

Impacts of Openness to Experience on Learning Innovation Model the Moderating Effect of Teacher Knowledge-Sharing

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ABSTRACT

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This study aims to determine the openness to experience and knowledge sharing on certified teacher learning innovations in Banyuwangi. This research was non-experimental quantitative research with a survey design. A total of 110 public and private Madrasah Aliyah teachers in Banyuwangi selected by purposive sampling participated in this survey research. The collected data were then analyzed using the WARP PLS 7.0 application and the IBM Statistical Package for Social Science (SPSS) version 23. Using WARP PLS 7.0 found that: 1) openness to experience affected knowledge sharing by 77 and 3% 2) openness to experience affected the innovative learning model by 48.0%. 3) knowledge sharing affects the innovative learning model by 40.6%. 4) openness to experience the innovation learning model through knowledge sharing is 13.5. It shows that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas that teachers have in various madrasa activities has an impact on the active attitude of teachers in writing books, articles, or research to share their knowledge with other teacher colleagues so that teachers have habituation which is indicated by learning patterns that are developed more effectively.

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INTRODUCTION

After the variants D614G, B117, B1351, B.1.617.2 in mid-2021, the Omicron variant appeared, and it was reported that the number of cases in Indonesia had touched the figure of six million cases as of January 7, 2022.¹ As for the province with the highest number of COVID-19 survivors, East Java, until the end of 2021, amounted to 1,100,735.² The first position was Surabaya, 227,948. The second was Malang, 73,084; the third was Banyuwangi, 38,364.³ However, what is worrying about the level of the Banyuwangi Covid-19 spread, is the cases that occurred in fifty-three Madrasah.

Thus, this pandemic significantly affects various dimensions of human life, including economic, social, tourism, and educational aspects.⁴ The field of education, according to Collins, has an impact on three fundamental changes.⁵ They were first changing the way millions of people are educated. Second, new education solutions can bring much-needed innovation. Third, the digital divide causes a new shift in educational approaches and can widen the gap.

The first and second changes provide a positive space to encourage all educational institutions to involve technology in the learning process. The impact of the third change with the digital divide is inevitable in various remote areas that do not yet have internet access and facilities for using laptops or smartphones.⁶

However, of the three changes, teachers are the key to adapting to these challenges to continue innovating learning models. According to Arum,⁷ learning during the COVID-19 pandemic has become very varied; various innovative learning models are used today, including online methods, offline methods, face-to-face pure, home visits, blended learning, and others.

For this reason, during the COVID-19 pandemic, teachers must continually innovate, especially in learning, starting from learning planning, implementing the learning process, and evaluating learning. Learning model innovation is needed to produce effective and efficient learning.⁸

The facts in Banyuwangi show that 21 Madrasah Aliyah are experiencing various

¹ Jamie Lopez Bernal et al., 'Effectiveness of COVID-19 Vaccines Against the B.1.617.2 (Delta) Variant', *The New England Journal of Medicine* 385, no. 7 (2021): 585–94.

² Nurul Aeni, 'Pandemi COVID-19: Dampak Kesehatan, Ekonomi, & Sosial', *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK* 17, no. 1 (2021): 17–34.

³ Muhyiddin Muhyiddin and Hanan Nugroho, 'A Year of Covid-19: A Long Road to Recovery and Acceleration of Indonesia's Development', *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning* 5, no. 1 (2021): 1–19.

⁴ Riyanti Djalante et al., 'Review and Analysis of Current Responses to COVID-19 in Indonesia: Period of January to March 2021', *Progress in Disaster Science* 6 (2020).

⁵ Muhyidin, 'Covid-19, New Normal, Dan Perencanaan Pembangunan Di Indonesia', *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning* 4, no. 2 (2020): 240–52.

⁶ Nanang Hasan Susanto, Ulfah Nabila, and Muasomah Muasomah, 'Cultural Identity, Capitalization of Education, and Pedagogy for Liberation', *Cendekia: Jurnal Kependidikan Dan Kemasyarakatan* 18, no. 2 (2020): 313–32.

⁷ Annisa Etika Arum and Endang Susilaningsih, 'Pembelajaran Daring Dan Kajian Dampak Pandemi Covid-19 Di Sekolah Dasar Kecamatan Muncar', in *Prosiding Seminar Nasional Seminar Pascasarjana (Prosnampas)*, 2020, 438–44.

⁸ Mulyana et al., *Pembelajaran Jarak Jauh Era Covid-19*, ed. Jejen Musfah (Jakarta Pusat: Libangdiklat Press, 2020).

learning problems, such as the lack of teacher mastery of online learning media, especially for teachers aged 55 years and over; in addition, teachers only focus on the lecture method and assigning assignments to students.⁹ In filling the learning module (LKS), the low interest of teachers to join the teacher subject cluster forum, to the low motivation of teachers to open themselves to technological developments and share knowledge with teachers from other Madrasah Aliyah to increase their scientific capacity and competence.

According to careful researchers, learning problems occur because of weaknesses in developing innovations in learning components. It needs to be a concern for all education so as not to forget to innovate so that learning can achieve goals and provide success in achieving the expected competencies.

The results of Lee Kyungmee's¹⁰ research, Javed¹¹ show that openness to experience significantly influences learning model innovation in universities. In addition, the results of research by Rifat Kamasak,¹² Ipseeta Satpathy,¹³ Asbari,¹⁴ Aulawi,¹⁵ Joosung Lee¹⁶ show that knowledge sharing has a significant influence on learning innovation in higher education. The research of Sarmawa¹⁷ and Sabrina¹⁸ also concluded that knowledge sharing can influence teacher learning innovation. From the description of the previous research and the lack of research that measures the innovation ability of teachers among Madrasah Aliyah teachers in Banyuwangi. The novelty of this research is a model for developing teacher learning innovation measured by knowledge sharing and openness to experience.

RESEARCH METHOD

This research was a causal explanatory type, hypothesis-testing research that examined cause and effect.¹⁹ The variables measured in this study were openness to experience and knowledge sharing on certified teacher learning innovations at A-accredited Madrasah Aliyah

⁹ Akbar Alviaan Hidayat and Endang Sri Wahjuni, 'Survei Peran Guru PJOK Terhadap Berlangsungnya Pendidikan Kesehatan Di SMP Se-Kecamatan Srono Kabupaten Banyuwangi Pada Era Pandemi Covid-19', *Jurnal Pendidikan Olahraga Dan Kesehatan* 9, no. 1 (2021): 407–13.

¹⁰ Kyungmee Lee, 'Openness and Innovation in Online Higher Education: A Historical Review of the Two Discourses', *Open Learning: The Journal of Open, Distance and e-Learning* 36, no. 2 (2021): 112–32.

¹¹ Basharat Javed et al., 'Openness to Experience, Ethical Leadership, and Innovative Work Behavior', *Journal of Creative Behavior* 54, no. 1 (2018): 211–23.

¹² Rifat Kamasak and Fusun Bulutlar, 'The Influence of Knowledge Sharing on Innovation Learning', *European Business Review* 22, no. 3 (2010): 306–17.

¹³ Ipseeta Satpathy et al., 'Value Creation through Knowledge Sharing and Innovation in IT Industry', *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* 9, no. 3 (2020): 1023–27.

¹⁴ Masduki Asbari et al., 'Effect of Tacit and Explicit Knowledge Sharing on Teacher Innovation Capability', *Dinamika Pendidikan* 14, no. 2 (2019): 228–43.

¹⁵ H Aulawi, 'Improving Innovation Capability Through Creativity and Knowledge Sharing Behavior', in *3rd Annual Applied Science and Engineering Conference (AASEC 2018)* (IOP Publishing Ltd, 2018), 1–6.

¹⁶ Joosung Lee, 'The Effects of Knowledge Sharing on Individual Creativity in Higher Education Institutions: Socio-Technical View', *Journal of Administrative Sciences* 8, no. 21 (2018): 1–16.

¹⁷ Anak Agung Dwi Widyani, I Wayan Gede Sarmawa, and I Gusti Ayu Manuati Dewi, 'The Roles of Knowledge Sharing in Mediating the Effect of Self-Efficacy and Self-Leadership Toward Innovative', *Jurnal Manajemen Dan Kewiransahaan* 19, no. 2 (2017): 112–17.

¹⁸ Mustika Nida Sabrina and Nurhidayati, 'Knowledge Sharing Sebagai Mediasi Penentu Perilaku Inovasi Melalui Agreeableness Dan Openness To Experience', in *Prosiding Seminar Nasional Konstelasi Ilmiah Mahasiswa UNISSULA (KIMU)* 4, 2020, 1212–38.

¹⁹ Joseph A. Maxwell, 'Causal Explanation, Qualitative Research, and Scientific Inquiry in Education', *Educational Researcher* 33, no. 2 (2004): 3–11.

in Banyuwangi.

The characteristics of participants in this study were certified teachers in all cities in Banyuwangi, East Java Province, who were assumed to have academic responsibility for teaching, especially in the learning process at the Madrasah Aliyah level. Individuals who meet the requirements above are asked to complete a questionnaire consisting of 4 parts (personal data, openness to experience questionnaire, knowledge sharing, and learning innovation model) for approximately 15 minutes.

According to Hair's opinion on the WARP PLS method, determining the number of samples is effective in the number of 50-200 respondents or by looking at the number of indicators multiplied by 5-10 samples per parameter. In this study, there are three constructs with 11 indicators. Researchers set a value of 10×11 , resulting in 110 respondents.²⁰ The number of 110 respondents is also in the table for determining the sample size recommendation in WARP PLS for a statistical from Cohen that for the target population of 110, the sample size is 110 with an error rate of 0.005.²¹

The data collection process was carried out for two weeks using the accidental sampling technique; namely, the sampling was based on the time reached the sampling population.²² This study uses a data collection method in the form of a questionnaire, a series list of questions whose answers are recorded by the respondents. There are three questionnaires used in this study.

The first research instrument used to measure openness to experience is The Big five personality questionnaire (Pervin and John), and the second instrument is knowledge sharing using Hooff and Ridder theory. The last is learning model innovation using Dick & Carey's theory, which is entirely adapted in Indonesian.

Furthermore, product-moment correlation is used to measure the validity of this instrument. The use of product-moment correlation is because the data scale in this study includes interval data and the statistical measurements are the mean, standard deviation, and Pearson correlation coefficient.

The calculations in this study use the help of the SPSS (Statistical Product and Service Solutions) program for Windows 21.0. The validity criterion is to compare the significance value with the probability value as determined, namely 0.05. If the value of R is 0.50, then the instrument can be valid, and if the value of r is 0.50, then the instrument is invalid.²³

The reliability test results of the instrument of openness to experience, knowledge sharing, and learning model innovation consisting of 32 statement items obtained Cronbach's Alpha value greater than 0.600, indicating that the instrument is reliable and can be used in the subsequent analysis process.

The data in the study were analyzed using descriptive analysis and analysis using the WARP PLS application. Descriptive data is a general description of respondents' answers to questions or statements in the questionnaire. The description describes the state of the object

²⁰ Marko Sarstedt, 'Revisiting Hair Et Al.'s Multivariate Data Analysis: 40 Years Later', in *The Great Facilitator*, ed. Barry J. Babin and Marko Sarstedt (Switzerland: Springer Nature Switzerland, 2019), 113–19.

²¹ Sarstedt.

²² Mimansha Patel, 'Exploring Research Methodology: Review Article', *International Journal of Research and Review* 6, no. 3 (2019): 48–55.

²³ Jennifer D. Chee, 'Pearson's Product-Moment Correlation: Sample Analysis', *ResearchGate*, 2016.

of research which is reflected in the data measured through several indicators in the questionnaire on each variable and produces the mean value. To describe the mean value of each instrument item, criteria are used with class intervals obtained from the calculation results:²⁴

(The highest answer score – the lowest answer score)

Number of categories

From each variable's class interval, each category's limits can be seen that can be used to assess each respondent's level. The score of respondents' answers in this study refers to a 5-point scale from Likert, so the score of the highest respondent's answer is five, and the lowest respondent's answer is 1. At the same time, the number of categories used in compiling the criteria are adjusted to the scale used, namely five classes. Hence, the interval obtained for each class is $(5-1): 5 = 0.8$. Thus, the criteria for describing the mean value obtained by each instrument can be arranged as follows:

Table 1. Descriptive Analysis Scores and Categories

Value	Statement Category
4,2 – 5,0	Strongly agree
3,4 – 4,1	Agree
2,6 – 3,3	Doubtful
1,8 – 2,5	Disagree
1,0 – 1,7	Strongly Disagree

Meanwhile, to analyze the data, researchers used Structural Equation Modeling Partial Least Squares Path (WARP PLS) from the WARPPLS 7.0 Software package. Following Hair's opinion, there are two stages in modeling and analyzing the WARP PLS equation. Parameter estimation in PLS includes three steps: 1) creating a latent variable score from the weight estimate. 2) estimating the path coefficient that connects the latent variables and measuring the loading factor (measurement model coefficient) that connects the latent variables with their indicators. 3) Estimating location parameters.²⁵

The analysis at this stage is in the form of a PLS algorithm which contains an iterative procedure that produces a score for the latent variable. The subsequent analysis was carried out after the latent variable scores were found. b. Model Evaluation: The evaluation of the model in PLS consists of two stages: the evaluation of the outer model or measurement model and the evaluation of the inner model or structural model (structural measurement).²⁶ The evaluation of the measurement model is grouped into the evaluation of the outer model and the evaluation of the inner model.

²⁴ Maxwell, 'Causal Explanation, Qualitative Research, and Scientific Inquiry in Education'.

²⁵ Ned Kock, 'Using WarpPLS in E-Collaboration Studies: An Overview of Five Main Analysis Steps', *International Journal of E-Collaboration* 6, no. 4 (2010): 1–11.

²⁶ Juliansyah Noor, 'Analisis Data Penelitian Sosial Dan Manajemen: Perbandingan Hasil Antara Amos, SmartPLS, WarpPLS, Dan SPSS', *International Journal Of Social and Management Studies (IJSOMAS)* 9, no. 4 (2017): 108.

RESULT AND DISCUSSION

Descriptions of respondents' answers to each statement item can be displayed below:

Descriptive Analysis of Variables

1. Description of the Variable Openness to Experience (X)

The openness to experience variable consists of six indicators, namely (1) fantasy, (2) Aesthetics, (3) feelings, (4) actions, (5) ideas, and (6) values. The results of each indicator's description of openness to experience are presented as follows.

Table 2. Description of the Openness to Experience Variable

No	Item	STS	TS	N	S	SS	Mean
		F	F	F	F	F	
<i>Fantasy (X1)</i>							
1	I always put forward a professional attitude	0	0	2	52	55	4,50
2	I always have had a passion for work	0	0	1	23	86	4,25
Number of Fantasy Indicator Means (X1)							4,37
<i>Aesthetics (X2)</i>							
3	I like to be creative for madrasa activities	0	0	2	41	67	4,63
4	I appreciate artistic souls	0	0	3	40	67	4,63
Number of Aesthetics Indicator Means (X2)							4,63
<i>Feelings (X3)</i>							
5	I try to change if I realize what I did wrong	0	0	6	50	54	4,50
6	Even though the situation is not good, I still carry out my duties carefully	0	0	24	58	28	4,04
Number of <i>Feelings</i> Indicator Means (X3)							4,27
<i>Actions (X4)</i>							
7	I am happy to participate in various training so that the madrasa can develop more.	0	0	2	23	85	4,79
8	I am happy to add positive activities for the progress of the madrasah	0	0	1	47	62	4,57
Number of <i>Actions</i> Indicator Means (X4)							4,68
<i>Ideas (X5)</i>							
9	I always have new ideas that can encourage the development of madrasah	0	0	2	23	85	4,72
10	I want to be creative with the ideas and ideas that I have in various madrasa activities	0	0	1	47	62	4,95
Number of <i>Ideas</i> Indicator Means (X5)							4,83
<i>Values (X6)</i>							
11	I still carry out my religious obligations even though I am busy working	0	0	4	23	83	4,50

12	I always show respect to my boss or co-workers	0	0	0	6	104	4,63	
	Indicator Means <i>Values</i>						Indicator Means (<i>X6</i>)	4,56
Total Mean of Openness to Experience Indicators							4,56	

Source: Primary Data Processed, 2022

Based on table 2, the average openness to experience variable is 4.56. This result means that respondents strongly agree that openness to experience is formed by (1) fantasy, (2) aesthetics, (3) feelings, (4) actions, (5) ideas, and (6) values. The results of the description of the openness to experience variable indicate that the ideas indicator, which is indicated by the desire to be creative with the ideas and ideals possessed by teachers in various madrasa activities, is the primary indicator that can measure openness to experience with the highest mean value of 4.95, followed by teacher actions to take part in various training. So, the madrasah is more developed, with a mean value of 4.79.

2. Description of Knowledge Sharing Variable (Z)

The knowledge-sharing variable consists of six indicators, namely (1) Knowledge Donating and (2) Knowledge Collection. The results of the description of knowledge sharing on each indicator are presented as follows.

Table 3. Description of Knowledge Sharing Variable (Z)

No	Item	STS	TS	N	S	SS	Mean
		F	F	F	F	F	
<i>Knowledge Donating (Z1)</i>							
1	If I learn a new skill or knowledge, then I share it with my co-workers	0	0	2	41	67	4,63
2	If my co-worker learns a new skill or information, then they share it with me	0	0	2	28	80	4,75
3	I actively express opinions and suggestions while discussing work problems with my co-workers	0	0	2	41	67	4,63
4	If I find something difficult to explain, I tend to demonstrate it with my co-workers	0	0	14	70	26	4,11
Mean Number of Knowledge Donating Indicators (Z1)							4,53
<i>Knowledge Collection (Z2)</i>							
		STS	TS	N	S	SS	
5	I actively invite my co-workers to discuss work problems I do not understand.	0	0	2	41	67	4,63
6	If I learn a new skill or knowledge, I will write it down so that other colleagues can use the knowledge	0	0	0	42	68	4,62
7	If my co-worker learns a new skill or information, they will record it so other co-workers, including me, can use that knowledge	0	0	2	41	67	4,63

8	I am actively writing books, articles, or research intending to share my knowledge with my colleagues	0	0	1	47	62	4,93
	Mean Number of Knowledge Collection Indicators (Z2)						4,72
	Total Mean Knowledge Sharing Indicators (Y)						4,61

Based on table 3, the average knowledge-sharing variable is 4.61. This result means that respondents strongly agree that openness to experience is formed by knowledge donating and knowledge collection. The results of the description of the knowledge sharing variable indicate that the teacher's enthusiastic attitude indicates the indicator of knowledge collection in writing books, articles, or research to share the knowledge possessed with other teacher colleagues, with the highest mean value of 4.93, followed by action if a teacher learns new skills or information then he shares it with other colleagues with a mean value of 4.75.

3. Variable Description of Innovation learning model (Y)

The innovation learning model variable consists of six indicators, namely (1) the innovation of developing a reflection thinking strategy, (2) the innovation of developing a reinforcement strategy, and (3) the innovation of developing a habituation strategy. The results of the description of the innovative learning model on each indicator are presented as follows.

Table 4. Variable Description of Innovation Learning Model (Y)

No	Item	STS	TS	N	S	SS	Mean
		F	F	F	F	F	
Reflection Thinking (Y1)							
1	Encourage students to identify problems	0	0	2	41	67	4,63
2	Encouraging students to find alternative problem solving	0	0	2	42	66	4,62
3	Encourage students to develop ideas for solving problems	0	0	2	27	83	4,75
4	Encourage students to test problem-solving solutions	0	0	0	28	82	4,75
	Total Mean Reflection Thinking Indicator (Y1)						4,69
Reinforcement (Y2)							
		STS	TS	N	S	SS	
5	Encourage students to express ideas/ideas freely	0	0	2	41	67	4,63
6	Encourage students to complete assignments on time	0	0	2	27	83	4,74
7	Give appreciation to students who have innovative ideas	0	0	2	41	67	4,63
8	Give prizes to students who can complete assignments on time	0	0	0	28	82	4,76
	Total Mean Reinforcement Indicator (Z2)						4,69
Habituation (Y3)							
		STS	TS	N	S	SS	
9	Timely learning	0	0	2	41	67	4,63
10	Learning begins and ends with prayer	0	0	4	40	66	4,60

11	Learning by using the correct and good language	0	0	2	27	83	4,73
12	Learning patterns are developed effectively and efficiently.	0	0	1	47	62	4,84
Total Mean Habituation Indicator (Z3)							4,72
Total Mean Innovation Learning Model Indicators (Z)							4,70

Based on table 3, the average knowledge-sharing variable is 4.70. This result means that respondents strongly agree that openness to experience is formed by (1) reflection thinking, (2) reinforcement (3) habituation. The results of the description of the Innovation Learning Model variable indicate that the habituation indicator, as indicated by the learning pattern, is developed effectively and efficiently, with the highest mean value of 4.84, followed by giving prizes to students who can complete assignments on time with a mean value of 4.76.

WARP-PLS Data Analysis

1. Testing the Measurement Model (outer model)

A research concept and model cannot be tested in a relational and causal relationship prediction model if it has not gone through the purification and measurement model stages. The measurement model (outer model) was used to test the construct validity and instrument reliability. The results of data processing with the WARP PLS application are described as follows:

Validity test:

According to Wiyono, validity can be determined by convergent validity (outer model) with a loading factor value of 0.50 to 0.60 is considered sufficient. In this validity test, the researcher used a loading factor > 0.50 . The questionnaires were distributed, then the questionnaires were processed using WarpPLS 7.0 by producing the loading factor values as presented in table 5:

Table 5. Value of Loading Factor

Variable	Item	Value of loading Factors	Information
Openness to experience (X)	X1.1	0.725	Valid
	X1.2	0.942	Valid
	X2.1	0.861	Valid
	X2.2	0.797	Valid
	X2.3	0.703	Valid
	X3.1	0.795	Valid
	X3.2	0.662	Valid
	X4.1	0.635	Valid
	X4.2	0.785	Valid
	X5.1	0.700	Valid
	X5.2	0.861	Valid
	X6.1	0.733	Valid
X6.2	0.672	Valid	

Knowledge Sharing (Z)	Z1.1	0.986	Valid
	Z1.2	0.619	Valid
	Z1.3	0.831	Valid
	Z1.4	0.754	Valid
	Z2.1	0.678	Valid
	Z2.2	0.865	Valid
	Z2.3	0.644	Valid
	Z2.4	0.690	Valid
Innovation Learning Model (Z)	Y1.1	0.792	Valid
	Y1.2	0.683	Valid
	Y1.3	0.629	Valid
	Y1.4	0.852	Valid
	Y2.1	0.752	Valid
	Y2.2	0.730	Valid
	Y2.3	0.642	Valid
	Y2.4	0.792	Valid
	Y3.1	0.730	Valid
	Y3.2	0.676	Valid
	Y3.3	0.819	Valid
	Y3.4	0.732	Valid
	Y3.3	0.852	Valid
	Y3.4	0.752	Valid

Source: data processed with Warp PLS 7.0

Based on table 5, all statement items are worth > 0.50 and are declared valid. The results of data processing with the WARP PLS application are described in the Reliability Test. The reliability test shows the consistency and stability of the measuring instrument in the study. According to Abdillah and Hartono, a construct is reliable if the composite reliability value is > 0.60 .

Table 6. Cronbach's Alpha and Composite Reliability

No	Variable	Composite reliability	Status
1	Openness to experience	0,664	Reliable
2	Knowledge Sharing	0,639	Reliable
3	Innovation learning model	0,744	Reliable

Source: data processed with Warp PLS 7.0

From the table, it is known that all variables can be said to be reliable because the composite reliability value is > 0.60 . The lowest composite reliability value is in the knowledge sharing variable, which is 0.639, and the highest is in the Innovation learning model t variable, which is 0.744.

2. Meaning of R² and Testing of the structural model (inner model)

a. Structural Model Testing through R² Value

The value of R² is used to measure the level of variation of changes in the independent variable to the dependent variable. The following is the R² value used to assess the effect of the independent variable on the dependent variable:

Table 7. Value of R²

No	Variable	R ²
1	Knowledge Sharing	0,598
2	Innovation learning model	0,281

Source: data processed with Warp PLS 7.0

The table shows that the R² value of the knowledge-sharing variable is 0.598, meaning that the knowledge-sharing variable can be explained by the online learning assistance variable of 59.8%. Other variables can explain the remaining 40.2% outside of this study.

The R² value of the innovative learning model variable is 0.281, meaning that the openness can explain the innovative learning model variable to the experience variable and 28.1% knowledge sharing. Other variables can explain the remaining 71.9% outside of this study.

b. Hypothesis test

This research model uses hypothesis testing to see the significance level (p-value) and the relationship between variables. It can be seen from the estimation results of the path coefficient (path coefficient). The following is an image of the test results using WarpPLS 7.0:

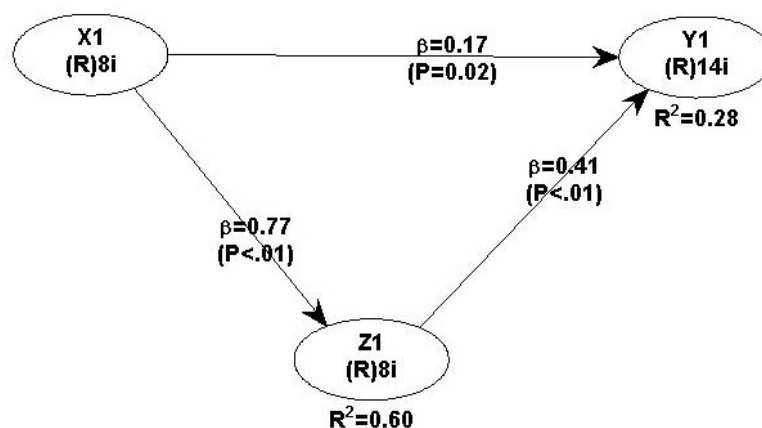


Figure 1. Indirect Effect Research Model Testing with WarpPLS 7.0

Source: data processed with WarpPLS 7.0

Caption:

- 1) X1: Openness to experience
- 2) Z1: Knowledge Sharing
- 3) Y1: Innovation learning model

All hypotheses in this study can be significant or insignificant based on the p-value. If the p-value is less than 5% (≤ 0.05), then H_0 is rejected, or there is a significant effect. In contrast, if the p-value is greater than 5% (> 0.05), then H_0 is accepted, or there is an effect that is not significant. At the same time, the results of the path coefficient estimation are to test the strength of the influence between variables and carry out the firmness of the relationship between variables.

Following are the results of hypothesis testing based on the WARP PLS model that has been formed between Online Learning Assistance (X1), Spiritual Well Being (Z1), Single Parent Mother Resilience (Y1):

1) hypotheses 1

Table 8. Path Coefficients Estimation Results

No	Hypothesis	Path Coefficients	P Value	Information
1	X1 → Z1	0,773	<0,001	Significant

Source: data processed with Warp PLS 7.0

Hypothesis 1 examines the effect of openness to experience (X1) on knowledge sharing (Z1). The test results obtained p values of $0.001 < 0.005$ so that a decision can be made:

H_a accepted: openness to experience (X1) affects knowledge sharing (Z1). As for the interpretation of path coefficients with a value of 0.773, it can be said that openness to experience affects knowledge sharing by 77.3%. The higher the openness to experience a teacher, the higher the knowledge sharing.

2) hypotheses 2

Table 9. Path Coefficients Estimation Results

No	hypotheses	Path Coefficients	P Value	Information
1	X1 → Y1	0,480	<0,002	Significant

Source: data processed with Warp PLS 7.0

Hypothesis 2 examines the effect of openness to experience (X1) on the innovative learning model (Y1). The test results obtained p values of $0.002 < 0.005$ so that a decision can be made:

H_a is accepted: openness to experience (X1) affects the innovative learning model (Y1). As for the interpretation of path coefficients with a value of 0.480, it can be said that openness to experience affects the innovative learning model by 48.0%. That is, the better the openness to experience of a teacher, the better the innovative learning model is.

3) hypotheses 3

Table 10. Path Coefficients Estimation Results

No	Hypotheses	Path Coefficients	P Value	Information
1	Z1 → Y1	0,406	<0,001	Significant

Source: data processed with Warp PLS 7.0

Hypothesis 3 examines the effect of knowledge sharing (Z1) on the innovative learning model (Y1). The test results obtained p values of $0.001 < 0.005$ so that a decision can be made:

Ha accepted: that knowledge sharing (Z1) affects the innovative learning model (Y1). As for the interpretation of path coefficients with a value of 0.406, it can be said that knowledge sharing affects the innovative learning model by 40.6%. That is, the better the level of knowledge sharing of a teacher, the better the innovative learning model is.

4) Hypothesis 4

Table 11. Indirect Effects for Paths Estimated Results

No	Hypotheses	Indirect Effects on Paths	P Value	Information
1	X1 → Z1 → Y1	0,315	<0,001	Significant

Source: data processed with Warp PLS 7.0

Hypothesis 4 examines the effect of openness to experience (X1) on the innovative learning model (Y1) through knowledge sharing (Z1). The test results obtained p values of $0.001 < 0.005$ so that a decision can be made:

Ha accepted: that openness to experience (X1) affects the innovative learning model (Y1) through knowledge sharing (Z1). As for the interpretation of indirect effects for paths with a value of 0.315, it can be said that the openness to experience the innovative learning model through knowledge sharing is 13.5%, meaning that knowledge sharing can become a mediator variable in influencing the innovative learning model of the openness to experience variable.

The results of the study strengthen the theory of Pervin and John²⁷ that openness to experience is formed by (1) fantasy, (2) aesthetics, (3) feelings, (4) actions, (5) ideas, and (6) values. The results of the study strengthen the theory of Hooff and Ridder that knowledge sharing is formed by (1) Knowledge Donating and (2) Knowledge Collection. The results of the study strengthen the theory of Dick & Carey that the learning innovation model is formed by (1) reflection thinking, (2) reinforcement (3) habituation.

The results of the first hypothesis test show that the higher the openness to experience, the better knowledge sharing is. It means that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas that teachers have in various madrasa activities impacts teachers' active attitude in writing books, articles, or research to share their knowledge with other teachers' colleagues. This finding strengthens

²⁷ Cervone and Pervin, *Personality: Theory and Research*.

Lee Kyungmee's research,²⁸ Javed²⁹ showing that openness to experience significantly influences learning model innovation informal education institutions.

The results of the second hypothesis test indicate that the higher the openness to experience, the better the innovation learning model. It means that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas possessed by teachers in various madrasa activities impacts habituation, as indicated by learning patterns developed effectively and efficiently. This finding strengthens the research results of Rifat Kamasak,³⁰ Ipseeta Satpathy,³¹ Asbari,³² Aulawi,³³ Joosung Lee Division,³⁴ showing that knowledge sharing has a significant influence on learning innovation in higher education.

The results of the third hypothesis test show that the higher the knowledge sharing, the better the innovation learning model. It means that knowledge Sharing in the form of the teacher's enthusiastic attitude in writing books, articles, or research to share the knowledge possessed with other teacher colleagues impacts teacher habituation, which is indicated by learning patterns that are developed more effectively and efficiently. This finding strengthens the research results by Sarmawa and Sabrina, which also concludes that Knowledge Sharing can become a mediator variable in teacher learning innovation.

The results of the fourth hypothesis test show that knowledge sharing can become a mediator variable in influencing the innovative learning model from the openness to experience variable. It means that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas that teachers have in various madrasa activities has an impact on the teacher's enthusiastic attitude in writing books, articles, or research sharing knowledge possessed with other teacher colleagues so that teachers have habituation which is indicated by learning patterns that are developed more effectively and efficiently.

CONCLUSION

Based on the results of research and discussion, it can be concluded that: 1) openness to experience affects knowledge sharing by 77.3%. It means that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas of teachers in various Madrasah activities has an impact on the active attitude of teachers in writing books, articles, or research to share their knowledge with other teacher colleagues 2) that openness to experience affects the innovative learning model by 48.0%. It means that openness to experience in the form of ideas through the desire to be creative with the ideas and ideas possessed by teachers in various madrasa activities impacts habituation, as indicated by

²⁸ Lee, 'Openness and Innovation in Online Higher Education: A Historical Review of the Two Discourses'.

²⁹ Javed et al., 'Openness to Experience, Ethical Leadership, and Innovative Work Behavior'.

³⁰ Kamasak and Bulutlar, 'The Influence of Knowledge Sharing on Innovation Learning'.

³¹ Satpathy et al., 'Value Creation through Knowledge Sharing and Innovation in IT Industry'.

³² Asbari et al., 'Effect of Tacit and Explicit Knowledge Sharing on Teacher Innovation Capability'.

³³ Aulawi, 'Improving Innovation Capability Trough Creativity and Knowledge Sharing Behavior'.

³⁴ Lee, 'The Effects of Knowledge Sharing on Individual Creativity in Higher Education Institutions: Socio-Technical View'.

learning patterns developed effectively and efficiently 3) knowledge sharing affects innovative learning models by 40.6%. It means that knowledge sharing in the form of the teacher's enthusiastic attitude in writing books, articles, or research to share the knowledge with other teacher colleagues impacts teacher habituation, which is indicated by learning patterns that are developed more effectively and efficiently. 4) openness to experience the innovation learning model through knowledge sharing is 13.5%.

REFERENCES

- Aeni, Nurul. 'Pandemi COVID-19: Dampak Kesehatan, Ekonomi, & Sosial'. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK* 17, no. 1 (2021): 17–34.
- Arum, Annisa Etika, and Endang Susilaningsih. 'Pembelajaran Daring Dan Kajian Dampak Pandemi Covid-19 Di Sekolah Dasar Kecamatan Muncar'. In *Prosiding Seminar Nasional Seminar Pascasarjana (Prosnampas)*, 438–44, 2020.
- Asbari, Masduki, Laksmi Mayesti Wijayanti, Choi Chi Hyun, Agus Purwanto, and Budi Santoso. 'Effect of Tacit and Explicit Knowledge Sharing on Teacher Innovation Capability'. *Dinamika Pendidikan* 14, no. 2 (2019): 228–43.
- Aulawi, H. 'Improving Innovation Capability Trough Creativity and Knowledge Sharing Behavior'. In *3rd Annual Applied Science and Engineering Conference (AASEC 2018)*, 1–6. IOP Publishing Ltd, 2018.
- Bernal, Jamie Lopez, Nick Andrews, Charlotte Gower, Eileen Gallagher, Ruth Simmons, Simon Thelwall, Julia Stowe, et al. 'Effectiveness of COVID-19 Vaccines Against the B.1.617.2 (Delta) Variant'. *The New England Journal of Medicine* 385, no. 7 (2021): 585–94.
- Cervone, Daniel, and Lawrence A. Pervin. *Personality: Theory and Research*. New York: John Wiley & Sons, Inc, 2001.
- Chee, Jennifer D. 'Pearson's Product-Moment Correlation: Sample Analysis'. *ResearchGate*, 2016.
- Djalante, Riyanti, Jonatan Lassa, Davin Setiamarga, Aruminingsih Sudjatma, Mochamad Indrawan, Budi Haryanto, Choirul Mahfud, et al. 'Review and Analysis of Current Responses to COVID-19 in Indonesia: Period of January to March 2021'. *Progress in Disaster Science* 6 (2020).
- Hidayat, Akbar Alvian, and Endang Sri Wahjuni. 'Survei Peran Guru PJOK Terhadap Berlangsungnya Pendidikan Kesehatan Di SMP Se-Kecamatan Srono Kabupaten Banyuwangi Pada Era Pandemi Covid-19'. *Jurnal Pendidikan Olahraga Dan Kesehatan* 9, no. 1 (2021): 407–13.
- Javed, Basharat, Abdul Karim Khan, Surendra Arjoon, Maria Mashkooor, and Adnan ul Haque. 'Openness to Experience, Ethical Leadership, and Innovative Work Behavior'. *Journal of Creative Behavior* 54, no. 1 (2018): 211–23.

- Kamasak, Rifat, and Fusun Bulutlar. 'The Influence of Knowledge Sharing on Innovation Learning'. *European Business Review* 22, no. 3 (2010): 306–17.
- Kock, Ned. 'Using WarpPLS in E-Collaboration Studies: An Overview of Five Main Analysis Steps'. *International Journal of E-Collaboration* 6, no. 4 (2010): 1–11.
- Lee, Joosung. 'The Effects of Knowledge Sharing on Individual Creativity in Higher Education Institutions: Socio-Technical View'. *Journal of Administrative Sciences* 8, no. 21 (2018): 1–16.
- Lee, Kyungmee. 'Openness and Innovation in Online Higher Education: A Historical Review of the Two Discourses'. *Open Learning: The Journal of Open, Distance and e-Learning* 36, no. 2 (2021): 112–32.
- Maxwell, Joseph A. 'Causal Explanation, Qualitative Research, and Scientific Inquiry in Education'. *Educational Researcher* 33, no. 2 (2004): 3–11.
- Muhyiddin, Muhyiddin, and Hanan Nugroho. 'A Year of Covid-19: A Long Road to Recovery and Acceleration of Indonesia's Development'. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning* 5, no. 1 (2021): 1–19.
- Muhyidin. 'Covid-19, New Normal, Dan Perencanaan Pembangunan Di Indonesia'. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning* 4, no. 2 (2020): 240–52.
- Mulyana, Jejen Musfah, Nursalamah Siagian, Abdul Basid, Saimroh, Rilla Sovitriana, Neneng Habibah, et al. *Pembelajaran Jarak Jauh Era Covid-19*. Edited by Jejen Musfah. Jakarta Pusat: Libangdiklat Press, 2020.
- Noor, Juliansyah. 'Analisis Data Penelitian Sosial Dan Manajemen: Perbandingan Hasil Antara Amos, SmartPLS, WarpPLS, Dan SPSS'. *International Journal Of Social and Management Studies (IJOSMAS)* 9, no. 4 (2017): 108.
- Patel, Mimansa. 'Exploring Research Methodology: Review Article'. *International Journal of Research and Review* 6, no. 3 (2019): 48–55.
- Sabrina, Mustika Nida, and Nurhidayati. 'Knowledge Sharing Sebagai Mediasi Penentu Perilaku Inovasi Melalui Agreeableness Dan Openness To Experience'. In *Prosiding Seminar Nasional Konstelasi Ilmiah Mahasiswa UNISSULA (KIMU)* 4, 1212–38, 2020.
- Sarstedt, Marko. 'Revisiting Hair Et Al.'s Multivariate Data Analysis: 40 Years Later'. In *The Great Facilitator*, edited by Barry J. Babin and Marko Sarstedt, 113–19. Switzerland: Springer Nature Switzerland, 2019.
- Satpathy, Ipseeta, Mitali Das Mohapatra, B. C. M. Patnaik, and S. C. Das. 'Value Creation through Knowledge Sharing and Innovation in IT Industry'. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* 9, no. 3 (2020): 1023–27.
- Susanto, Nanang Hasan, Ulfah Nabila, and Muasomah Muasomah. 'Cultural Identity,

Capitalization of Education, and Pedagogy for Liberation'. *Cendekia: Jurnal Kependidikan Dan Kemasyarakatan* 18, no. 2 (2020): 313–32.

Widyani, Anak Agung Dwi, I Wayan Gede Sarmawa, and I Gusti Ayu Manuati Dewi. "The Roles of Knowledge Sharing in Mediating the Effect of Self-Efficacy and Self-Leadership Toward Innovative". *Jurnal Manajemen Dan Kewirausahaan* 19, no. 2 (2017): 112–17.