



Effect of Teacher Certification, School Principle Leadership, Job Satisfaction, and Work Ethos on Teacher Performance Islamic Education in Badung Regency



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leadership;
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work ethic;

Abstract

The research objective was to determine the effect of certification, leadership, job satisfaction, and work ethic on the performance of Islamic Education teachers in Badung Regency. The research design is descriptive quantitative on 60 teachers. The data collection technique was a questionnaire and then analyzed using Structural Equation Modeling with Partial Least Squares (PLS-SEM). Research result; (1) Certification has a direct and significant effect on teacher performance with a coefficient of 0.449 and T-statistic 2.085 P-Values 0.040 (2) Leadership has a direct and significant effect on teacher performance with a coefficient of 0.210 and T-statistic 2.856 P-Values 0.030 (3) Certification has an indirect effect on teacher performance through job satisfaction. (6) Leadership has an indirect effect on teacher performance through job satisfaction. The findings of this study are that Certification and Leadership have a very strong effect on teacher performance. The indirect effect of job satisfaction is a strong mediating variable, while the work ethic is not able to mediate the effect of Certification and Leadership on teacher performance. Recommendations for implementing Certification, Leadership, and Job Satisfaction to improve teacher performance.

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1 Introduction

Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal, basic, and secondary education as described in Law Number 14 of 2005 (Republican Government. Indonesia, 2005). Teachers have an important role in improving the quality of education to shape character and be able to develop the potential of students to become human beings who have faith and piety, have noble character, are knowledgeable, capable, creative, independent, and become responsible citizens. Education is a strategic effort to form a superior generation for the advancement of the nation. The Indonesian government stipulates regulations for the implementation of the national education system (Government of the Republic of Indonesia, 2003). To achieve these educational goals, the government sets national education standards that apply to the implementation of early childhood education up to secondary education.

Elaborating on government regulations, the Ministry of Religion stipulates Madrasah administration regulations (Ministry of Religion RI, 2015) regarding Education Standards in Madrasahs and more specifically that the Badung Bali Regency Government has drawn up a strategic plan for the development of education sector (Badung Regency Ministry of Education, 2015). In the world of education, the function of teachers including Religious Education Teachers is very important and teachers are the spearhead of improving the quality of education so that the government is trying to improve the quality of Islamic Religious Education Teachers through excellent programs such as empowering school supervisors and mobilizing working groups of school principals, developing teachers through clusters, and teacher competency development through teacher working groups. The development of teacher quality in various research results states that competency development is carried out to improve the teaching profession. Professional teachers must meet the standards set by the government, namely Qualification and Competency Standards, namely pedagogic competence, personal competence, social competence, and professional competence (Putri & Imaniyati, 2017). Developing teacher quality to improve the teaching profession is carried out by developing competencies (Mahtur & Suwasono, 2020). Professional teachers must meet the standards set by the government, namely Qualification and Competency Standards, namely pedagogical competence, personal competence, social competence, and professional competence (National Education Standards Agency, 2007).

The government's attention to education has been socialized, and the mandated education budget of 20% has been implemented. The quality of teachers is of concern to all parties. Teachers must be truly competent in their fields and teachers must also be able to serve optimally. Teacher performance is influenced by various factors, both internal and external. Changes in the direction of policies regarding teachers and lecturers in Indonesia have brought about several significant changes, especially regarding performance issues. Every teacher is obliged to improve competence, both in terms of mastery of the field of study, and understanding of students, including understanding the characteristics of students and their stages of development in intellectual, personal, and spiritual aspects. After the issuance of the Law on Teachers and Lecturers, from then on certification became a very popular term and became a hot topic of conversation among the public, especially in the world of education. This law has three functions. First, as a juridical basis for teachers from

the arbitrary actions of students, parents, and society. Second, to increase teacher professionalism. Third, to improve teacher welfare (Haslina et al., 2021).

Data on Islamic Religious Education teachers in Badung Regency are; some teachers are certified but their performance is not good, this can be seen from the certification teachers who arrive late, there are certified teachers who have not made regular lesson plans, plus when teacher's certification evaluation is carried out by the supervisor, there are still certified teachers but the learning administration not complete (Lima et al., 2000; Font, 2002). Teachers who have been certified have the same performance as when the teacher was not certified, this is known from the results of the description of the teacher certification instrument with the lowest score of 15%, some teachers are certified but lack the motivation to be professional, this is known from the results of the instrument description the teacher's work motivation with the lowest score of more than 50%, but not all certified teachers perform less well, there are also certified teachers who can change their performance for the better and with better quality.

Teacher performance according to Edison (2016), is the result of a process that refers to standards that are measured over a certain period. According to Supardi (2014), a research journal defines teacher performance as the teacher's ability to carry out tasks and responsibilities toward students (Hasyim & Supardi, 2018). Evaluation of teacher performance in carrying out learning tasks is indicated by several dimensions, including; the ability to compose lesson plans, the ability to carry out learning, the ability to communicate with students, the ability to assess learning outcomes, the ability to carry out enrichment, the ability to implement remedial. Putri & Imaniyati (2017), in a research journal, it is explained that teacher performance is the work achieved by teachers in carrying out their duties and responsibilities (Lesmana & Putri, 2017). To achieve good work results, teachers are required to have the qualifications and competencies as stipulated in the Regulation of the Minister of National Education concerning Academic Qualification and Competency Standards, namely pedagogical, personality, social, and professional competencies (Supriyono, 2017).

Based on this opinion it was concluded that teacher performance is the work achieved by teachers in schools, following the authority and responsibility given in achieving the vision, mission, and goals of the school legally, not violating the law, and having morals and ethics. Teacher performance can be seen from their responsibilities in carrying out their professional and moral duties. Teacher performance is the result of teacher work which is manifested in the form of knowledge, skills, values, and attitudes of teachers in carrying out their duties and functions, which can be seen in the following indicators; (1) Teaching Ability, (2) Curriculum Development, (3) Mastery of Theory (4) Assessment and evaluation of performance, actions, and work performance.

Teacher performance is influenced by teacher certification that has been obtained through training. In RI Law Number 14 of 2005, it is explained that certification is the process of awarding educator certificates to teachers and lecturers. It also explains that certification is a competency test process designed to reveal a person's mastery of competence as the basis for awarding a certificate. Teachers are required to have academic qualifications, competencies, and educator certificates, be physically and mentally healthy and have the ability to realize national education goals. Educator certificates as stated in article 8 are given to teachers who meet the requirements (Alfath & Huliatusunisa, 2021). According to the regional autonomy law, local governments are responsible for appointing teachers in state schools except for madrasah schools and religious teachers. This includes all PNS teachers, both working in public schools and private schools appointed by the central government. The problem that arises in the appointment of teachers is that the appointment of teachers does not take into account the qualifications, competencies, and real needs of the school. This also occurs at the school level where the committee still appoints many contract teachers who do not consider the teacher's qualifications.

Teacher performance is influenced by the leadership of the Principal. Leadership is one of the most important management functions to achieve organizational goals. With a very heavy task, leadership seems to be required to face various factors such as structure or order, coalitions, strength, power, and environmental conditions of the organization. Besides that, leadership can be used as a tool to solve a problem that befalls the organization. A leader designs work and its mechanisms, supported by staff who carry out tasks according to ability. A leader uses influence based on authority or power rights in moving a social system to achieve goals. So, leadership is a process of creating a vision and mission, influencing attitudes, behavior, opinions, values, norms, and so on from followers in this study leadership indicators are; (1) Participatory Leadership, (2) Open Communication, (3) Organizing and (4) Upholding Discipline.

Performance is influenced by job satisfaction which is the general attitude of an individual toward his work. A job demands interaction with colleagues, superiors, organizational rules and policies, performance standards, working conditions, and so on. A person with a high level of job satisfaction shows a positive attitude toward the job, whereas someone dissatisfied with his job shows a negative attitude toward his job (Julianingsih & Paramartha, 2018). Pleasant emotional attitude and loves his job. This attitude is reflected in work morale, discipline, and work performance. Job satisfaction is enjoyed at work, and outside work, and the combination of inside and outside work indicators are as follows; (1) Enjoying Work, (2) Loving Work, (3) Work Discipline, and (4) Work Achievement. An easy way to see the character and indicators of; certification (X1) Principal Leadership (X2), Job Satisfaction (Y1) Work Ethics (Y2), and Teacher Performance (Y3) in this study can be seen in the grand theory matrix in table 1 below.

Table 1
Grand Theory Matrix on each measurement variable

Variable	Grand Theory	Characteristics	Indicator
Teacher Certification (X1)			
(Shoimin 2013:81); (Mulyasa 2009); (Martinis Yamin 2006); (Muclis 2007).	Teacher Certification is the awarding of certificates to professional teachers who can improve the quality of services and results of formal education as evidenced by the recognition given to teachers and lecturers as professionals who fulfil certain requirements, namely academic qualifications, competence, physical and mentally healthy, and can realize goals National Education	1) Pedagogic Ability 2) Professional Teachers 3) Personality 4) Social Skills 5) Improvement, quality 6) Professional personnel 7) Competence, Ability	X1.1 Pedagogic Competence X1.2 Personality Competence X1.3 Professional Competency X1.4 Social Competence
School Principle Leadership (X2)			
Wahjosumidjo (2002:83); Miftah Thoha (2010:9); (Hughes, <i>et al.</i> , 2002:9); Mulyono (2008:143).	Principal leadership is a teacher who is given the task of leading a school, influencing the behavior of other people, or the art of influencing human behavior that leads to the achievement of organizational goals that have the right foundation as a basis for measuring leadership constructs increasing the opportunity to hold meetings effectively with teachers in a	1) Organization Leaders 2) Participatory 3) Communicative 4) Organizing 5) Affect, Behavior 6) Achievement, Construction 7) Uphold Discipline	X2.1 Participatory Leadership X2.2 Open Communication X2.3 Organizing X2.4 Upholding Discipline

conducive situation.			
Job Satisfaction (Y1)			
(Stephen P. Robbins); (Davis); (Robbins, 2008); (Hasibuan 2011)	Job satisfaction is a general attitude towards one's work, between the number of rewards an employee receives for his work between what is expected to be enjoyed at work by obtaining praise for work, placement, and treatment is reflected by a balanced emotional attitude between remuneration and work performance.	1) Attitude, Belief 2) Loving Work 3) Hope 4) Work discipline 5) Work results, Treatment 6) Attitude, Implementation	Y1.1 Enjoying Work Y1.2 Loving Work Y1.3 Work Discipline Y1.4 Work Performance
Work ethic (Y2)			
(Tanjung (2002:64); (Webber dalam Suseno (2002:64); Toto Tasmara (2020); Chong dan Tai dalam Wirawan (2007: 97)	Work Ethics is a person's soul or character in carrying out their duties which serves as a guide for behavior for someone how to express, perceive, believe, and give meaning to something, which encourages him to act and achieve optimal charity emphasizing individualism or independence and positive influence of work on individuals. The Work Ethic variable is measured based on 4 indicators namely,	1) Soul or disposition 2) Workability 3) Belief 4) Initiative 5) Quality of work 6) Encouragement, Action 7) Timing	Y2.2 Ability Y2.2 Initiative Y2.3 Quality of Work Y2.4 Punctuality
Teacher Performance (Y3)			
(Obilade Adeyemi, 2011); (Ismail M, 2010); Anwar Prabu Mangkunegara (2012:9); (Notoatmodjo 2009:124).	Teacher performance is a task carried out by a teacher in a certain period as a person's level of attainment of work results, both the quality and quantity achieved that can be displayed, or one's work appearance.	1) Teaching Skills 2) Work speed 3) Curriculum Development 4) Quality and quantity of work 5) Mastery of Learning Theory 6) Results of work 7) Evaluation Ability 8) Ability to follow up	Y3.1 Teaching Ability Y3.2 Curriculum Development Y3.3 Mastery of Theory Y3.4 Assessment and evaluation

2 Materials and Methods

Research design

The design of this study is a quantitative research that is to test the theory and results of research conducted using survey methods. This study will describe the symptoms, events, and events related to the theories and results of previous studies. This study reveals the direct effect of Teacher Certification (X1) and Principal Leadership (X2) on Job Satisfaction (Y1), Work Ethics (Y2), and teacher performance (Y3) and the indirect effect of Teacher Certification (X1) on Teacher performance (Y3) through Job Satisfaction (Y1) and Work Ethic (Y2) as well as the indirect influence of Principal Leadership (X2) on teacher performance (Y3) through job satisfaction (Y1) and work ethic (Y2) as mediating variables. This study focuses on the problem of teacher performance which is influenced by teacher certification, principal leadership, job satisfaction, and work ethic which is described by the research design as follows

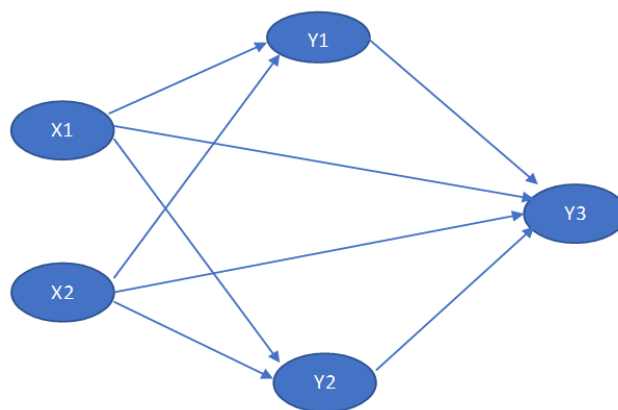


Figure 1. Constellation of research variables

Research subject

The research location is in Badung Regency, the study population is Islamic Education Teachers in Badung Regency consisting of 60 people; SD/MI 48 people, SMP/MTs 7 people, and SMA/SMK 5 people. This study is entitled "The Influence of Teacher Certification, Principal Leadership, Job Satisfaction, and Work Ethics on the Performance of Islamic Religious Education Teachers in Badung Regency". According to [Arikunto \(2013\)](#), if the population is less than 100, it is better to take all of them so that a research sample is a number of these populations (total sample). But if the population is large, it can be taken between 10-15 percent or 20-25 percent or more. The population of Islamic Religious Education teachers is 60 people and the research sampling technique is the total sample, and for a population of fewer than 100 people, all of them are samples ([Sugiyono, 2018](#)). Based on this theory, the sample is 60 people and the sample is called the respondent.

Data collection techniques

The data collection technique used an instrument in the form of a questionnaire which was answered by the respondents. The stages of making a questionnaire start with making a grid, then making statement items and alternative answers ([Agung, 2014](#)). The procedure used to assess respondents' answers is a Likert scale with 5 alternative answers namely; Strongly agree score 5, agree score 4, disagree score 3, disagree score 2, and strongly disagree score 1. Questionnaires were created on Google Forms and distributed to Islamic Religious Education Teachers and answered online. The researcher looked at the recap of the results of the respondents' answers to a complete number of 60 people.

Research data analysis techniques

Hypothesis analysis is useful for knowing the results of research on the effect of teacher certification (X1) Principal Leadership (X2) as an independent variable on Job Satisfaction (Y1) and Work Ethics (Y2) and teacher performance (Y3) as the dependent variable using "Structural Equation Modeling with Partial Least Square (PLS-SEM). The analysis technique uses the smart PLS application. The PLS-SEM model approach is very suitable for predicting the effect of independent variables on the dependent variable (Ghozali, 2016), PLS-SEM is a multivariate analysis that describes the application of several general models which include: (1) canonical correlation techniques, (2) multiple regression, (3) multivariate analysis of variance, and (4) principal component analysis that SEM-PLS is also suitable for causal-predictive analysis in situations with high complexity and supported by weak theory (Pering, 2020).

After obtaining the data, a validity test was carried out with the help of the SPSS version 26 application for windows to see all items in the variables with a sample size of 60 respondents, by comparing the Pearson correlation results on product-moment $\alpha = 5\%$ Pearson Correlation > 0.250 while p-values < 0.050 . The results of the validity of the research instrument items can be seen in the following table

Table 2
Test results for the validity of research instrument items with product moment test sig $\alpha = 0.05$

Variable	Indicator	P-Correlation ($>0,250$)		P-values ($<0,05$)		Result
		High	Low	High	Low	
X1 Certifikation	X1.1	0,663	0,338	0,035	0,000	Valid
	X1.2	0,700	0,306	0,036	0,000	Valid
	X1.3	0,757	0,437	0,005	0,000	Valid
	X1.4	0,842	0,607	0,002	0,000	Valid
X2 Leadership	X2.1	0,764	0,568	0,004	0,000	Valid
	X2.2	0,815	0,404	0,011	0,000	Valid
	X2.3	0,858	0,505	0,002	0,000	Valid
	X2.4	0,941	0,742	0,000	0,000	Valid
Y1 Job Satisfaction	Y1.1	0,719	0,361	0,017	0,000	Valid
	Y1.2	0,703	0,379	0,018	0,000	Valid
	Y1.3	0,726	0,348	0,015	0,000	Valid
	Y1.4	0,802	0,561	0,001	0,000	Valid
Y2 Work Ethics	Y2.1	0,822	0,348	0,015	0,000	Valid
	Y2.2	0,841	0,601	0,002	0,000	Valid
	Y2.3	0,812	0,619	0,001	0,000	Valid
	Y2.4	0,79	0,569	0,004	0,000	Valid
Y3 Teacher performance	Y3.1	0,421	0,258	0,041	0,000	Valid
	Y3.2	0,662	0,323	0,031	0,000	Valid
	Y3.3	0,768	0,283	0,038	0,000	Valid
	Y3.4	0,843	0,605	0,003	0,000	Valid

Based on Table 2 it can be explained that the variable of Certification (X1) consists of 4 indicators, and 32 questions and the Pearson correlation results > 0.250 all items are valid. Leadership variable (X2) has 4 indicators, 32 questions, and Pearson correlation results > 0.250 , all items are valid, Job Satisfaction variable (Y1) consists of 4 indicators and 32 questions, and Pearson correlation results > 0.250 , all items are valid, work ethic variable (Y2) consists of 4 indicators, and 32 questions and Pearson correlation results > 0.250 , all items are valid and teacher performance variables consist of 4 indicators, 32 questions, and Pearson correlation results > 0.250 , all items are valid. It can be concluded that all instrument items are valid.

Furthermore, the reliability test was carried out by measuring research instruments with the help of SPSS 26.0 for Windows software to determine Cronbach's Alpha (α). An instrument or variable is said to be reliable if the Cronbach Alpha value is > 0.70

Table 3
Reliability test results of research instruments certification, leadership, job satisfaction, work ethics, and teacher performance

Number	Variable	Code	Cronbach's Alpha	N of Items	Result
1	Certification	X1	0.962	32	very high
2	Leadership	X2	0.948	32	very high
3	Job Satisfaction	Y1	0,904	32	very high
4	Work Ethics	Y2	0,975	32	very high
5	Teacher Performance	Y3	0,883	32	very high

Based on Table 3 it can be explained that the research instruments show the highest Cronbach's Alpha number of 0.975 and the lowest 0.883 or more than 0.70 so it can be concluded that all of these instruments fulfil the Reliability requirements even in the very high category (Budiastuti & Bandur, 2018).

3 Results and Discussions

3.1 Results

The results of research data analysis used the SEM-PLS technique to test the effect of Teacher Certification (X1), Principal Leadership (X2), Job Satisfaction (Y1), and Work Ethics (Y2) on Teacher Performance (Y3) using the SmartPLS application and the results can be seen in Figure 2 below.

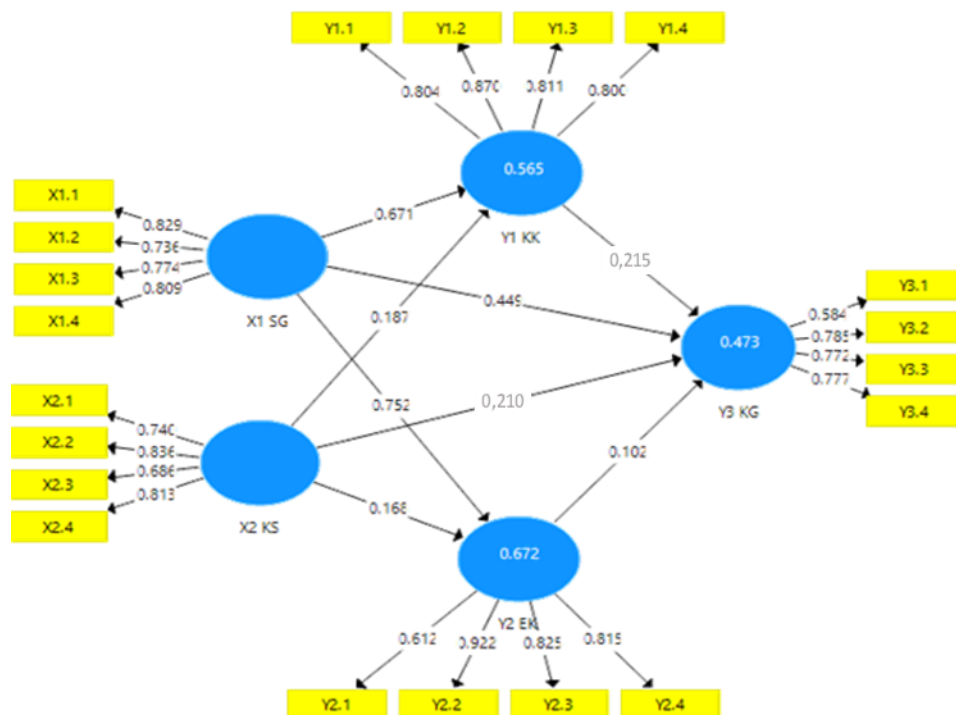


Figure 2. Results of analysis of the effect of teacher certification, school principal leadership, job satisfaction and work ethos on teacher performance Islamic education

Evaluation of the outer model to find out whether the indicators used to form constructs or latent variables are valid, then the following analysis is carried out. The output results regarding convergent validity are shown in the following table

Table 4
Outer loading each indicator of certification, school principal leadership, job satisfaction and work ethics on teacher performance

Relationship of Variable with Indicator	Loading	Standard Deviation	T Statistics	P Values	
X1.1 <- X1 Certification	0,829	0,030	27,411	0,000	Significant
X1.2 <- X1 Certification	0,736	0,071	10,391	0,000	Significant
X1.3 <- X1 Certification	0,774	0,057	13,534	0,000	Significant
X1.4 <- X1 Certification	0,809	0,049	16,368	0,000	Significant
X2.1 <- X2 Leadership	0,740	0,123	6,028	0,000	Significant
X2.2 <- X2 Leadership	0,836	0,124	6,744	0,000	Significant
X2.3 <- X2 Leadership	0,786	0,086	7,981	0,000	Significant
X2.4 <- X2 Leadership	0,813	0,090	9,031	0,000	Significant
Y1.1 <- Y1 Job Satisfaction	0,804	0,053	15,119	0,000	Significant
Y1.2 <- Y1 Job Satisfaction	0,870	0,052	16,612	0,000	Significant
Y1.3 <- Y1 Job Satisfaction	0,811	0,081	9,958	0,000	Significant
Y1.4 <- Y1 Job Satisfaction	0,800	0,053	15,080	0,000	Significant
Y2.1 <- Y2 Work Ethics	0,712	0,076	8,030	0,000	Significant
Y2.2 <- Y2 Work Ethics	0,922	0,023	39,282	0,000	Significant
Y2.3 <- Y2 Work Ethics	0,825	0,065	12,605	0,000	Significant
Y2.4 <- Y2 Work Ethics	0,815	0,071	11,546	0,000	Significant
Y3.1 <- Y3 Teacher Performance	0,784	0,113	4,401	0,000	Significant
Y3.2 <- Y3 Teacher Performance	0,785	0,111	7,082	0,000	Significant
Y3.3 <- Y3 Teacher Performance	0,772	0,057	13,524	0,000	Significant
Y3.4 <- Y3 Teacher Performance	0,777	0,055	14,092	0,000	Significant

Based on Table 4 it can be seen that all indicators in the Certification (X1), Leadership (X2), Job Satisfaction (Y1), Work Ethic (Y2), and Teacher Performance (Y3) constructs are statistically significant with t-statistic > 1.96 with p-value < 0.05. So it is concluded that these constructs have met the requirements of convergent validity which can be said to be positive and significant so that the research data meets the specified requirements (Utama, 2020).

Discriminant Validity to determine the validity of a construct seen from discriminant validity. Discriminant validity on reflective indicators by looking at cross-loading indicators on latent constructs. Good Discriminant Validity is an indicator that has a greater cross-loading on other constructors (Garson, 2016). The results of the cross-loading indicators for each variable are in table 5.

Table 5
Cross-loading of each indicator on variables X₁, X₂, and Y

Variable	X1 Certification	X2 Leadership	Y1 Job Satisfaction	Y2 Work Ethics	Y3 Teacher Performance
X1 Certification	0,788				
X2 Leadership	0,316	0,771			
Y1 Job Satisfaction	0,731	0,400	0,822		
Y2 Work Ethics	0,805	0,405	0,759	0,802	
Y3 Teacher Performance	0,660	0,353	0,578	0,607	0,734

Based on Table 5 it can be seen that Discriminant Validity has been fulfilled properly because the indicator has greater cross-loading on the construct compared to other constructs that are on the left or below. Then on Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha Composite reliability are used as a reflective indicator that aims to measure the internal consistency of a construct and Cronbach's Alpha. Construct feasibility can be seen from Discriminant Validity (DV) through Average Variance Extracted (AVE). The results of data processing are presented in the following table.

Table 6
Cronbach's Alpha And Composite Reliability Values And Average Extracted Variance (AVA)

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Extracted Variance (AVE)
X1 Certification	0,800	0,828	0,867	0,620
X2 Leadership	0,872	0,891	0,854	0,694
Y1 Job Satisfaction	0,840	0,842	0,893	0,675
Y2 Work Ethica	0,807	0,843	0,876	0,643
Y3 Teacher Performance	0,818	0,843	0,822	0,639

Based on Table 6, the reliability criteria for Cronbach's Alpha > 0.70, rho A > 0.70, and the Average Variance Extracted (AVE) are more than 0.50. It can be said that the instruments for Certification (X1), Leadership (X2), Job Satisfaction (Y1), Work Ethic (Y2), and Teacher Performance (Y3) have met the Reliability requirements. This can be continued for hypothesis testing to determine the direct and indirect effects of the independent variables on the dependent variable. After evaluating and then carrying out the direct effect test is carried out to test the direct effect between the research variables whose results are listed in the table below

Table 7
Results of hypothesis testing direct influence between variables

Indirect Relationship Between Variables	Loading	Deviation Standart	T Statistic	P Values	Result
X1 Certification -> Y1 Job Satisfaction	0,671	0,076	8,791	0,000	accepted
X1 Certification -> Y2 Work Ethics	0,752	0,049	15,430	0,000	accepted
X1 Certification -> Y3 Teacher Performance	0,449	0,216	2,085	0,040	accepted
X2 Leadership -> Y1 Job Satisfaction	0,187	0,092	2,038	0,044	accepted
X2 Ledership -> Y2 Etos Kerja	0,168	0,075	2,244	0,027	accepted
X2 Leadership -> Y3 Teacher Performance	0,210	0,140	2,856	0,030	accepted
Y1 Job Satisfaction -> Y3 Teacher Performance	0,215	0,128	3,700	0,026	accepted
Y2 Work Ethics -> Y3 Teacher Performance	0,102	0,208	0,491	0,625	rejected

Based on the results of the analysis of the direct effect between variables as above, the results of the study are explained as follows; (1) Hypothesis-1, the direct effect of certification on teacher performance is indicated by a coefficient of 0449 and a T-statistic of 2.085 > 1.96 and P values 0.004 < 0.05 H0 is rejected while H1 is accepted, it is said that certification has a direct positive and significant effect on teacher performance. (2) Hypothesis-2, the direct effect of leadership on teacher performance is indicated by a coefficient of 0.210 and a T-statistic of 2.856 > 1.96 and P Values 0.030 < 0.05 H0 is rejected while H1 is accepted, it is said that leadership has a direct positive and significant effect on teacher performance. (3) Hypothesis-3, the direct effect of job satisfaction on teacher performance is indicated by a coefficient of 0.215 and a T-statistic of 3.700

<1.96 and P values $0.026 < 0.05$ H_0 is rejected while H_1 is accepted, it is said that job satisfaction has a direct positive effect and significant effect on teacher performance. (4) Hypothesis-4, the direct effect of work ethic on teacher performance is indicated by a coefficient of 0.102 and a T-statistic of 0.491 < 1.96 and P values $0.625 > 0.05$ H_0 is accepted while H_1 is rejected, it is said that work ethic does not directly affect teacher performance.

Furthermore, the indirect effect test aims to see the role of job satisfaction (Y1) and work ethic (Y2) as mediating variables on the effect of certification (X1) and leadership on teacher performance (Y3), the results are as in the following table

Table 8
Hypothesis testing results from indirect effect between variables

Indirect Relationship Between Variables	Mediation	Loading	Deviation Standart	T Statistic	P Values	Result
X1 Certification -> Y3 Teacher Performance	Y1	0,533	0,123	3,680	0,008	accepted'
X2 Leadership -> Y3 Teacher Performance	Y1	0,243	0,039	2,602	0,019	accepted
X1 Certification -> Teacher Performance	Y2	0,077	0,158	0,486	0,628	rejected
X2 Leadership -> Y3 Teacher Performance	Y2	0,017	0,043	0,399	0,691	rejected

Based on table 8 above it can be explained that; (5) Hypothesis-5, Indirect effect of certification on teacher performance through job satisfaction with a total coefficient of 0.533 and T-statistic $3.680 > 1.96$ and P values $0.008 < 0.05$ so H_0 is rejected while H_1 is accepted, it is said that certification has a significant effect positive and significant indirect effect on teacher performance through job satisfaction. (6) Hypothesis-6, The indirect effect of leadership on teacher performance through job satisfaction with a total coefficient of 0.243 and a T-statistic of $2.602 > 1.96$ and P values $0.019 < 0.05$ so that H_0 is rejected while H_1 is accepted. it can be said that leadership has a positive and significant indirect effect on teacher performance through job satisfaction. (7) Hypothesis-7, Certification, and leadership have no indirect effect on teacher performance through work ethics because the coefficient is less than 1.00 and the T-statistic is less than 1.96 while the P values are greater than 0.05

The findings of this study are that certification and leadership have a direct and significant effect on teacher performance, besides that certification and leadership also have an indirect and significant effect on teacher performance through job satisfaction (Judge et al., 2010; Gaertner, 1999). It can be said that job satisfaction can act as a mediating variable. Another finding is that the structure of the research model made was successful in testing the direct and indirect relationship between the independent variables and the dependent variable.

3.2 Discussion

The discussion of the results of testing the hypothesis about the influence of the research variables is explained as follows;

The results of testing hypothesis 1 show that certification has a direct positive and significant effect on teacher performance, meaning that the higher the certification value, the higher the teacher performance. Because in teacher certification activities, overall teacher training is carried out in all teacher competencies, including; Pedagogic competence, personal competence, social competence, and professional competence, so that teachers who have passed certification are ensured to have very good performance (Riva'i, 2019; Irawadi & Yustikarini, 2019).

The results of the hypothesis 2 test show that leadership has a direct positive and significant effect on teacher performance, meaning that the higher the value of leadership will have an impact on high performance. A school principal who always carries out a good leadership function will assist in overcoming

teachers' difficulties in carrying out preparatory and implementation tasks. This is in line with the results of research in journals (Jalilah et al., 2020). Good school principal leadership is leadership that is carried out, among others; (1) Participatory Leadership, (2) Open Communication, (3) Organizing and (4) Upholding Discipline. Thus it will affect the performance of teachers in schools (Karo et al., 2020).

The results of testing hypothesis 3 show that job satisfaction has a direct positive and significant effect on teacher performance, meaning that the higher the job satisfaction, the higher the teacher's performance. This is very important if the teacher feels comfortable working, what is needed is met, and there is a very good working atmosphere which will certainly improve their performance (Muliartini et al., 2019). Job satisfaction includes; (1) Enjoying Work, (2) Loving Work, (3) Work Discipline, and (4) Work Achievement. If a teacher who feels job satisfaction will be able to improve his performance, this is in line with research examining the effect of job satisfaction on teacher performance (Barrung et al., 2021).

The results of testing hypothesis 4 show that the work ethic does not directly affect teacher performance, meaning that if there is an increase in the value of the work ethic it cannot be ascertained that there will be an increase in performance or vice versa if the teacher's work ethic decreases it will not have an impact on decreasing performance. Teacher work ethic as measured by indicators; (1) Ability, (2) Initiative, (3) Quality of Work, and (4) Timeliness. In previous studies, work ethic had an impact on performance, but in this study, there was a significant effect. Even though the results of previous research showed that work ethic has a direct and significant effect on teacher performance (Ningrat & Yudana, 2020).

The results of hypothesis 5 testing show that certification has an indirect and significant effect on teacher performance through job satisfaction. This happens because certification and job satisfaction directly have a significant effect on teacher performance, so job satisfaction will be able to mediate the indirect effect of certification on teacher performance (Lesyk et al., 2022).

The results of hypothesis 6 testing shows that leadership has an indirect and significant effect on teacher performance through job satisfaction. This happens because leadership and job satisfaction directly have a significant effect on teacher performance, so job satisfaction will be able to mediate the indirect effect of leadership on teacher performance (Kaiman et al., 2020).

The results of hypothesis 7 testing showed that certification and leadership have no indirect effect on teacher performance through work ethic. This happens because the work ethic does not directly affect teacher performance, even though the direct influence of certification and leadership has a direct effect on teacher performance but with a low coefficient so that the indirect effect of the work ethic is not able to mediate or in other words, it is said that work ethic does not mediate in realizing the indirect effect of certification and leadership on teacher performance (Elkins & Keller, 2003; Van Knippenberg et al., 2005).

The findings of this study are that the Principal's Certification and Leadership have a direct effect on the performance of Islamic Religious Education teachers in Badung Regency. Besides that, certification and leadership also have an indirect effect on teacher performance through job satisfaction, so job satisfaction can play a mediating variable. Another finding is that the structure of the research model has succeeded in testing the occurrence of a direct or indirect relationship between the independent variable and the dependent variable (Hayati & Caniago, 2012; bin Salahudin et al., 2016).

4 Conclusion

Based on the results of testing using, the results of the analysis and discussion concluded that based on the results of the analysis of the direct effect between variables as above, the results of the study are explained as follows; (1) Certification has a direct positive and significant effect on teacher performance. (2) that leadership has a direct positive and significant effect on teacher performance. (3) Job satisfaction has a direct positive and significant effect on teacher performance. (4) work ethic has no direct effect on teacher performance (5) Certification has a positive and significant indirect effect on teacher performance through job satisfaction. (6) leadership has a positive and significant indirect effect on teacher performance through job satisfaction. (7) Certification and leadership do not indirectly affect teacher performance through work ethic.

The recommendations from the results of this research are for the government and other education providers to implement certification, leadership, and job satisfaction to improve teacher performance. In addition, it is necessary to create conditions that can improve the teacher's work ethic. For other researchers,

Ulfa, M., Agung, A. A. G., Sunu, I. G. K. A., & Sugiarta, I. M. (2023). Effect of teacher certification, school principle leadership, job satisfaction, and work ethos on teacher performance Islamic education in Badung Regency. International Journal of Health Sciences, 7(1), 26–41. <https://doi.org/10.53730/ijhs.v7n1.13952>

the results of this study can be used as a reference in addition to scientific research studies related to teacher performance.

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