

Testing the Adoption of Region Government Financial Information System (SIKDA) on User Satisfaction

(Empirical Study of Local Government Keerom)

¹Rantebua Ardin Banneringgi, ²Madris, ³Mediaty

¹Department of regional finance master, Graduate Program, University of Hasanuddin, Indonesia

²Department of economics, University of Hasanuddin, Indonesia

³Department of accounting, University of Hasanuddin, Indonesia

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Abstract: This study aims to empirically test the success of the adoption of regional financial information systems (SIKDA) at the Government of Keerom Regency. Variables used in this study consist of exogenous variables system quality and endogenous variables consisting of information quality and user satisfaction. The sample of this research is employees who use SIKDA consists of 25 units of work with the number of respondents as much as 100. The technique of data analysis using statistical analysis of Partial Least Square (PLS). The results show that the adoption of SIKDA in Keerom Regency has been successful or satisfactory to SIKDA users. Detailed test results of the four hypotheses indicate that the system quality significantly influence information quality but has no significant effect on user satisfaction. The results of this study also indicate that the information quality significantly influence the user satisfaction and information quality mediate the influence of system quality on user satisfaction SIKDA in Keerom Regency.

Keywords: information system success model, system quality, information quality, and user satisfaction

I. INTRODUCTION

One of the objectives of the regional financial accounting system is to provide financial information that is complete, accurate, and accurate so that it can present reliable financial statements, be accountable, and be used to evaluate past financial implementation in the context of economic, social and political decision making. The role of information technology in supporting operational and managerial systems in government agencies today is felt to be increasingly important. Information has become a valuable commodity to achieve the success of government.

One type of information system used by local governments in the Papua region, especially the Keerom Regency Government, is the Regional Financial Information System (SIKDA), a financial application program, developed by the BPKP since 2003. Until 2016, the application has been used by most local governments in Indonesia or as many as 365 local governments. The development of SIKDA aims to enable local governments to carry out integrated financial management, starting from the process of financing, administration, to accounting and reporting.

Until now, the topic of research in the area of success is still one of the most popular types of research and interest by researchers in the field of information systems. One of the most well-known studies in this area is DeLone and McLean's research. The information system success model developed by DeLone and McLean aims to assess whether an information system implementation is successful or not. Since its introduction in 1992 and renewed in 2003, the information system success model developed by DeLone and McLean (D & M IS Success Model) has been widely applied to explain the success of information systems implementation.

The DeLone and McLean (1992) model and the updated model (2003), quickly received responses from researchers in the field of information technology systems because they were considered parsimony. The model proposed by DeLone and McLean (1992) reflects the dependence of six dimensions on the success of information technology systems, namely: system quality, information quality, use, user satisfaction, individual impact (individual impact, and organizational impact (organizational impact).

Research conducted by Patter et.al (2008) investigated ninety studies that carried out empirical testing of the relationship dimensions of success of DeLone and Mclean. From the results of the study, found the number of relationships between dimensions of success that have been tested by researchers in the field of information systems so far, increased to fifteen relationships.

The results of the investigation by Patter et.al (2008) show that out of the fifteen relationships between dimensions, there are only four relationships that have the support of empirical evidence in the strong support category, seven moderate categories, three mixed categories, and one not enough data. The relationship of success dimensions belonging to the strong category are: (1) system quality and user satisfaction, (2) information quality and user satisfaction, (3) user satisfaction and net benefits, (4) net benefits and user satisfaction. The relationships between dimensions in the moderate category are: (1) system quality and net

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benefits, (2) information quality and net benefits, (3) system quality and net benefits, (4) system usage and user satisfaction, (5) usage system and net benefits, (6) user satisfaction and system usage, (7) net benefits and system usage. The relationships between the dimensions of the mixed category are: (1) system quality and system usage, (2) information quality and system usage, and (3) service quality and user satisfaction while the relationship between dimensions that have not been supported by data is the quality of service and use.

Petter and McLean (2009) also conducted empirical testing using a meta-analysis approach to the application of the Delone and McLean Success Model (2003). The aim of the study was to examine the relationship between the dimensions of success of the Delone and McLean Model (2003) at the individual level. The results showed as many as eleven significant positive relationships, consisting of seven relationships belonging to the strong category, three moderate relationships, and one belonging to the weak category.

Since 2011, the Keerom Regency Government has adopted SIKDA developed by BPKP and is still being used until the 2017 fiscal year. Since adopting SIKDA, the Keerom Regency government has only received a 'fair with exception' opinion in the 2016 fiscal year while in the previous period it received an unnatural opinion. This phenomenon indicates that the adoption of SIKDA has been successful. This condition is a field fact that inspired the author to use the success models of DeLone and Mclean to test empirically the success of SIKDA adoption in the local government in Keerom Regency.

From the description above, showing the existence of research gaps that are the motivation to conduct this research. In detail there are two main motivations for the author, to conduct research on "Investigation and Testing of Successful Adoption of SIKDA in Local Governments in Indonesia", is the first, not conclusive findings of previous studies indicated by research results that are still different (contradictory), especially against ten relationships between dimensions of success in the DeLone and McLean models. The second motivation, research information system successes, particularly empirical research on the success of SIKDA in the Keerom District Government has never been done. Based on the explanation above, the research objectives are as follows: (1) to test empirically whether there is an effect of system quality on information quality and user satisfaction on SIKDA Adoption in Keerom District; (2) to test empirically whether there is an effect of system quality on user satisfaction on SIKDA adoption in Keerom District; (3) to test empirically whether there is an influence of information quality on user satisfaction on SIKDA Adoption in Keerom Regency; and (4) to test empirically whether the quality of information mediates the relationship of system quality to user satisfaction on SIKDA adoption in Keerom District.

The results of this study are expected to be useful, first for academics, namely to provide theoretical support for the relationship of dimensions of success in Delone and McLean's success model and at the same time expected to strengthen the literature support for the success of behavioral information systems primarily in the area of information system success. For this reason, at the theoretical level this research is expected to provide empirical evidence of the main factors that influence the successful adoption and use of information systems in public sector organizations, especially government organizations. Secondly, for practitioners, the results of this study are expected to be able to formulate the concept and practice of information system development, especially in government organizations in Keerom Regency to be successful, especially in establishing constructive limitations that support the successful adoption and use of information systems, and thirdly at the level of policy research. become a reference especially for regional heads and leaders of regional work units in Keerom District, formulating policies that directly encourage the success of SIKDA adoption.

II. RESEARCH METHODOLOGY

Site and Time of Determination

The object of research is the successful implementation of the Regional Financial Financial Information System (SIKDA), therefore this research will be conducted on the Regional Government in Keerom District which has adopted SIKDA. When the research was conducted for four months, March to June 2018.

Population, Sample and Sampling Technique

The population in this study were all SKPD, Agencies, Offices and Parts totaling 32. The number of samples was 100 employees, the research sample was those employees using SIKDA and output users from SIKDA from 25 SKPD. The reason for using employees is because they are directly involved as users so they can assess the quality of the system, information quality, and user satisfaction.

The sampling procedure is carried out by means of purposive sampling, namely sampling from a population based on certain criteria. The criteria that must be fulfilled in this study are: (1) the districts selected as research sites are those that have developed SIKDA for more than 2 years, so that it is feasible to evaluate the success of its information system adoption; and (2) employees selected as samples are those who are directly involved in the implementation of SIKDA and employees concerned with the output of the system.

Data Collection Methods and Data Analysis Techniques

Data collection techniques using survey techniques using questionnaire instruments. The questions posed are questions related to variables in the study such as: information quality, system quality, actual use, user satisfaction, and the individual impact of SIKDA adoption on each respondent's work unit. Questionnaires that are closed, with seven alternative answers provided at intervals. This study uses a Likert scale with five alternatives allowing the distribution of respondents' answer values. Data analysis techniques use statistical analysis of Partial Least Square (PLS).

Research Variables and Operational Definitions

Indicator of measurement of each variable in this study, referring to Iivari (2005). The operational definition and measurement of each variable are as follows:

a. Information Quality

Information quality is the quality of the output of the information system, which involves the value, benefits, relevance, and urgency of the information produced. Indicators for measuring information quality include: (1) the accuracy of information; (2) precision; (3) completeness; (4) reliability; (5) currency; (6) format of output; (7) and volume (reports and queries).

b. Quality System

System quality is the quality of its own information technology system, namely how well the hardware capabilities, software, policies, procedures of the information system can provide information on user needs. The system quality indicator consists of six measurement scales, namely: (1) flexibility of the system; (2) integration of the system; (3) response time; (4) error recovery; (5) convenience of access; (6) language.

c. User Satisfaction

User satisfaction is the user's response to the use of information system output. User satisfaction variables consist of 6 items, to measure general reactions to satisfaction: (1) good; (2) easy; (3). Satisfying; (4) adequate; (5) fun; and (6) flexible.

III. RESULTS

Direct Influence Testing

Testing the inner model (structural model) essentially tests the hypothesis in the study. Hypothesis testing is done by t-test (T-Statistics) in each part of the direct influence partially. Complete analysis results, contained in the results of PLS analysis. The following table presents the results of hypothesis testing.

Table 1. Table of Hypothesis Testing Results in Inner Model in SEM

Relationship	Path Coefficient	p-value	Result
System Quality→Information Quality	0.729	0.000	Significant
System Quality→User Satisfaction	0.103	0.147	Not Significant
Information Quality→User Satisfaction	0.652	0.000	Significant

Source: Processed Data (2018) (Appendix 4)

*Significant at α,5%.

Based on PLS analysis testing on tables and graphs, in testing the direct effect between the Quality of the System on the Quality of Information, the inner loading coefficient is obtained at 0.729, with a p-value of 0.000. Because the p-value is <0.05, then Hypothesis 1 is accepted so that there is a significant direct effect between the Quality of the System on the Quality of Information. Given the inner loading coefficient is positive, indicating that the relationship is both positive. That is, the higher the Quality of the System, the higher the Information Quality will be.

In testing the direct effect of the Quality of the System on User Satisfaction, the inner loading coefficient is obtained at 0.103, with a p-value of 0.147. Because the p-value> 0.05, then Hypothesis 2 is rejected so that there is an insignificant direct influence between System Quality on User Satisfaction. That is, the high and low quality of the system, will not affect the high and low user satisfaction.

Testing the direct effect between the Quality of Information on User Satisfaction, the inner loading coefficient is obtained at 0.652, with a p-value of 0.000. Because p-value is <0.05, then Hypothesis 3 is accepted so that there is a significant direct effect between Information Quality on Customer Satisfaction. Given the inner loading coefficient is positive, indicating that the relationship is both positive. That is, the higher the Quality of Information, the higher the User Trust will be.

Indirect Influence Testing

Testing outer models (structural models) hypotheses in research essentially tests. Hypothesis testing is done by t-test (T-Statistics) on the effect of the relationship between the System Quality variable on User Satisfaction through the mediation of Information Quality. Complete analysis results, contained in the results of PLS analysis using Sobel-test, can be seen in Appendix 2. The following table presents the results of the hypothesis testing using the Sobel-test.

Indirect effect between System Quality variables on User Satisfaction through Information Quality obtained by T-Statistics of 5,840 with p-value 0.001. Because the p-value is <0.05, there is a significant indirect relationship between System Quality and User Satisfaction. Which has a positive sign the indirect influence coefficient indicates a positive relationship between the two. That is, the higher the quality of the system supported by the better quality of information, will be able to increase User Satisfaction.

Table2. Table of Hypothesis Testing Results Using Sobel-Test

Relationship	Test Statistic	Std. Error:	<i>p-value</i>
System Quality→Information Quality→ User Satisfaction	5.840	0.081	0.001

Source: Processed Data (2018) (Appendix 4)
 Significant at $\alpha, 5\%$.

IV. DISCUSSION

Effect of System Quality (X1) on Information Quality (Y1)

The effect of system quality on information quality on the SIKDA adoption in Keerom District shows significant and positive results. The results of this study are consistent with some of the results of previous studies, one of which is Eldrandaly at. Al (2015) on a geographic information system, which also found that the quality of the system has a positive and significant effect on the quality of information on geographic information systems. Eldrandaly at. Al (2015) provides empirical evidence that quality systems that have good, reliable, easy to use response times, recover from errors, have accurate and accurate data base content affect the quality of output from geographic information systems in Egypt.

In addition, the results of this study are also consistent with research in other behavioral information systems, including the research of Yim and Shim (2014) on industrial information systems in Korea, Al-Mamary, et.al (2014) on information systems in Malaysia, and Gorla (2010) on service company information systems in Korea. The three researchers also found that the quality of the system influences the quality of information.

The results of this study provide support for empirical evidence that the quality of a flexible information system, can be integrated with other systems, has a good and fast response time, is able to recover from errors, easily and conveniently accessed, and has simple and easy to use commands have a positive effect on quality information generated. In this study, also showed that the quality of SIKDA in Keerom District was good. This result is based on the average user perception of six system quality indicators reaching a value of 4.02.

The quality of SIKDA in Keerom Regency which is best perceived by the user is the simple and easy to use command of SIKDA commands so as to facilitate employees in carrying out their duties. The ability of SIKDA to respond to commands includes fast and consistent besides that the use of SIKDA is also fun for users and very efficient. After Keerom District Government uses SIKDA the financial reporting process is faster and facilitates the work of the guards.

Although the quality of the system from SIKDA is good, there are some things that still need to be improved, including the flexibility and integration of SIKDA. For users of financial statements, especially TAPD requires financial information that can be accessed at any time for continuous planning and evaluation of work programs. In supporting the accountability of the regional government, integration between budgeting and financial reports is needed but until now there has been no integration between SIKDA and the regional management system in an integrated manner. Although the process of integrating SIKDA with other systems can be carried out, it still needs time or in other words it has not been directly connected.

In this study it was concluded that the quality of SIKDA in Keerom Regency was included well and had a significant influence on the quality of information. Since the Keerom District Government used the designed SIKDA by the Regional Development Supervisory Agency (BPKP), financial reporting is faster and the Opinion of Keerom District Financial Report increases from Disclaimer to Fair With Exceptions. Auditor opinion which is getting better shows that the quality of information produced by SIKDA is getting better so it will provide useful information for users of local government financial statements. To produce better quality information on financial statements in the future, the adoption of an information system must also be supported by other factors such as user competence.

Effect of System Quality (X1) on User Satisfaction (Y2)

The effect of the quality of the system on the quality of information on the adoption of SIKDA in Keerom Regency is not significant. The results of this study are consistent with some of the results of previous studies which also did not find a significant effect between the quality of the system and user satisfaction including Yi et.al (2010) on e-learning systems in Taiwan; Chong et.al (2010) on e-commerce information systems in Korea; Edrees and Mahmood (2014) on e-government systems in Bahrain; Kwun, et. Al (2015) on e-learning systems in New Orleans; Khudhair (2016) on the university-based electronic service system in Iraq. Yi et.al (2010) found that the quality of e-learning systems does not affect user satisfaction. The suspected causative factors are environmental factors, meaning an indicator of system quality measurement cannot be directly used in a new environment.

The results of the study of the effect of system quality is insignificant, in general contrary to Petter and McLean's (2009) study which examined the effect of information quality dimensions and user satisfaction using a meta-analysis approach to information system success at the individual level, and found that evidence of significant and positive influence both dimensions are significant, at a strong level. Likewise with Petter, et.al (2008) research which also investigates research that examines one or more dimensional relationships to determine the strength of the support of empirical evidence on all relationships between the dimensions of Model Delone and Mclean and find that the amount of literature support influences system quality and satisfaction users have reached the strong category.

According to Eldrandaly at. Al (2015) that in producing quality information is not only determined by the quality of the system but also must be supported by the quality of system users (user quality). Therefore Eldrandaly at. Al (2015) asserts that to produce

quality information on the adoption or use of information systems, in addition to being supported by a quality system is also determined by user quality factors which include: the ability of users to do work, feeling happy in using the system, understanding their duties, and feel confident when using the system.

The results of this study indicate that the quality of the system does not directly affect user satisfaction but through the quality of information produced. The researcher agrees with the concept that Eldrandaly et al. (2015) that the quality of the system and the quality of users will determine the quality of information produced and the quality of information will have an impact on customer satisfaction or in other words that the quality of the system does not affect directly to user satisfaction, especially in the adoption of information systems at the organizational level because it is influenced by other factors.

The results of Petter and Mclean's (2008) investigation that separated the influence of the success dimension on the DeLone and McLean Model at the individual and organizational level and concluded that empirical support for each relationship between the dimensions of the model (fifteen relationships) was stronger at the individual level compared to support empirical evidence at the organizational level, including empirical support for the influence of system quality on user satisfaction. Of the 90 research references used by Petter and Mclean (2008), there were 21 studies that examined the effect of system quality on user satisfaction at the individual level and the whole study supported empirical evidence while at the organizational level there were only three studies and only two provided empirical support. , so it was concluded that the effect of system quality on user satisfaction at the organizational level was lower than at the individual level. Researchers concluded that the process and factors that influence user satisfaction at the individual level differ from the adoption of information systems at the organizational level, meaning that the success of information systems at the organizational level is influenced by more complex factors and not just the quality of information systems.

Effect of Information Quality (Y1) on User Satisfaction (Y2)

The effect of system quality on information quality on SIKDA adoption in Keerom District shows significant and positive results. The results of this study indicate that the quality of information produced by SIKDA in Keerom Regency is characterized by: (1) concise and appropriate to the needs of users, (2) quite complete and adequate, (3) having high accuracy and accuracy of information, (4) output form which is not complicated and easily legible, (5) the information produced is adapted to the latest regulations, (6) adequate, and in accordance with needs, and (7) the information produced has a fairly reliable consistency.

The quality of information generated by SIKDA in Keerom Regency is perceived by the users as quite good. This study has provided support for empirical evidence that the quality of information generated by SIKDA has a significant and positive effect on user satisfaction. The results of this study are consistent with previous researchers including: Choga and Nyaruwata (2015); Chong, et al. (2010); Edrees and Mahmood (2014); Freeze, et al (2014); Ghobakhloo, et al (2015); Hung, et al (2012); Kwun, et al (2015); Landrum, et al (2008); Iivari (2005); Makokha and Ochieng (2014); Marchanda and Mukherjee (2014); Mudzana and Maharaj (2015); Petter and Mclean (2009); Scott, et al (2011); Sharkey, et al (2010); Sirsat and Sirsat (2016); Sørnum, et al (2012); Tilahun and Fritz (2015); Tsai, et al (2013); Tzeng, et al (2013); Wang and Liao (2008).

The results of this study also strengthen the support of empirical evidence of the influence of information quality on user satisfaction. The support of empirical evidence of the influence of information quality on user satisfaction is included in the category of strong support (Petter and Mclean (2008)). Of the 90 research references used by DeLone and Mclean, there were 19 studies that examined the effect of information quality on user satisfaction at individual level and 18 studies provide evidence system support. empirical while at the organizational level there are three studies and the whole provides empirical support, so it is concluded that the influence of information quality on user satisfaction is almost the same at the organizational and individual level.

In addition to being supported by good system quality, the adoption of information systems in Keerom Regency is also supported by the availability of information systems consultant personnel. Some indicators of information quality that still need to be improved are the accuracy and accuracy of information and the reliability of information. In general, SIKDA users have no difficulty in operating SIKDA because they have been given training and there is assistance from consultants. The constraints in producing accurate, accurate, and reliable information are the lack of human resource expertise in accounting, so that there is still insufficient financial information presented in the financial statements.

The form of output and format of the information generated from SIKDA is deemed appropriate to the needs because the preparation of SIKDA is always updated by consultants and adapted to the latest regulations. Likewise, the completeness of the information produced from SIKDA is included is quite adequate but still must be supported by more interesting and younger presentation techniques such as graphical support and must be complemented with policies

Effect of System Quality (Y2) on User Satisfaction (Y2) through Information Quality (Y1)

The influence of system quality relationships on user satisfaction through quality information shows significant and positive results. The indirect influence coefficient which has a positive sign indicates a positive relationship between the two. That is, the higher the quality of the system if supported by the better quality of information, will be able to increase user satisfaction. The results of this study show empirical evidence that the successful adoption of information systems, especially in local government organizations in addition to having good system quality, must also be supported by adequate quality information.

From this study provides important findings that the results of testing the effect of system quality directly on user satisfaction is not significant, but indirect or mediated testing by the quality of information shows significant and positive values. This result is consistent with the results of previous studies which also found the influence of information quality in moderating the relationship between system quality and the success of information system adoption, including the Gorla (2010) and Al-Mamari, et. al (2014).

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Based on the results of the research and discussion in this study can be concluded as follows:

1. System Quality has a significant and positive effect on Information Quality on the adoption of SIKDA in Keerom District. The results of this study provide empirical evidence that the quality of a flexible information system can be integrated with the system others, having good and fast response times, being able to recover from mistakes, easily and conveniently accessed, and having easy-to-use commands have had a positive and significant impact on the quality of SIKDA information in Keerom District.
2. System Quality does not have a significant effect on User Satisfaction. found that the quality of e-learning systems did not affect user satisfaction. The suspected causative factors are environmental factors, meaning an indicator of system quality measurement cannot be directly used in a new environment. In addition, in producing quality information is not only determined by the quality of the system but also must be supported by the quality of system users (user quality).
3. Information Quality has a significant and positive effect on User Satisfaction. Given the inner loading coefficient is positive, indicating that the relationship is both positive. That is, the higher the Quality of Information, will have an impact on increasing User Satisfaction. The results of this study indicate that the quality of information produced by SIKDA in Keerom Regency is characterized by: (1) concise and appropriate to the needs of users, (2) quite complete and adequate, (3) having high accuracy and accuracy of information, (4) output form which is not complicated and easily legible, (5) the information produced is adapted to the latest regulations, (6) adequate, and in accordance with needs, and (7) the information produced has a fairly reliable consistency. The results of this study also strengthen the support of empirical evidence of the influence of information quality on user satisfaction.
4. The influence of system quality relationships on user satisfaction through quality information shows significant and positive results. The indirect influence coefficient which has a positive sign indicates a positive relationship between the two. That is, the higher the quality of the system if supported by the better the quality of information, will be able to increase customer satisfaction. The results of this study show empirical evidence that the successful adoption of information systems, especially in local government organizations in addition to having good system quality, must also be supported by adequate quality information.

SUGGESTIONS

In order to improve the success of the adoption of the Regional Financial Information System (SIKDA) in Keerom Regency and to strengthen the support of empirical evidence on the literature on behavioral information systems researchers recommend the following suggestions:

1. Keerom Regency Government in addition to considering the quality factor of the SIKDA, Adoption of SIKDA must also be supported by the competencies of SIKDA users, especially competencies in the financial field, and must be supported by facilities such as the internet;
2. To improve the success of the adoption of SIKDA in Keerom Regency, the SIKDA quality indicator that still needs to be improved is the flexibility and system integration and the ability to correct errors while the information quality indicators that still need to be improved are the information, accuracy, and reliability of the information produced by SIKDA.
3. In an effort to strengthen theoretical support for the literature on behavioral information system research, system researchers need to develop measurement indicators for each of the more specific dimensions of success. In addition, researchers are also advised to add other variables that influence the success of information systems and test success on a positive impact on the organization.

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Appendix 1. Validitas Test And Reliability Instrumen

Variabel X1

Reliability Statistics	
Cronbach's Alpha	N of Items
,894	12

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1_item01	44,8200	25,907	,606	,885
X1_item02	44,7300	25,734	,605	,885
X1_item03	44,4500	25,179	,602	,885
X1_item04	44,4300	24,429	,604	,887
X1_item05	43,8400	26,560	,622	,885
X1_item06	43,8600	26,202	,604	,885
X1_item07	44,3800	25,874	,601	,885
X1_item08	44,1700	25,637	,604	,885
X1_item09	44,0200	25,878	,600	,885
X1_item10	43,9600	26,099	,604	,885
X1_item11	43,8400	25,247	,632	,883
X1_item12	43,7000	25,970	,619	,884

Variabel Y1

Reliability Statistics	
Cronbach's Alpha	N of Items
,911	14

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y1_item01	47,5200	37,848	,613	,904
Y1_item02	47,4100	37,113	,654	,903
Y1_item03	47,7500	38,230	,630	,904
Y1_item04	47,8500	37,967	,603	,905
Y1_item05	48,1600	37,691	,605	,905
Y1_item06	48,1100	37,917	,609	,905
Y1_item07	48,1900	38,458	,627	,904
Y1_item08	48,4600	37,059	,625	,904
Y1_item09	47,3900	38,119	,607	,905
Y1_item10	47,6200	38,420	,602	,905
Y1_item11	47,1800	37,967	,636	,904
Y1_item12	47,1800	38,513	,616	,904
Y1_item13	48,2000	38,040	,602	,905
Y1_item14	48,2200	37,891	,628	,904

Variabel Y2

Reliability Statistics	
Cronbach's Alpha	N of Items
,845	6

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y2_item01	19,8400	7,146	,679	,810
Y2_item02	19,7400	7,326	,626	,820
Y2_item03	20,0500	7,321	,608	,823
Y2_item04	19,7300	6,926	,608	,825
Y2_item05	19,8500	7,321	,630	,819
Y2_item06	20,8400	7,307	,610	,823

Lampiran 2 Analisis PLS

	X1	Y1	Y2
X1	0.531		
Y1	0.060	0.474	
Y2			

Notes: R-squared contributions of predictor lat. vars.; columns = predictor lat. vars.; rows = criteria lat. vars.; negative sign = reduction in R-squared.

Outer Model Hasil Analisis PLS

	X1	Y1	Y2	Type (as defined)	SE	P value
X1.1	(0.796)	0.047	0.094	Reflective	0.081	<0.001
X1.2	(0.731)	-0.315	0.137	Reflective	0.082	<0.001
X1.3	(0.785)	0.325	-0.156	Reflective	0.081	<0.001
X1.4	(0.769)	-0.200	0.060	Reflective	0.081	<0.001
X1.5	(0.747)	0.332	-0.248	Reflective	0.082	<0.001
X1.6	(0.838)	-0.186	0.103	Reflective	0.080	<0.001
Y1.1	0.009	(0.789)	0.000	Reflective	0.081	<0.001
Y1.2	0.057	(0.768)	0.190	Reflective	0.081	<0.001
Y1.3	-0.150	(0.759)	-0.347	Reflective	0.081	<0.001
Y1.4	-0.161	(0.795)	0.150	Reflective	0.081	<0.001
Y1.5	0.163	(0.792)	0.162	Reflective	0.081	<0.001
Y1.6	0.114	(0.796)	-0.012	Reflective	0.081	<0.001
Y1.7	-0.037	(0.795)	-0.152	Reflective	0.081	<0.001
Y2.1	0.146	0.286	(0.799)	Reflective	0.080	<0.001
Y2.2	-0.045	0.144	(0.754)	Reflective	0.081	<0.001
Y2.3	-0.079	-0.200	(0.736)	Reflective	0.082	<0.001
Y2.4	0.073	-0.012	(0.734)	Reflective	0.082	<0.001
Y2.5	-0.019	-0.115	(0.754)	Reflective	0.081	<0.001
Y2.6	-0.087	-0.128	(0.736)	Reflective	0.082	<0.001

Inner Model PLS Analysis

Path coefficients			
	X1	Y1	Y2
X1			
Y1	0.729		
Y2	0.103	0.652	

P values			
	X1	Y1	Y2
X1			
Y1	<0.001		
Y2	0.147	<0.001	

CALCULATION FOR THE SOBEL TEST quantpsy.org

An interactive calculation tool for mediation tests

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 Supplemental material for publications
 Online utilities
 Mediation & moderation material
 PSY-GS 8882: Multilevel Modeling
 PSY-GS 8850: Advanced Structural Equation Modeling
 Vanderbilt Psychological Sciences
 Vanderbilt Quantitative Methods

Note that s_a and s_b should never be negative.

To conduct the Sobel test

Details can be found in Baron and Kenny (1986), Sobel (1982), Goodman (1960), and MacKinnon, Warsi, and Dwyer (1995). Insert the a , b , s_a , and s_b into the cells below and this program will calculate the critical ratio as a test of whether the indirect effect of the IV on the DV via the mediator is significantly different from zero.

Input:	Test statistic:	Std. Error:	p-value:
a 0.73	Sobel test: 5.84023449	0.08124674	1e-8
b 0.65	Arlian test: 5.81935878	0.08153819	1e-8
s_a 0.082	Goodman test: 5.86133648	0.08095423	0
s_b 0.084	<input type="button" value="Reset all"/>	<input type="button" value="Calculate"/>	

Alternatively, you can insert t_a and t_b into the cells below, where t_a and t_b are the t-test statistics for the difference between the a and b coefficients and zero. Results should be identical to the first test, except for error due to rounding.