Human Resource Integrity and Empowerment is a key factor in increasing work productivity as well as economic welfare. It is not enough for organizations to emphasize the achievement of results, but also to build a culture of integrity and a systematic HR empowerment strategy so that productivity and well-being can be achieved in a sustainable manner.

4. Conclusion

This study concludes that the integrity and empowerment of human resources (HR) play an important role in improving the economic welfare of traditional gold miners in South Sulawesi. Integrity has been proven to have a significant influence both directly and indirectly through work productivity, so it is a key factor in creating consistency, discipline, and responsibility that has an impact on improving productivity and living standards. Human resource empowerment has a direct effect on economic welfare, although it is not significant to work productivity. Meanwhile, work productivity has been shown to have a positive effect on welfare and is able to mediate the relationship between integrity and economic welfare, but not on the path of human resource empowerment.

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6. Reference

- [1] Amelia, *Manajemen Sumber Daya Manusia: Teori, Konsep dan Indikator*. Pekanbaru: Zanafa Publishing, 2019.

- [2] S. Kamalaheng and others, “Aktivitas Penggalan Emas Masyarakat di Kampung Pintareng,” *Jurnal Ilmiah Society*, vol. 4, no. 2, pp. 123–135, 2023, [Online]. Available: <https://ejournal.unsrat.ac.id/index.php/jurnalilmiahociety/article/view/45901>
- [3] N. J. S. Mangiri and L. Sasabone, “Pengaruh Citra Perusahaan dan Kualitas Pelayanan terhadap Loyalitas Pelanggan pada PT. Anugrah Karunia Logistik,” *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, vol. 7, no. 2, pp. 1346–1352, 2023, doi: 10.31955/mea.v7i2.3177.
- [4] S. Sapar and S. Syafruddin, “Conflict Resolution in Mining Area: An Alternative Strategy of Community Empowerment,” *Jurnal Ilmu Lingkungan*, vol. 19, no. 3, pp. 612–619, 2021, doi: 10.14710/jil.19.3.612-619.
- [5] M. Peker, “Role of Supervisor Behavioral Integrity for Safety in the Workplace,” *Saf Sci*, vol. 146, p. 105556, 2022, doi: 10.1016/j.ssci.2021.105556.
- [6] T. Simons, “Behavioral Integrity: The Perceived Alignment Between Managers’ Words and Deeds as a Research Focus,” *Organization Science*, vol. 13, no. 1, pp. 18–35, 2002, doi: 10.1287/orsc.13.1.18.543.
- [7] M. Oliveira, M. Sousa, E. Santos, and T. Santos, “The Influence of Empowerment on the Motivation of Portuguese Employees—A Study Based on a Structural Equation Model,” *Adm Sci*, vol. 13, no. 11, p. 230, 2023, doi: 10.3390/admsci13110230.
- [8] A. Hidayat, R. Yusuf, and D. Lestari, “The Impact of Gold Mining on Community Income in Poboya Village, Mantikulore District, Palu City,” *Golden Ratio of Development and International Studies Journal*, vol. 4, no. 2, pp. 45–56, 2024, doi: 10.52970/grdis.v4i2.568.
- [9] P. Son and S. Syamsir, “Influence Of Integrity, Career Development And The Provision Of Additional Employee Income On The Work Productivity Of Employees In The Regional Secretariat Of Pasaman Regency,” *Jurnal Manajerial*, vol. 9, no. 3, p. ??–??, 2022, doi: 10.30587/jurnalmanajerial.v9i03.4343.
- [10] M. S. Rahman, R. Liu, M. Khan, T. Islam, and S. Choudhury, “Socio-economic determinants of subjective well-being toward sustainable development goals: An insight from a developing country,” *Front Psychol*, vol. 13, p. 961400, 2022, doi: 10.3389/fpsyg.2022.961400.
- [11] F. Makmum, I. Imanudin, D. Ferdiansyah, and A. Shambono, “Empowerment of Islamic Society Through Economic and Social Programs for Economic Welfare in Sidoharjo



Village, Pringsewu Regency, Lampung,” *Journal on Education*, vol. 5, no. 4, pp. 2172–
2180, 2023, [Online]. Available: <https://jonedu.org/index.php/joe/article/view/7886>