

The Relationship between Knowledge Sharing Behavior and Innovative Work Behavior through Innovation Self-Efficacy as Mediator

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Abstract

Purpose: This study focuses on the role of innovation self-efficacy as a mediator in the relationship between knowledge sharing behavior and innovative work behavior.

Research methodology: This research was conducted on 306 students from 14 faculties who were taking second to last semester. This study was measured using the Innovative Work Behavior (IWB) scale developed by (Janssen, 2000) Knowledge Sharing Behavior (KSB) developed by (Chen, Chen, & Kinshuk, 2009), and Innovation Self-Efficacy (ISE.6) developed by (Dungs, Sheppard, & Chen, 2017) The sampling method in this study used non-probability sampling with a convenience sampling technique. The statistical analysis technique used PROCESS through IBM SPSS version 21.

Results: The results showed that innovation self-efficacy had a partial mediating effect on the relationship between knowledge sharing behavior and innovative work behavior.

Limitations: The limitation in this study is that the effect of mediation is still partial mediation so it is hoped that further research can examine other mediator variables that have a stronger influence.

Contribution: This research contributes to institutions, companies, or governments to develop programs or activities that aim to improve an individual's innovative work behaviors.

Keywords: *Innovative Work Behavior, Knowledge Sharing Behavior, Innovation Self-Efficacy.*

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1. Introduction

Currently, the world is facing the era of industrial revolution 4.0 which is marked by very rapid technological developments (Nawangsih, 2019). The existence of industrial revolution 4.0 has an impact on companies in the form of increasing consumer needs. Companies need large amounts of data that are useful for encouraging innovation so that they can provide information about unique products and services for consumers (Marzal, 2019); (Nawangsih, 2019) Such large amounts of data can be obtained through Big Data, which means that companies must always be ready to be open to any changes that occur. One way to overcome the impact of the industrial revolution 4.0 is to have a creative character (Marzal, 2019).

However, the terms creativity and innovation are different things (Etikariena, 2019) This is because creativity is only an idea while innovation has reached the realization stage. (Ramamoorthy, Flood, Slattery, & Sardesai, 2005) explained that innovation in organizations can be obtained through the innovative work behavior of its employees. Innovative work behavior is defined as the intentional creation, introduction, and application of new ideas that can be useful for work, groups, or organizations (Janssen, 2000) The existence of innovative work behavior can include much better organizational functions, increased job satisfaction, and much better employee interpersonal communication (Janssen,

2000) In addition, it can also help individuals in dealing with various changes that can occur at any time related to the environment or workload ([Etikariena, 2019](#))

However, according to the Global Index Innovation (GII) 2020, it shows that the level of ability to innovate in Indonesia is still quite low. This can be seen through the innovation ranking position in Indonesia, which is ranked 85th out of 131 countries around the world. It is also known that the rating has not increased since 2018 ([Lokadata, 2021](#)). One way to overcome this is through the role of higher education from students ([Ramadhan, 2020](#); ([DJKI, 2020](#)). However, the reality is that universities in Indonesia are still not optimal in displaying innovative behavior ([UNPD, 2020](#)). In addition, from 2015 until now, it is also known that employment is still dominated by elementary school graduates (37.50%). Meanwhile, workers with a bachelor's background are only around 10% and diplomas are only about 2% ([Wirawan et al., 2021](#)).

([Etikariena, 2019](#)) says that it is very important to prepare for innovative work behavior since college. This is because when prospective graduate students enter the world of work, they only have to adapt to the innovations that exist in the company. There are several advantages gained by implementing innovative work behaviors early on students. Innovative work behavior can reduce the risk of innovation failure in the world of work such as conflicts between employees and individual bad reputations, saving time and organizational costs in developing innovative work behaviors of their employees, and can affect student entrepreneurial success in the future ([Helmi, 2011](#)); ([Winarsih & Etikariena, 2020](#)); ([Firdausiah & Etikariena, 2021](#))

One of the factors that can influence innovative work behavior is knowledge sharing behavior ([Nijenhuis, 2015](#); ([Medori, 2020](#)) Davenport and ([Davenport & Prusak, 1998](#)) describe knowledge sharing behavior as a process of exchanging knowledge between individuals or groups that can provide benefits for now and in the future. [Ghorbani & Knanacah \(2020\)](#) also explain that knowledge sharing is the transfer of knowledge from one person or group to another person or group. The existence of knowledge sharing can provide positive benefits for innovation and a high level of productivity for the organization. In addition, organizations that can transfer knowledge from one organizational unit to another can make the organization more productive ([Ghorbani & Knanacah, 2020](#)). ([Aljaaidis, Bagais, & Al-Moataz, 2020](#)) also said that the existence of knowledge sharing behavior can increase student innovation. Several studies have examined the relationship between the two variables ([Phung, Hawryszkiewicz, Chandran, & Ha, 2017](#)); ([Etikariena, 2019](#)); ([Asurakkody & Kim, 2020](#)) However, other studies say that there is no relationship between knowledge sharing behavior and innovative work behavior ([Yeşil & Hırlak, 2013](#)); ([Sulistiowati, 2018](#)) The research provides suggestions to add mediator variables that can play an important role between knowledge sharing behavior and innovative work behavior.

One of the variables that can affect the relationship between the two variables is innovation self-efficacy. Innovation self-efficacy is an individual's belief in his ability to produce innovative results, which refers to innovative work behavior ([Dörner, 2012](#)) The reason for using innovation self-efficacy is because there are still many students who are embarrassed to ask ([Febrian, 2018](#)). Based on the results of the report, it is known that there are only 10% of students actively ask in one of the universities in Indonesia. ([Putri & Wijayanti, 2018](#)) also added that there are still many students who are afraid to speak. This is following ([Bock & Kim, 2002](#)) who say that individuals tend to hoard the knowledge they have. Thus, instead of just encouraging individuals to share their knowledge, it is necessary to cultivate some kind of motivation to make individuals believe in sharing their knowledge. Therefore, the authors assume that one type of motivation that can influence knowledge sharing behavior is innovation self-efficacy.

The relationship in this study can be explained through social cognitive theory, which explains that human function can be caused by the interaction of various factors such as personal, behavioral, and environmental factors ([Bandura, 1999](#)) In this study, there will be an interaction between personal factors (innovation self-efficacy) and behavioral factors (knowledge sharing behavior and innovative

work behavior), which will lead to how individuals should behave in their environment. Researchers assume that individuals who have knowledge sharing behavior will gain more knowledge so that it will increase the self-efficacy of their innovations. As a result, individuals with higher levels of innovation self-efficacy will increase their confidence to produce innovative ideas that refer to innovative work behavior.

So far, there has been no specific research that discusses the relationship between the three variables. However, there have been previous studies that discussed the relationship between variables and general self-efficacy ([Widyani, Sarmawa, & Dewi, 2017](#)); ([Ibus, Wahab, & Ismail, 2020](#)) ([Ibus et al., 2020](#)) provide suggestions for researching other mediator variables so that they will get more comprehensive view of the factors that can increase innovative work behavior. In addition, the research of ([Yeşil & Hırlak, 2013](#)) and ([Sulistiowati, 2018](#)) also forms the basis for this study to add a mediator variable that can play an important role between knowledge sharing behavior and individual innovative work behavior. Thus, this study aims to determine the mediating role of innovation self-efficacy on the relationship between knowledge sharing behavior and innovative work behavior, especially in the student context.

2. Literature Review and Hypothesis Development

Innovative Work Behavior (IWB)

([Scott & Bruce, 1994](#)) explain innovative work behavior as an individual process in creating ideas as solutions to problems, forming coalitions as an effort to support ideas, and implementing ideas in the form of models that are displayed on the need for innovation in their environment. Complementing the definition of ([Scott & Bruce, 1994](#)) ([Janssen, 2000](#)) describes innovative work behavior as the intentional creation, introduction, and application of new ideas that can benefit the job, group, or organization. The study of ([Janssen, 2000](#)) uses the same steps as Scott and ([Scott & Bruce, 1994](#)) in explaining innovative work behavior. First, idea generation is the stage of producing new ideas that can be useful in solving problems. Second, the promotion of ideas, where individuals look for sources of support to build the idea. Last, idea realization is the stage of realizing ideas by producing prototypes or innovation models that can be applied in various situations or activities such as work, groups, or organizations.

Knowledge Sharing Behavior (KSB)

([Davenport & Prusak, 1998](#)) describe knowledge sharing behavior as a process of exchanging knowledge between individuals or groups that can provide both current and future benefits. In the context of higher education, knowledge sharing behavior is defined as a knowledge sharing process carried out by students by asking good questions, recommending articles, and providing ideas, and helping others in solving problems ([Chen et al., 2009](#)) ([Aljaaidis et al., 2020](#)) said that the existence of knowledge sharing behavior can increase student innovation. In addition, ([Nisar ul Haq & Haque, 2018](#)) say that the existence of knowledge sharing behavior through conversation or discussion can also trigger a much better way of thinking of students and is considered a success factor in the world of work.

Innovation Self-Efficacy (ISE)

([Dungs et al., 2017](#)) explain innovation self-efficacy as an important variable to explain innovative work behavior. ([Dörner, 2012](#)) also describes innovation self-efficacy as an individual's belief in his or her ability to produce innovative results, where innovative results refer to the implementation of innovative work behaviors. ([Dungs et al., 2017](#)) said that innovation self-efficacy consisted of 5 predictors, which was adapted based on the literature of ([Dyer, Gregersen, & Christensen, 2008](#)) First, questioning, which aims to obtain new information or ideas. Second, observing is an intense observation by observing the world around life. Third, experimenting is conducting trials to produce new information. Fourth, the idea of networking is to build and maintain diverse social networks to get new ideas and perspectives. Finally, associating is a cognitive skill that helps individuals make connections across seemingly unrelated questions, problems, or ideas.

The Mediation Role of Innovation Self-Efficacy on the Relationship of Knowledge Sharing Behavior with Students' Innovative Work Behavior

Based on previous research, it is known that there is a relationship between knowledge sharing behavior and innovative work behavior ([Etikariena, 2019](#)); ([Phung et al., 2017](#)); ([Asurakkody & Kim, 2020](#)) This is due to the existence of knowledge sharing behavior that can increase student innovation and is considered as one of the success factors in the world of work later. However, there are previous studies that say that knowledge sharing behavior has no relationship with individual innovative work behavior ([Yeşil & Hırlak, 2013](#)); ([Sulistiowati, 2018](#)) This is because the existence of group discussions can indeed increase an individual's ability to share knowledge, but does not directly affect innovative work behavior. In addition, based on the results of previous research, it shows that there are still many students who are lacking in displaying knowledge sharing behaviors such as being shy to actively ask questions and being afraid to read ([Febrian, 2018](#)); ([Putri & Wijayanti, 2018](#)) Therefore, we need a connecting variable that can relate to the two variables.

Researchers assume that self-efficacy can be a link between the two variables. However, there is another term that has a closer relationship with innovative work behavior, namely innovation self-efficacy. Innovation self-efficacy is defined as an individual's belief in his ability to produce innovative results, which refers to the term innovative work behavior ([Dörner, 2012](#)) Previous research has also said that self-efficacy is considered different from innovation self-efficacy. Innovation self-efficacy is considered to have a more important role in explaining innovative work behavior. Meanwhile, self-efficacy is considered to better describe individual beliefs in general in various situations. Self-efficacy also focuses more on an individual's cognitive abilities such as gathering information and memory rather than being innovative. Therefore, the use of innovation self-efficacy is considered more appropriate in explaining the relationship between knowledge sharing behavior and innovative work behavior.

The relationship between variables can be explained through social cognitive theory, which explains that human function is caused by the interaction of various factors such as personal, behavioral, and environmental factors ([Bandura, 1999](#)) In this study, there will be an interaction between personal factors (innovation self-efficacy) and behavioral factors (knowledge sharing behavior and innovative work behavior), which will lead to how individuals should behave in their environment. Researchers assume that individuals who have knowledge sharing behavior will gain more knowledge so that it will increase the self-efficacy of their innovations. This is because the process of knowledge sharing behavior, not only benefits recipients of information but also individuals who share their knowledge ([Medori, 2020](#)) As a result, individuals with higher levels of innovation self-efficacy will increase their confidence to produce innovative ideas that refer to innovative work behavior, and in the end, they will become more innovative in performing various tasks. In addition, following social cognitive theory, innovation self-efficacy is also expected to influence an individual's initial decision to engage in innovative work behavior. This is because they will feel more confident in their abilities so that they are brave in facing challenges, both related to innovative work behavior and knowledge sharing behavior.

So far, there has been no specific research that discusses the relationship between variables. However, there are previous studies that discuss the relationship between variables and general self-efficacy ([Widyani et al., 2017](#)); ([Ibus et al., 2020](#)) This research provides input for researching other mediator variables so that it will get a more comprehensive view of the factors that can increase innovative work behavior. In addition, this research is strengthened by research which states that there is no relationship between knowledge sharing behavior and individual innovative work behavior ([Yeşil & Hırlak, 2013](#)); ([Sulistiowati, 2018](#)) The research also provides suggestions to add mediator variables that can play an important role between knowledge sharing behavior and individual innovative work behavior. Therefore, this study aims to determine the mediating role of innovation self-efficacy on the relationship between knowledge sharing behavior and innovative work behavior, especially in the student context.

3. Research Methodology

Research Type and Design

This research uses quantitative research in which the measurement data is in the form of numerical data and will be processed statistically to draw conclusions and interpretations ([Gravetter & Forzano, 2011](#)) This research also used a non-experimental research design and cross-sectional study because no variables were manipulated, didn't explain a causal relationship, and in this study data collection was carried out once ([Gravetter & Forzano, 2011](#))

Research Respondents and Sampling

The researchers chose the students as a population in this study so that they would be better prepared for the challenges of the world of work. This is because based on the Global Innovation Index 2020 survey shows that the level of innovation capability in Indonesia is still quite low, which is ranked 85th out of 131 countries in the world ([Lokadata, 2021](#)). In addition, it is also known that students in Indonesia are still not optimal in showing innovation behavior ([UNPI, 2020](#)). There are also very few university graduates in Indonesia to become the workforce, which is only around 10% for undergraduate graduates and 2% for diploma graduates ([Wirawan et al., 2021](#)).

Meanwhile, the sample in this study were students from the Universitas Indonesia (UI) who were taking second to last semester. The reason the authors didn't involve first-year students was that the authors assumed that they were still in the adaptation process. ([Clinciu, 2013](#)) said that first-year students are the most critical year for the adaptation process because there are usually various problems related to adjustment problems. Therefore, researchers chose second to last semester because at least they were familiar with the learning system and environment in lectures.

The data collection technique used a non-probability sampling method with a convenience sampling technique. This is because the population in this study is not fully known with certainty and the data collection method is based on the ease of finding respondents which is based on the availability of respondents in filling out questionnaires ([Gravetter & Forzano, 2011](#)) In obtaining respondents, researchers will distribute questionnaires through social media such as Instagram, Line, WhatsApp, and Twitter. The authors also asked for help from other UI students to distribute questionnaires to their respective friends to make it easier for researchers to collect data.

Instruments

The authors use the Innovative Work Behavior scale from ([Janssen, 2000](#)) which has been adapted into the context of Indonesian students by ([Winarsih & Etikariena, 2020](#)) The scale has 9 items that fall into 3 stages (idea generation, idea promotion, and idea realization). The scale uses a Likert scale with 6 answer options, ranging from 1 (Never did) to 6 (Always do). The scale has a Cronbach's alpha of 0.89. To measure knowledge sharing behavior, the authors used the Knowledge Sharing Behavior scale from ([Chen et al., 2009](#)) The scale has 4 items with Cronbach's alpha of 0.84. The scale also uses a Likert scale with 7 answer choices, ranging from 1 (Strongly disagree) to 7 (Strongly agree). Innovation self-efficacy was measured using Innovation Self-Efficacy (ISE.6) scale from ([Dungs et al., 2017](#)) The scale has 6 items that are included in 5 predictors (questioning, observing, experimenting, network ideas, and associating). The measuring instrument uses a Likert scale with 5 answer choices, ranging from 0 (Not confident) to 4 (Extremely confident). The measuring instrument has a Cronbach's alpha of 0.81.

Procedure

The research procedure begins with the process of searching for literature and measuring instruments according to the variables. Furthermore, the authors carried out the process of translating the measuring instrument, especially for the variable of knowledge sharing behavior and innovation self-efficacy. After getting information on passing the ethical review with the number 007/FPsi.Komite Etik/PD.04.00/2021, the researchers then conducted a pilot study of measuring instruments to 30 students from the Universitas Indonesia (UI). Based on the results of the pilot study, it can be seen that the measuring instrument already has a fairly good reliability coefficient. The results of the pilot study show that knowledge sharing behavior has a reliability coefficient of 0.88 and an innovation self-efficacy of 0.82. Meanwhile, the measuring tool for innovative work behavior is known to have a reliability coefficient of 0.88 (Winarsih & Etikariena, 2020). According to (Kaplan & Saccuzzo, 2017) it can be seen that an item is said to be reliable if it has a reliability coefficient in the range of 0.70-0.80. In addition, it can also be seen that the measuring instrument has fairly good validity. The results of the pilot study show that knowledge sharing behavior has a corrected item-total correlation from 0.68-0.81 and innovation self-efficacy which has an item range from 0.43-0.74. Meanwhile, innovative work behavior has a range of items ranging from 0.60-0.70 (Winarsih & Etikariena, 2020). According to Nunnally and (Nunnally & Bernstein, 1994) it can be seen that the item is said to be good when $CrIT \geq 0.2$. Therefore, it can be concluded that the measuring instrument can be said to be valid and reliable for actual data collection.

After getting a valid and reliable measuring instrument, the authors prepared a questionnaire for actual data collection using Google Form. Respondents will be faced with some statements regarding innovative work behavior, knowledge sharing behavior, and innovation self-efficacy. After all the statements are filled in, the respondent will be faced with a confirmation sheet that aims to express gratitude to the respondent. In addition, on the confirmation sheet, there is also information about the link that leads to the prize draw. Finally, at the data processing stage, the authors will process the data using IBM SPSS version 21 using descriptive and frequencies statistical analysis, Pearson correlation test, and PROCESS by Hayes.

4. Results and Discussions

Results

Respondents obtained amounted to 306 data. It was found that most of the respondents were female students (73.2%) with an age range of 21 years (29.7%). Most of the respondents came from the social and humanities major consisting of 173 respondents (56.6%). Most of the respondents also came from psychology college students which consisted of 64 respondents (20.9%). Based on the semester category, it can be seen that most of the respondents are taking the 8th semester with a total of 113 respondents (36.9%). Finally, most of the respondents were participating in extracurricular activities consisting of 228 respondents (74.5%).

Correlation of Main Research Variables with Demographic Variables

Table 1. Correlation Test Results

	M	SD	1	2	3	4	5	6	7	8	9
1 IWB	31.38	10.89	1								
2 KSB	20.24	4.11	0.46**	1							
3 ISE	14.17	3.97	0.63**	0.39**	1						
4 Gender	1.76	0.46	-0.04	0.06	-0.14*	1					
5 Age	20.27	1.23	0.11	0.12*	0.13*	-0.06	1				
6 Faculty	8.68	3.84	0.03	0.00	0.05	0.00	0.04	1			
7 Semester	5.52	2.24	0.08	0.18**	0.13*	0.00	0.84**	0.03	1		
8 Extracurricular	1.25	0.44	-0.11	-0.04	-0.13*	0.01	0.20**	-0.04	0.25**	1	
9 Major	2.30	0.86	-0.01	-0.02	0.05	-0.08	0.07	0.90**	0.60	-0.06	1

IWB = Innovative Work Behavior, KSB = Knowledge Sharing Behavior, ISE = Innovation Self-Efficacy N = 306 **Significant, $p < 0.01$, *Significant, $p < 0.05$

Based on table 1, it is known that there is a significant relationship between knowledge sharing behavior and innovative work behavior ($r = 0.46, p < 0.01$). That is, the higher the student's knowledge sharing behavior, the higher the student's innovative work behavior. Furthermore, there is a significant relationship between innovative self-efficacy and innovative work behavior ($r = 0.63, p < 0.01$). That is, the higher the student's innovative self-efficacy, the higher the student's innovative work behavior. Then, there is a significant relationship between innovative self-efficacy and knowledge sharing behavior ($r = 0.39, p < 0.01$). This shows that the higher the student's innovative self-efficacy, the higher the student's knowledge sharing behavior. Thus, it can be concluded that the three main research variables are positively and significantly related.

Meanwhile, based on demographic variables, it is known that there is a significant relationship between age and knowledge sharing behavior ($r = 0.12, p < 0.05$) and semester with knowledge sharing behavior ($r = 0.18, p < 0.01$). Then, it can also be seen that there is a significant relationship between age and innovation self-efficacy ($r = 0.13, p < 0.05$) and semester with innovation self-efficacy ($r = 0.13, p < 0.05$).

Mediation Analysis Results

Table 2. Mediation Analysis Results

		Outcome						
		Innovation Self-Efficacy (M)			Innovative Work Behavior (Y)			
Predictor		Coef.	SE	p		Coef.	SE	p
Knowledge Sharing Behavior (X)	<i>a</i>	0.40**	0.05	0.00	<i>c'</i>	0.70**	0.12	0.00
					<i>c</i>	1.29**	0.13	0.00
Innovation Self-Efficacy (M)		-	-	-	<i>b</i>	1.45**	0.12	0.00
Konstan	<i>iM</i>	5.98	1.03	0.00	<i>iY</i>	-3.56	2.40	0.13
		$R^2 = 0.17$			$R^2 = 0.47$			
		$F(1,304) = 65.11, p < 0.01$			$F(2,303) = 135.65, p < 0.01$			

**Significant, $p < 0.01$

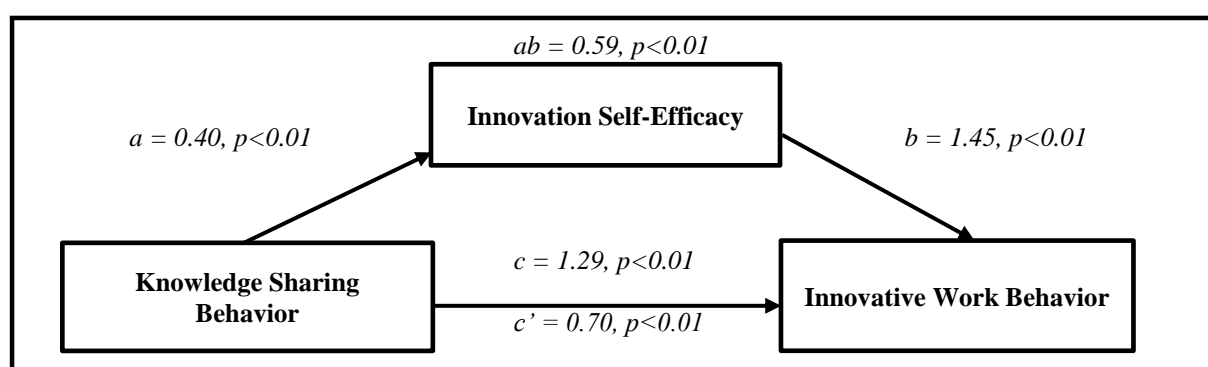


Figure 1. Mediation Analysis Results

Based on the explanation above, it is known that there is a significant relationship between knowledge sharing behavior and innovative work behavior ($c' = 0.70, p < 0.01, CI [0.4645-0.9431]$). After the innovation self-efficacy was included in the model, it was found that there was a mediating effect ($ab = 0.59, p < 0.01, CI [0.3972-0.8086]$). (Hayes, 2017) explains, if the mediation effect has a confidence interval (CI) above 0, it will support and conclude that there is a positive mediation effect. Based on

this explanation, it can be interpreted that the results of the mediation analysis support the research hypothesis, that innovation self-efficacy has a significant and positive mediating effect on the relationship between knowledge sharing behavior and innovative work behavior. However, it is known that in this study there is a direct effect that is greater than the mediating effect. It means, that innovation self-efficacy has a partially mediating effect. (Hayes, 2017) explains partial mediation as a mediation mechanism that does not fully explain the relationship between variables X and Y. Thus because mediation is partial, the presence or absence of a mediator will still have an influence, so knowledge sharing behavior can directly affect innovative work behavior although without having to go through the mediating effect of the innovation self-efficacy.

Discussions

Based on the results, this study supports the research hypothesis that innovation self-efficacy has a mediating role in the relationship between knowledge sharing behavior and innovative work behavior. Therefore, this study is in line with (Ibus et al., 2020) which says that self-efficacy has a mediating effect on the relationship between knowledge sharing behavior and innovative work behavior. Previously, the study provided suggestions to examine other mediator variables to get a more comprehensive view of the factors that can influence innovative work behavior. Through the results of this study, it can be seen that the self-efficacy of innovation has a greater mediating effect than the research of (Ibus et al., 2020) That is, this research can answer the suggestion of (Ibus et al., 2020) regarding the influence of other mediator variables that can influence knowledge sharing behavior with innovative work behavior.

This finding also extends the literature on social cognitive theory in explaining the relationship between variables. This is due to the interaction between personal factors (innovation self-efficacy) and behavioral factors (knowledge sharing behavior and innovative work behavior), which will determine how individuals should behave in their environment. Therefore, this study is in line with (Ibus et al., 2020) which says that social cognitive theory is considered appropriate in explaining the relationship between knowledge sharing behavior and innovative work behavior through general self-efficacy.

Researchers have also succeeded in proving that there is a significant relationship between knowledge sharing behavior and innovative work behavior. This is because there are previous studies that say that there is no significant relationship between knowledge sharing behavior and innovative work behavior (Sulistiwati, 2018; Yeşil & Hırlak, 2013); Therefore, this study is in line with previous research which said that there was a significant relationship between the two variables (Etikariena, 2019); (Phung et al., 2017); (Asurakkody & Kim, 2020) Previously, Yesil and Hırlak (2013) also suggested adding a mediator variable that could play an important role between the two variables. Through the results of this study, researchers can answer the suggestions given by (Yeşil & Hırlak, 2013) that innovation self-efficacy has a mediating effect on the relationship between knowledge sharing behavior and innovative work behavior.

However, the results of this study indicate that mediation does not fully affect the relationship between variables. This is because there is a direct effect that is higher than through mediation, so the effect of mediation is partial. (Hayes, 2017) explains partial mediation as a mediation mechanism that does not fully explain the relationship between variables X and Y. That is, the presence or absence of a mediator will still have an influence. However, through the results of this study, it can be considered for further research to find out again other mediator variables that can have a stronger influence so that they can enrich the related literature. In addition, the results of this research can also be used as consideration for several parties in developing various approaches to improve individual innovative work behavior, especially about knowledge sharing behavior and innovation self-efficacy.

Meanwhile, analysis of research variables with demographics shows that semester and age have a relationship with knowledge sharing behavior. So far, there has been no specific research that discusses age and semester with students' knowledge sharing behavior. The results of this study can provide a new explanation, that there is a significant relationship between age and semester with students'

knowledge sharing behavior. However, based on the organizational context, it can be seen that there is a significant relationship between age and knowledge sharing behavior. (Le Tan & Dai Trang, 2017) say that employees with a more mature age range have higher knowledge sharing behavior than younger age ranges. This means that the older the employee, the higher the knowledge sharing behavior of the employee.

The last finding, it can be seen that age and semester also have a relationship with innovation self-efficacy. So far, there has been no research that discusses about innovation self-efficacy with demographic variables. However, some studies say that age has a relationship with general self-efficacy. Therefore, this research is in line with Siddiqui (2018) which says that the increasing age of a student, the higher the level of self-efficacy of the student. This is based on Bandura's concept of self-efficacy, which means that the older you get, the more you will help the student to perform various tasks with a much higher sense of self-confidence. This is also similar to increasing semesters, that the increasing semesters, the more students will show a higher level of self-confidence in carrying out various tasks. Therefore, this is following the statement from Amegayibor (2021) which explains that demographic characteristics such as sex, age, education, department, and tenure are often regarded to play an important role in managing individuals in the workplace to achieve high performance.

5. Conclusion

Based on the results of data analysis on 306 students, it can be seen that the results of the analysis support the research hypothesis, that innovation self-efficacy as a mediating effect on the relationship between knowledge sharing behavior and students' innovative work behavior. However, the mediating effect is only partially mediated. This is because there is a direct effect that is higher than the indirect effect through the mediating role. Therefore, because mediation is partial, the presence or absence of a mediator will still have an influence, so that knowledge sharing behavior can directly influence innovative work behavior even without having to go through innovation self-efficacy.

In addition, this research can contribute to institutions, companies, or governments. Through this research, it is hoped that the institution can prepare its students as candidates for innovative workers through discussions, questions and answers, or presentations to hone students' skills in sharing their knowledge. However, institutions shouldn't only encourage students to share their knowledge but also require some kind of activity such as seminars that aim to encourage students to share their knowledge. Furthermore, the government is also expected to develop programs such as internship programs that can collaborate with various companies so that students can have experience in the world of work. Last, the company can also develop development activities such as training or out-of-office activities that aim to improve the innovative work behavior of its employees.

Limitation and Study Forward

Despite the explanation above, the authors realize that this research still has limitations. First, the COVID-19 pandemic has caused the respondents of this study to only come from UI students, so it will be more difficult to generalize to other populations. Second, the proportion of demographic data in this study is still not balanced, so this study is still not representative in explaining the study population. Third, this research does not involve randomization of items so that it is possible for bias to occur. Last, this study only relies on self-report through online questionnaires, so it is very vulnerable to social desirability. This is because the respondent can choose a good statement about himself or answer dishonestly in filling out the questionnaire according to his actual condition.

Based on the limitations of the study, the authors provide several suggestions that can be considered for further research. First, further research is expected to involve a larger number of respondents from various universities such as Jabodetabek universities and vocational education programs to get a more comprehensive view so that it can be generalized to other populations. The second is to balance the proportion of demographic data so that it can represent the research population. Third, further research can also examine topics related to high school students so that they will get a difference in preparing

innovative job candidates for college students and high school students. Fourth, further research is expected to be able to carry out the process of randomizing items which aims to reduce research bias. Fifth, the existence of the COVID-19 pandemic has caused this research to rely solely on the use of self-reports through online questionnaires, making it very vulnerable to social desirability. Therefore, further research is expected to be able to meet directly with respondents which aims to minimize the tendency of respondents to be dishonest in filling out questionnaires. Last, further research is expected to examine other mediator variables that have a stronger influence so that it will strengthen the results of research in explaining the relationship between variables.

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