

A Meta-Analysis Study of Principal Leadership and Teacher Job Satisfaction

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ABSTRACT

This paper aims to analyze the relationship between principal leadership and teacher job satisfaction in recent years. This research uses a systematic review and meta-analysis using JASP 0.14.1.0 software. The search for relevant articles through the Garuda, Eric, and Google Scholar databases with the keywords transformational leadership of school principals and job satisfaction was carried out by the research team. Based on the search results, Garuda found eight articles, Eric found 708 articles, and Google Scholar found 2,820 articles. Furthermore, based on the criteria: leadership, principal leadership, transformational leadership, and teacher job satisfaction, ten articles were selected. The data taken from the selected articles is the number of samples and the r-value in each article. After that, the effect size is calculated. A significant correlation between principals' transformational leadership and teacher job satisfaction was found based on the results of the meta-analysis. The effect size value resulting from the relationship between the two variables is categorized as moderate at the 95 percent confidence level. The effect size value is 0.50, in the interval 0.39 to 0.61. Research analysis in this study has stated the consistency of research and has strengthened existing theories. The results of the study recommend that further research be conducted on madrasah principals and madrasah teachers.

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1. INTRODUCTION

Along with the development of ICT in education, teachers are one of the factors that impact the success of an educational institution. Teachers' skills in managing ICT are essential for their students (Supardi, Juhji, Azkiyah, Muqdamien, Ansori, Kurniawan, & Sari., 2021) because learning in the 21st century uses LMS platforms such as Zoom, Google Meet (Septantiningtyas, Juhji, Sutarman, Rahman, & Sa'adah, 2021), Youtube, and WhatsApp. Therefore, principals need to improve their competence and develop job satisfaction through leadership. Teacher job satisfaction must be discussed in the educational environment, especially at madrasas in Indonesia. Madrasah teachers in Indonesia are divided into two groups, namely civil servant teachers who are appointed and given a fixed salary by the government, while private teachers (non-civil servants) are appointed and given salaries by foundations (institutions). In terms of employment status, those appointed as civil servant teachers are more comfortable at work than non-civil servant teachers because they receive salaries, family allowances, professional allowances, functional allowances, and regional allowances. However, some civil servant teachers still teach in several schools, even though they insufficient income. This fact needs to be re-examined, whether they want to add other income that causes dissatisfaction or other factors.

In general, previous researchers have researched job satisfaction. According to Hee, Yan, Rizal, Kowang, and Fei (2018), three variables affect job satisfaction: salary, job stress, and lack of communication. These three variables have a significant impact on job satisfaction. Alnıaçık, Alnıaçık, Akçin, and Erat (2012) concluded that career motivation correlates positively with organizational commitment and job satisfaction. Furthermore, extrinsic motivation can lead to job satisfaction (Talachı, Gorji, & Boerhannoeddin, 2014). Thus, highly motivated workers getting compensation following their efforts will lead to self-satisfaction. Therefore, a person's job satisfaction will be reflected in his attitude towards his work. In addition, Asegid, Belachew, and Yimam (2014) also reported a significant strong influence between autonomy, recognition, relationship with leadership, promotion, and environment. However, the factors of salary and benefits are predictors that are excluded. In contrast to Asegit et al. (2014), Supatmi, Nimran, and Utami (2013) find a significant direct effect of compensation on team member job satisfaction, which means that the higher the compensation received by employees, the higher their job satisfaction. Empirical facts obtained from the research findings reveal that finance is still seen as a variable that contributes significantly to job satisfaction compared to other variables.

Another study on teacher job satisfaction was conducted by Amorim Neto, Picanço Rodrigues, and Panzer (2017), who revealed a moderate correlation between the entrepreneurial and job satisfaction variables. A survey by Tickle, Chang, and Kim (2011) on administrative staff and school staff in the United States reported the significance of administrative support on teacher job satisfaction. Administrative support mediates the effect of teaching experience, student behavior, and salary on teacher job satisfaction. In addition, a study on teacher job satisfaction was also conducted by Kayastha and Kayastha (2012) in Nepal, which explored the existence of high status of satisfaction in the work itself, colleagues, and work in general. The study also found that teacher job satisfaction was low regarding salary. Shrestha (2019) found a positive relationship between job satisfaction and teacher attributes such as years of service, type of service, appointment, and education. However, Shresta's (2019) findings also reported no significant difference between job satisfaction and type of institution.

Research on the relationship between school principals and teacher job satisfaction has been carried out by Laila (2015), who found a relationship between the principal's transformational leadership variable and elementary school teacher job satisfaction of 0.582. In addition, Karmila (2017) also reports the results of his research which reveals that the magnitude of the relationship between the principal's transformational leadership and the job satisfaction of junior high school teachers is 0.552. The difference between the two lies in the number of samples and teacher teaching in schools. Meanwhile, Singgih, Iskandar, Goestjahjanti, Fahlevi, Nadeak, Fahmi, Anwar, Asbari, and Purwanto (2020) also reported a relationship between the two variables of 0.431. Based on empirical studies, job satisfaction impacts performance (Ardiansyah & Purba, 2015; Riyadi, 2015; Afshar & Doosti, 2016; Wolomasi, Asaloei, & Werang, 2019; Hendrawijaya, Hilmi, Hasan, Imsiyah, & Indrianti, 2020). Therefore, it

becomes essential to examine further the relationship between principal leadership and teacher job satisfaction. This study aims to analyze the interaction between principals' leadership and teacher job satisfaction, with the research question: how is the interaction between principals' leadership and teacher job satisfaction?

2. METHODS

The type of research used in this research is quantitative research. According to Sugiyono (2013), quantitative research is research based on the philosophy of positivism, used to examine specific populations or samples. Quantitative research examines a phenomenon by converting data into numbers that will be analyzed using statistics.

2.1. Research approach

This study uses a meta-analysis approach. Meta-analysis is research conducted by researchers by summarizing, reviewing, and analyzing data from several existing research results. A meta-analysis approach was used to combine and statistically evaluate the quantitative data obtained based on the research findings, namely the relationship between principals' transformational leadership and teacher job satisfaction.

2.2. Data collection

The research data collection was carried out by the research team by searching for articles contained in online journals using the Garuda data base on the page <http://garuda.ristekbrin.go.id>, Eric on the page <https://eric.ed.gov>, and Google Scholar found on the page <https://scholar.google.com>. The keywords used by the research team in searching for articles were the principal's transformational leadership and teacher job satisfaction. From the search results based on the keywords transformational leadership, principals and teacher job satisfaction, 8 articles have been published on Garuda, 708 articles on Eric, and 2,820 articles on Google Scholar.

2.3. Research data analysis

After analyzing the published articles relevant to this study, two articles from the Garuda database, four articles from the Eric database, and four articles from the Google Scholar database were analyzed. The components taken from the research include the year of research, subject, independent and dependent variables. The data taken in each article is the number of sample sizes and takes the value of r as the effect size. According to Borenstein, Hedges, Higgins, and Rothstein (2021), the effect size is the standard measure used by meta-analyses, which determines the strength and direction of the relationship. Data analysis using JASP 0.14.10 software.

3. FINDINGS AND DISCUSSION

3.1. Interaction between principals' leadership and teacher job satisfaction

The following are some research results that have the characteristics determined by the researcher as a sample as listed in Table 1 below:

Table 1. Research results

Researcher & Year	N	r	Source
Laila, Y. D. (2015)	100	0,582	Garuda
Karmila, N. (2017)	132	0,552	Garuda
Duyan, M., & Yildiz, S. M. (2020)	228	0,304	Eric
Tentama, F., et al., (2021)	49	0,337	Eric

Barnett, D. (2017)	77	0,536	Eric
Dapula, G. F., & Castano, M. C. N. (2017)	308	0,365	Eric
Jameel, A. S., & Ahmad, A. R. (2019)	137	0,480	Google Scholar
Singgih, E., et al. (2020)	221	0,431	Google Scholar
Chandrasekara, W. S. (2019)	70	0,710	Google Scholar
Dappa, K., Bhatti, F., & Aljarah, A. (2019)	450	0,325	Google Scholar

Based on the effect size calculation obtained, the average magnitude of the relationship is 0.50 with a standard error of 0.054. For the average confidence interval (M), the weighted relationship has a significant level of 95 percent, which lies in the range of 0.39 to 0.61. Thus, the summary results of the effects can be seen in the following forest plot image.

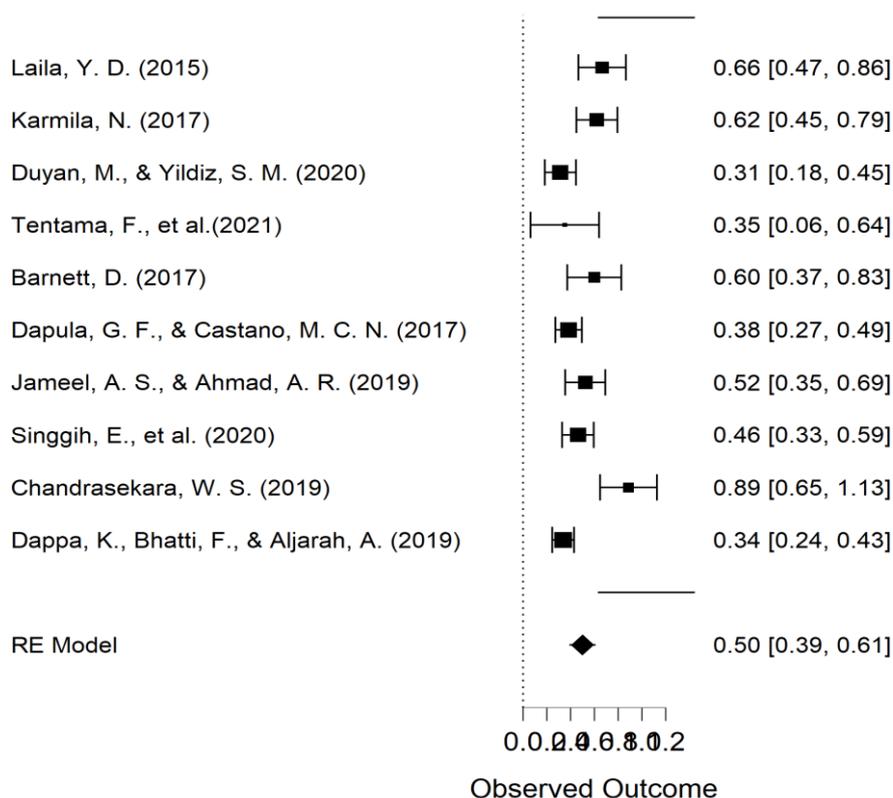


Figure 1. Results from the forest plot effect summary

Furthermore, in determining whether the null hypothesis is accepted or rejected, the p and z values are calculated. Based on the calculation, the z-value is 3.015, while the p-value is 0.003 because the p-value is less than 0.05 ($p < 0.05$), it means that the hypothesis is accepted at a significant level of 95 percent, both one-sided and two-tailed, thus, it is concluded that the principal's transformational leadership can be significantly correlated with teacher job satisfaction.

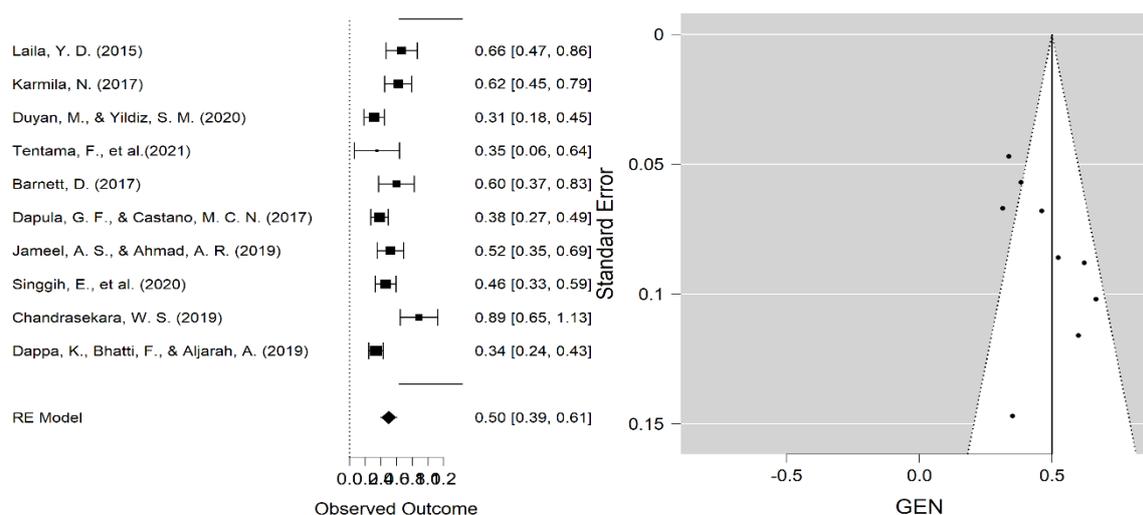


Figure 2. Forest plot and funnel plot of effects summary

Then, in addition, to find out whether or not there is a strong relationship between principal leadership and teacher job satisfaction is to convert the weighted average value of the effect size (M) into a correlation coefficient (r). Based on the calculation, the value of r is 0.50 with a confidence range between 0.39 and 0.61, which is moderate. The publication check can be seen in the output of the Trim-fill Analysis diagram above (Figure 2).

3.2. Discussion

Based on the calculations and descriptions above, it can be concluded that there is a significant relationship between the principal's leadership and teacher job satisfaction. That is, the principal's leadership impacts the satisfaction of teachers working in schools. Thus, a person's job satisfaction can be influenced by external factors (Herberg, Mauser, & Snyderman, 1993; Azim, Haque, & Chowdhury, 2013; Barusman & Mihdar, 2014; Maghsoodi, Azizi-Ari, Barzegar-Kasani, Azad, Zavadskas, & Antucheviciene, 2019; Chandrasekara, 2019; Dappa et al., 2019). It follows the research findings of Laila (2015) and Karmila (2017) who found evidence that the principal's transformational leadership had a significant effect on teacher job satisfaction, respectively 0.582 and 0.552. In contrast, the findings of Dapula and Castano (2017), Duyan and Yildiz (2020), and Tentama and Merdiaty (2021) found a small and significant relationship. However, they found that the two variables had a significant relationship. Therefore, from the discussion of the results of this study, it can be concluded that there is a significant relationship between the principal's transformational leadership and teacher job satisfaction.

According to the leadership theory, Robbins and Judge (2012) state that a leader must have the nature of influencing others, taking risks, being authoritative, honest, fair, and paying attention to the interests of subordinates. Based on this theory, the principal is obliged to provide job satisfaction for his teachers. Teachers who have a high level of job satisfaction have an impact on their performance so that school achievement also increases. Several studies have strengthened the effect of job satisfaction on performance (Kholik, 2016; Munawirsyah, 2016). According to work motivation theory; two factors (Alshmemri, Shahwan-Akl, & Maude, 2017; Herberg, Mauser, & Snyderman, 1993), there are two factors that cause a person to feel satisfied and dissatisfied with his job; namely: (1) the dissatisfaction factor, which is related to physical security including salary, quality of supervision, organizational policies, quality of interpersonal relationships among coworkers, with superiors and subordinates, job security, status, and working conditions; (2) factor satisfaction, which is related to psychology. Thus, teacher job satisfaction can be determined by physical and spiritual factors. Therefore, transformational school principals as leaders in school organizations should build good relationships with teachers in their environment so that their job satisfaction increases.

The effect size value of 0.50 is in the interval 0.39 to 0.61. In contrast, the effect size is in the medium category with a confidence level of 95 percent. Based on the analysis results, it has shown the consistency of existing research to strengthen the existing theory. Jameel and Ahmad (Jameel & Ahmad, 2019) stated that transformational leadership plays an essential role in increasing job satisfaction. In addition, Barnett (Barnett, 2017) also reported the same thing. However, most of the previous research was conducted in organizations and the health sector, while in the education sector, it was still limited. Transformational leadership supports and motivates employees to achieve human needs and increases their satisfaction. Therefore, a successful transformation can increase job satisfaction and organizational performance. Transformational leadership relies not only on personal charisma but must be able to try to empower its staff and carry out its leadership functions.

Transformational leadership is a process in which leaders try to lead their subordinates to reach a higher level of morality and motivation (Leithwood & Sun, 2012). Transformational leadership is a leadership approach by making efforts to change awareness, inspire, and inspire subordinates or members of the organization to expend extra effort in achieving organizational goals without feeling pressured or pressured (Royhatudin, Supardi, & Juhji, 2020). The principal's transformational leadership can be interpreted as a form or style in influencing teachers, administrative staff, students, and non-students to achieve the desired goals (Ab Samad, Abd Wahab, Sukor, & Wei, 2017; Abdul Wahab, Mohd Fuad, Ismail, & Majid, 2014). Thus, a principal who applies transformational leadership must be able to transform organizational resources optimally in order to achieve meaningful goals following predetermined targets. Good use of human resources can determine their job satisfaction. Therefore, the interaction between the principal and his subordinates must be built properly so that teacher job satisfaction increases.

4. CONCLUSION

The principal's transformational leadership has a significant relationship with teacher job satisfaction. Principals who apply transformational leadership can help teachers improve and develop their competencies and encourage teachers in schools to work hard and excel in teaching and develop schools according to the vision, mission, and educational goals set. In addition, school principals can motivate teachers to work hard and excel in achieving the school's vision and mission, stimulate teachers to be innovative and creative, able to guide teachers, and always provide motivation will make teachers enthusiastic in working and will ultimately have an impact on improving teacher performance. In summary, the results of this meta-analysis conclude that the principal's leadership and teacher job satisfaction have a significant relationship

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