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# How Servant Leadership and Knowledge-Sharing Trigger Innovative Work Behavior among Millennials at Start-Up **Businesses**?

# Putri Rahma Dayanti<sup>01,</sup> \*Praptini Yulianti<sup>01</sup>

Department of Management, Faculty of Economics and Business, Universitas Airlangga, Surabaya, Indonesia Correspondence\*

Address: Jl. Airlangga No.4-6, Surabaya, Jawa Timur, Indonesia, 60286 | e-mail: praptini-y@feb.unair.ac.id

# Abstract

Purpose: Technological developments and environmental changes are currently growing rapidly. This adaptation indirectly requires a company to continue to innovate, especially in the development of Start Up software. This study aims to examine the relationship between servant leadership and knowledge sharing on innovative work behavior. This study also explores the mediating role of creative self-efficacy on innovative work behavior.

Design/methodology/approach: Data was collected from 120 millennial Start Up employees in the field of software development. Data collection was carried out through a survey design. Data analysis was done through a structural equation model using PLS-Smart.

Findings: The results show that servant leadership and knowledge sharing have a significant positive effect on innovative work behavior. Creative self-efficacy partially mediates the relationship between servant leadership and innovative work behavior. Creative self-efficacy is also able to partially mediate the relationship between knowledge sharing and innovative work behavior.

Originality/value: This study contributes to the existing literature by integrating the mechanism between servant leadership and knowledge sharing into innovative work behavior.

Practical implications: This study provides prospective insights to management leaders and practitioners that servant leadership and knowledge sharing bring about positive change in the innovative work behavior. It also augments innovative behavior by enhancing employees' creative self-efficacy, especially millennials in Start-Up businesses.

Keywords: Innovative work behavior, Servant leadership, Knowledge sharing, Creative self-efficacy, Start up, Millennial, productive employment

JEL Classification: L84, O15



#### I. Introduction

Employees' innovative work behavior is essential in determining organizational competitive advantage (Hu & Zhao, 2016; Shaw & Ogilvie, 2010; Wang et al., 2015). Innovative work behavior includes developing new ideas and business procedures in specific work areas to improve individual and organizational performance. Innovative work behavior begins with idea generation with a willingness to pay attention to new issues and an interest in improving things in the workplace. Exploration of ideas involving the ability to find new work methods and techniques. Ideas championing encourage other individuals to be passionate about innovation as well as the ability to convince people to support innovative ideas. Then the last is the implementation of ideas with a willingness to introduce innovative ideas systematically at work (De Jong & Den Hartog, 2010).

The industry context has changed in the last ten years, especially in the industrial technology Start Up base. Start-Up businesses are currently growing all over the world, including in Indonesia. Indonesia is ranked 5th in the world with a total of 2.381 Start-Ups (Zaky et al., 2018). The number of Start-Ups in Indonesia creates opportunities and threats. The Start-Up business life cycle depends on substantial capital and good quality of their human resources (Zaky et al., 2018). They require innovative work behavior from their employee by developing new ideas and unique products. Innovative work behavior is vital for Start-Up employees. Start-Up is in a dynamic environment that allows conditions to change at an unknown time. Employees are expected to be sensitive and responsive to changes that occur, especially in the field of software development. Software development plays an essential role in helping other companies in various fields. Start-Up software development employees need experience and up-to-date knowledge to meet consumer needs and provide the solution for dynamic problems for each customer. Start-Up software development employees must be able to behave innovatively to provide suggestions and solutions that will later be implemented in the software to be developed.

46.9 % of Start Up employees in Indonesia are millennials (Zaky et al., 2018). The unique characteristics of the millennial generation are self-efficacy, innovative work, and knowledge sharing (Ngotngamwong, 2019). They must be allowed to develop their innovative work ideas as a comfortable base. They also prefer their leader to be inspiring and imaginative. Millennials prefer a more interpersonal relationship with their leader and to know that their leader cares (Farhan, 2021). The leadership characteristic expected by the millennial generation is servant leadership. The focus of servant leadership is meeting the needs of followers to develop followers to achieve goals, especially in line with the development of human resources owned by an organization. Hence, with the support of a servant leader, it will be easier for employees to increase their innovative work behavior (Reslan et al., 2021). This leadership style aligns with the millennial character who prefers work flexibility and support for what is being fought for. As long as the organization offers and fulfills what the millennial generation needs, they tend to stay and contribute to the organization. They must serve their employees, create opportunities, and make employees develop organizational performance (Long, 2017).

Millennials also care about developing knowledge of technology (Murphy, M., 2012). Knowledge sharing is a millennial need. They gain new knowledge, share information, and have creative ideas (Ngotngamwong, 2019; Radaelli et al., 2014). The existence of a good relationship vertically through serving leaders and horizontally through knowledge sharing will bring out one's creative self-efficacy. Creative self-efficacy is the belief that a person has the knowledge and skills to produce innovative output (Tierney and Farmer, 2011). Creative self-efficacy is a good capital for someone to find new ideas. The focus of creative self-efficacy is not on how many numbers a person has but on how confident they are in performing or mastering creativity they have in certain situations. This supports innovation because creative self-efficacy motivates employees to survive in difficult situations with the right strategy. Cundawan et al. (2021) state that millennials develop their creativity through creative self-efficacy. Creative self-efficacy makes it easier for Start-Up businesses to build innovative work behavior in millennial employees.

The current study proposes servant leadership and knowledge sharing to develop innovative work behavior in their employees. Several studies have found servant leadership (Cai et al., 2018; Faraz et al., 2021; Khan et al., 2022; Krog & Govender, 2015) and knowledge sharing (Anser et al., 2021; W. Kim & Park, 2017) related to employees' innovative work behavior. However, none have explored the mediating role of creative self-efficacy and context in the millennial generation. Therefore, this study examines the role of servant leadership and knowledge sharing in developing employees' innovative work behaviour. This study contributes to the literature in several ways. First, by revealing the positive interactive effect of servant leadership and knowledge sharing on innovative work behavior, our findings guide us toward a better understanding of how to facilitate innovative work behavior in millennials employee. Second, by revealing the mediating role of creative self-efficacy, this study contributes to a detailed understanding of how servant leadership and knowledge sharing of millennials employee. Finally, for practitioners, our results provide some implications on ways to promote innovative work behavior in millennials employee. Finally, for practitioners, such as adopting knowledge sharing and simultaneously developing servant leadership.

The rest of this paper is organized as follows. It commences with the research model and hypotheses development. Then, the methodology used for the study is discussed. After that, the presentation of the analyses and the results are described. The discussion and conclusion are then stated, and areas for future research are also provided.

# 2. Literature Review and Hypotheses Development

#### Servant Leadership and Innovative Work Behavior

Eva et al. (2019) state that servant leadership is a leadership concept with different orientations. They are oriented to employees' needs and care. Their characteristics can increase the psychological contract of their employees and motivate them to innovative work behavior (Yoshida et al., 2014). The influence of servant leadership in developing innovative work behavior has been stated in the previous study (Bou Reslan et al., 2021; Cai et al., 2018; Khan et al., 2022; Krog & Govender, 2015). Supportive and encouraging leadership is instrumental in stimulating the employees to embark upon a risky adventure, such as innovative work behavior. Innovative work behavior is broken into two components, idea creation and idea implementation. Servant leadership motivates employees to work for their development. The supportive role of servant leadership enhances employees' positive emotions, have creative ideas, and implements their ideas (Khan et al., 2022).

This leadership style is conducted as an effective leadership style to motivate the millennial generation. They focus on the employee's needs and development (Long, 2017). Millennials tend to be interested in servant leadership oriented on their innovative work behavior. They want leaders and organizations willing to invest in them, even if it is just an investment. If they get such an investment, they are more likely to choose to develop their innovative thinking and contribute more to the organization. So, we propose to test the hypotheses as follows: HI. Servant Leadership has a positive influence on Innovative Work Behavior

# Knowledge Sharing and Innovative Work Behavior

Knowledge Sharing is an exchange of information and skills in the organization (Radaelli et al., 2014). Knowledge Sharing is also an important process that increases innovative work behavior in the organization (Zhao et al., 2020) and individuals (Anser et al., 2021). Much knowledge can be based on and inspired in creating new solutions, including knowledge sharing at work. The employee knowledge can develop and have new innovative ideas. The implementation of ideas can be easier developing together than within one employee. Their process can be easier with knowledge sharing about information, skills, and perspectives. Knowledge sharing can also benefit the innovative behavior of knowledge receivers. The recipient collects knowledge gained by other people, including their experience and proven and useful solutions and practices. Through the learning process, the recipient of the knowledge combines the knowledge gained from others with his or her knowledge, which leads to the reinterpretation of the knowledge stimulates the creativity and innovative behavior of the recipient of the knowledge consequently, the acquired knowledge stimulates the creativity and innovative behavior of the recipient of the knowledge (Lai et al., 2018).

Related to the target of this research, the millennial generation is interested in learning new things, experiences, and technology in daily life (Cundawan et al., 2021). Their characteristics can create a knowledge sharing between employees, such as gathering and providing knowledge. Their knowledge will widen so that it will increase the opportunities for innovative ideas will also increase. This process develops innovative work behavior to find a new organizational solution. The study by Palumian et al. (2021) states that knowledge sharing positively influences the innovative work behavior of millennial employees. So, we purpose to test the hypotheses as follows: H2. Knowledge Sharing has a positive influence on Innovative Work Behavior

# The Role of Creative Self-Efficacy Mediating the Relationship between Servant Leadership and Innovative Work Behavior

Servant leadership makes the employee easier to develop new ideas and skills (Jensen & Luthans, 2006). Servant leader comes with opportunities for employees to help them grow. The support from servant leadership can influence their employee's creative self-efficacy. Servant leaders influence employees' creative self-efficacy by enabling them to feel confident and able to perform their work tasks in a preferred way, thereby increasing their creative self-efficacy (Avolio et al., 2009).

Creative self-efficacy is developing innovative ideas to achieve organizational goals (Gong et al., 2009). Employees who work in companies with a level of competition are expected to be able to solve problems that will be more creative through creative self-efficacy. Of course, this is also felt by employees at Start-Up. Start Up's competitive environment in its development can be said to be very fast. So it requires creativity and consistency in developing innovations to stay afloat in the industry. Creative self-efficacy can increase employees' innovative work behavior (Akbari et al., 2021). The relationship between servant leadership and employee innovative work behavior can be developed through creative self-efficacy (Jan et al., 2021). Servant leadership contributes to employees' Innovative work behavior by enhancing their creative self-efficacy. It provides development support and encouragement to followers by enabling them to feel competent and perform well. Such support and encouragement offered by servant leaders increase employees' creative self-efficacy. So, we purpose to test the hypotheses as follows:

H3. The role of Creative Self-Efficacy mediating the relationship between Servant Leadership and Innovative Work Behavior

# The Role of Creative Self-Efficacy Mediating the Relationship between Knowledge Sharing and Innovative Work Behavior

Knowledge sharing is the process of employee knowledge exchange and experience to get and create new ideas (Brouwer & Jansen, 2019). This process can develop innovative work behavior for employees to achieve creative ideas. Knowledge sharing makes the millennials get new knowledge, information, exchange, and skills in the organization (Radaelli et al., 2014). Millennial characteristics are creativity and confidence in their abilities (Twenge & Kasser, 2013). The employees will become more confident in carrying out these innovative work behaviors because they have gained knowledge through knowledge sharing. Several researchers have previously conducted tests by connecting knowledge sharing, creative self-efficacy, and innovative work behavior. Knowledge sharing can increase creative self-efficacy. Creative self-efficacy can develop innovative work behavior (Tierney & Farmer, 2011). Employees acquire knowledge through sharing. They will become more confident in performing innovative behavior. In this way, employees will enhance their creative self-efficacy can mediate the relationship between knowledge, and examining and updating their existing knowledge. Creative self-efficacy can mediate the relationship between knowledge-sharing and innovative work behavior in the millennial generation (Cundawan et al., 2021). So, we purpose to test the hypotheses as follows: H4. The role of Creative Self-Efficacy mediating the relationship between Knowledge Sharing and Innovative Work Behavior

Based on the problem, literature review, and previous related research, the conceptual framework of this research can be shown in Figure 1.



Figure 1. Conceptual framework

# 3. Method

This study uses a quantitative approach. The method used is non-probability sampling using accidental sampling. Data collection was carried out by distributing questionnaires. The questionnaire consists of four parts. Each part represents each variable, including innovative work behavior as the dependent variable, servant leadership and knowledge sharing as independent variables, and creative self-efficacy as mediating variables. The research targets filled out the questionnaires. The research targets were Start Up employees in the Software Development field who were born between 1981 to 1996. The employees were contacted and asked to participate. When they gave their consent, the questionnaire was personally administered to them. The minimum sample size needed for this study was 120 respondents. It follows the minimum sample indicators n x 5 formulas (Hair et al., 2014). The questionnaire contains 24 question indicators. The profile shows that 59.16 % of the respondents are male, while almost 40.84 % are female. Additionally, 16 respondents or 13%, are 36-40 years old, so it can be said that most respondents are under 35 years old. In addition, most respondents have a working period of more than 4 years, with a percentage of 42.5%, as shown in Table 1.

Table I	. The	<b>Respondents'</b>	Profiles.
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Characteristics	Classification	Total	Percentage
Gender	Male	71	59.16%
	Female	49	40.84%
	Total	120	100%

Characteristics	Classification	Total	Percentage
Age	25 – 30 years old	68	57%
-	31 – 35 years old	36	30%
	36 – 40 years old	16	13%
	Total	120	100%
Work period	≤ 2 years	28	23%
•	$2 \le 4$ years	41	34.5%
	> 4 years	51	42.5%
	Total	120	100%

## Measure

All items were measured using a 5-point Likert scale. Servant leadership was measured by five items developed by Liden et al. (2015). Innovative work behavior was measured through the scale developed by De Jong & Den Hartog, 2010. The scale consists of four dimensions (idea generation, idea exploration, idea championing, and idea implementation), comprising ten items. Knowledge sharing used the scale developed by Lin et al. (2022) and Yeşil (2013). This scale consists of two dimensions (knowledge donating and knowledge collecting) with a total scale of six items. Creative self-efficacy was measured by three items developed by Hallak et al. (2018). Research hypotheses were validated using partial least squares path modeling (PLS-PM). PLS-SM testing was analyzed with SmartPLS software version 3.29. The use of PLS included (1) the assessment of the measurement model (essentially confirmatory factor analysis) and then (2) the assessment of the structural model (Hair et al., 2010).

# 4. Result and Discussion

#### **Measurement Model**

To evaluate the adequacy of the measurement model, all the constructs used in the model were checked for validity and reliability. Convergent validity through item loadings. As shown in Table 2, all the constructs had item loadings of more than 0.7 (Hair et al., 2010). To establish convergent validity at the construct level, the average variance extracted (AVE) was gauged, more than the minimum acceptable value of 0.5 for all the constructs (Hair et al., 2017). Moreover, reliability is measured through inter-item consistency through Cronbach's alpha (Alpha) and composite reliability (CR). As shown in Table 3, all the constructs had their Alpha and CR more than 0.7, thus ensuring the reliability of the constructs (Hair et al., 2019).

Construct and AVE score Indicator		Description	Factor Loading	Remark	
Servant	t SL I The leader can find out If there are problems at		0.719	Valid	
Leadership (SL)		work.			
AVE = 0.534	SL 2	Leaders make employee career development a priority.	0.757	Valid	
	SL 3	The leader will help if there is a problem.	0.711	Valid	
	SL 4	The leader puts the interests of their subordinates above their interests.	0.751	Valid	
	SL 5	The leader gives employees the freedom to handle difficult situations how they think is best.	0.714	Valid	
Knowledge Sharing (KS)	KS I	Willingness to share new knowledge with others.	0.741	Valid	
AVE = 0.540	KS 2	Colleagues are willing to share new knowledge.	0.708	Valid	
	KS 3	The work environment is accustomed to a knowledge-sharing culture.	0.724	Valid	
	KS 4	Willingness to share information when someone needs it.	0.720	Valid	
	KS 5	Willingness to share abilities when needed.	0.757	Valid	
	KS 6	Having a workplace that can share knowledge and abilities when needed.	0.758	Valid	
Creative Self-	CSE I	Ability to create new ideas in doing work.	0.882	Valid	
efficacy (CSE) AVE = 0.677	CSE 2	Confidence in problem-solving while working.	0.790	Valid	
	CSE 3	Competence in developing own ideas and improving coworkers' ideas.	0.793	Valid	

## Table 2. Validity

Construct and AVE score	Indicator	Description	Factor Loading	Remark	
Innovative	IWB I Ability to pay attention to new issues.		0.737	Valid	
Work Behavior (IWB) AVE = 0.528	IWB 2	Willingness to improve according to the need for improvement in the workplace.	0.725	Valid	
	IWB 3	The ability to find new methods or techniques to get the job done.	0.731	Valid	
	IWB 4	Ability to come up with the right idea for a problem.	0.700	Valid	
	IWB 5	Ability to find new ways to get work done.	0.734	Valid	
	IWB 6	Ability to encourage colleagues to complete enthusiasm for innovation.	0.718	Valid	
	IWB 7	Ability to convince colleagues to support innovative ideas.	0.730	Valid	
	IWB 8	Ability to introduce new ideas into work practice systematically.	0.716	Valid	
	IWB 9	Willingness to contribute to implementing new ideas.	0.727	Valid	
	IWB 10	Ability to strive for the development of new things in the workplace.	0.746	Valid	

#### Table 3. Reliability

Variable	Min loading	Alpha	CR
Servant Leadership	0.711	0. 846	0.851
Knowledge Sharing	0.724	0.857	0.876
Creative self-efficacy	0.790	0.852	0.862
Innovative work behavior	0.732	0.899	0.918

Discriminant validity can be assessed through Fornell and Larcker criterion. This method compares the square root of the average variance extracted (AVE) with the correlation of latent constructs. A latent construct should better explain its indicator's variance rather than other latent constructs' variance. Therefore, the square root of each construct's AVE should have a greater value than the correlations with other latent constructs, as shown in Table 4.

Construct	SL	KS	CSE	IWB
SL	0.731			
KS	0.171	0.735		
CSE	0.324	0.394	0.823	
IWB	0.423	0.347	0.431	0.726

Table 4. Discriminant Validity

Note(s): SL= Servant Leadership, KS = Knowledge Sharing, CSE = Creative Self Efficacy, IWB = Innovative Work Behavior.

## Structural Model

Before analyzing the structural model, multi-collinearity was evaluated by performing variance inflation factor (VIF) to eliminate the possibility of biases in regression findings (Hair et al., 2017). VIF values for all the variables were lower than the suggested score of 5.0, which means the model does not have an issue of multi-collinearity (Table 5). The structural model tested both direct and indirect relations between the constructs. Hypothesis testing can be done by considering the path coefficient and parameter coefficient. The path coefficient obtained by bootstrapping estimates the relationship of one latent variable with another latent variable. To assess whether the relationship between these variables has a significant effect or not can be seen from the t-statistic value and p-value. The t-statistic value must be greater than 1.96, and the p-value must be less than 0.05. Parameter coefficient is seen from the original sample value. If the value of the original sample is positive, then the direction is positive. If the value of the original sample is negative, it means the direction is negative. The test begins with the first hypothesis was that the relationship between knowledge sharing and innovative work behavior was also significant ( $\beta = 0.193$ ; p < 0.05). The role of creative self-efficacy mediating the relationship between servant leadership and innovative work behavior as proposed in hypothesis 3, was significant ( $\beta = 0.063$ ; p < 0.05). The fourth hypothesis about the mediating role of creative self-efficacy in the relationship between

knowledge sharing and innovative work behavior was also significant ( $\beta = 0.044$ ; p < 0.05). Table 5 shows that the analysis result supports all hypotheses.

Table 5. The structural model

Hypothesis	Path	Original Sample	t-statistics	p-values VIF	Remarks
HI	$SL \rightarrow IWB$	0.308	3.147	0.002 1.120	Supported
H2	$KS \to IWB$	0.193	2.062	0.040 1.287	Supported
H3	$SL\toCSE\toIWB$	0.063	2.136	0.033	Supported
H4	$KS \to CSE \to IWB$	0.044	2.004	0.046	Supported

Note(s): SL= Servant Leadership, KS = Knowledge Sharing, CSE = Creative Self Efficacy, IWB = Innovative Work Behavior.



Figure 2: Inner model

## Discussion

#### Servant Leadership and Innovative Work Behavior

Servant Leadership can have a significant positive effect on Innovative Work Behavior. Servant Leaders play an important role for employees in finding, processing, introducing, and implementing ideas. They can be useful for the company, including solving problems, finding new methods, and finding new products. In other words, the higher support from servant leaders, the higher the employees' innovative work behavior. Bou Reslan et al. (2021) corroborates this study's results. They found a significant positive influence of Servant Leadership on the Innovative Work Behavior of employees in the same workplace engaged in information technology and telecommunications (ICT). Bou Reslan et al. (2021) stated that ICT-enabled companies should continue to train and retrain existing managerial and leadership staff in developing and implementing servant leadership practices. So that both new and existing managerial staff and leaders have sufficient resources to implement servant leadership practices properly. An organization at least requires cooperation from leaders and employees where both parties need each other.

The attitude of a servant leader will build personal closeness with employees. So personal encouragement arises from employees to engage in innovative work behavior. Meanwhile, employees also need support from leaders to implement their ideas. Then the efforts of both parties go hand in hand, and the process of innovative work behavior from idea generation, idea exploration, and idea championing to idea implementation will go well. The fifth indicator used to measure servant leadership is that leaders give freedom to employees to handle difficult situations. This triggers employees to explore in finding solutions to their problems. The employees will be more innovative. Related to Yulianti & Arifien (2019), millennial employees will explore their ideas and take the initiative to find new methods. An employee will be free to explore his abilities, skills, and knowledge in carrying out his duties and dare to take risks to implement his ideas. Thus, if a company wants to improve the innovative work behavior of its employees. It can be pursued by creating a servant leadership attitude. For example, the leader realizes that employees need help in solving problems. The employees are personally close to other. They do not hesitate to share experiences. The leaders trust employees to develop their potential in finding the right ideas and solutions.

#### Knowledge Sharing and Innovative Work Behavior

Knowledge Sharing has a significant positive effect on Innovative Work Behavior. This shows that the reciprocal process of giving and receiving information, skills, and expertise from one person to another plays a role in developing employee innovative work behavior. The higher the knowledge-sharing culture in the workplace, the higher the development of employees' innovative work behaviour. Previously, Nguyen et al. (2019) also examined the effect of knowledge sharing on innovative work behavior with the same two dimensions as this study: knowledge collecting and knowledge donating. The findings in the study of Nguyen et al. (2019) showed that knowledge sharing significantly affects innovative work behavior, with the knowledge-collecting dimension having a stronger impact. While in this study of the two dimensions, the knowledge-donating dimension has a stronger impact on innovative work behavior. Knowledge donating refers to employee initiatives to share new knowledge with others and coworkers' initiatives to share new knowledge. Regardless of which dimension is stronger, knowledge donating and knowledge collecting are needed considering that knowledge sharing is a reciprocal process of giving and receiving knowledge from others. Related to the results of this study, knowledge sharing has also been shown to affect innovative work behavior in millennial employees significantly (Palumian et al., 2021) at ICT companies (Natalia & Sandroto, 2020). Knowledge sharing is beneficial for the survival of a company. The culture of knowledge sharing in an organization will indirectly facilitate the distribution of knowledge. This can increase the potential of employees to continue to improve themselves, the work department, and the organization where they work. The employee will combine their knowledge and new knowledge from their coworkers. This information collection is very useful when employees have to deal with situations requiring them to improve old ways, modify old methods, and even apply new findings in work. Thus, a reciprocal process of giving and receiving knowledge in an organization can improve employees' innovative work behaviour.

#### Servant Leadership, Creative Self-efficacy, and Innovative Work Behavior

Based on the results of hypothesis testing shows that creative self-efficacy can mediate the relationship between servant leadership and innovative work behavior. Creative self-efficacy's mediating role is partial. The role of partial mediation is servant leadership capable of increasing innovative work behavior either through creative self-efficacy or not through creative self-efficacy. The results of this study are supported by previous research by Jan et al. (2021) that creative self-efficacy can mediate the relationship between servant leadership and innovative work behavior. Servant leaders accompany and supervise the work of employees. This can improve their creative performance by better understanding their skills, competencies, and abilities, thus developing high creative self-efficacy. Employees' creative self-efficacy helps them confidently take risks and gather sufficient resources to engage in innovative work behavior.

Suppose the results of hypothesis testing are related to a millennial employee as the object of research. In that case, it is certainly very in tune with one of the distinctive characteristics of the millennial generation. Millennials like a comfortable workplace where they get the trust and freedom of their bosses to do things. On the other hand, one of the indicators of servant leadership, namely, the leader gives employees the freedom to solve the problems they face in the way they think is correct, with a Mean of 4.392 in the very high category. One of the millennial characteristics and indicators of servant leadership seems to be an offer that matches the existing demand. Employees' needs for support from servant leaders are fulfilled, which will encourage employees' creative self-efficacy. Then creative self-efficacy gives employees the confidence to dare to implement their ideas. According to Yulianti & Usman (2019), a leader's behavior that allows employees to explore and experiment more will increase creative self-efficacy. Employees' creativity and self-efficacy can be a strength for Start-Up companies in a competitive environment. It can support the company's innovation efforts. Support from leaders can increase employee confidence in their abilities which will create new ideas so they can contribute with creative ideas at work. Thus, improving employees' personal belief in their ability to develop and implement innovative ideas.

#### Knowledge Sharing, Creative Self-efficacy, and Innovative Work Behavior

Based on the results of hypothesis testing, creative self-efficacy can mediate the relationship between knowledge sharing and innovative work behavior. Creative self-efficacy's mediating role is partial. The role of partial mediation is knowledge-sharing capabilities of increasing innovative work behavior either through creative self-efficacy or not through creative self-efficacy. The character of the millennial generation, who has a high interest in learning new things and deepening their previous knowledge, is related to the results of this research. The millennial generation also considers teamwork, including knowledge sharing, to produce better output. The employees' knowledge and skills will increase their confidence in their ability to behave innovatively.

The results of this study are related to the previous research by Hu & Zhao (2016), which proves that creative self-efficacy can mediate the relationship between knowledge sharing and innovative behavior. Employees with creative self-efficacy have a high curiosity. It will dare to take risks and encourage them to engage in innovative work behavior. Innovative work behavior involves employees' efforts to introduce concepts and methods to the company to produce different concepts and methods. The capital of knowledge and skills, as well as employees' creative self-efficacy, is needed to explore new ideas for employees at work.

Cundawan et al. (2021) have also tested the mediating effect of creative self-efficacy on knowledge sharing on millennial employees' innovative work behaviour. This research shows that companies need to consider their closeness to employees. It is also to ensure that employees have confidence in their creative abilities. One of the ways to do this is by ensuring that the demands of the job match the creative abilities of the members. Encouraging knowledge sharing will also increase employees' confidence in their ability to create creative work creating innovations. Thus, if the company wants to improve the innovative work behavior of millennial employees with the support of knowledge sharing. It can involve creative self-efficacy. The knowledge and skills will provide creative self-efficacy to develop employee ideas at work.

# 5. Conclusion

This study aimed to explore the relationship between servant leadership and knowledge sharing to innovative work behavior. We also examined the mediating effect of creative self-efficacy on the relationship between servant leadership, knowledge sharing, and innovative work behavior. The method used is non-probability sampling using accidental sampling. The respondents are millennials employees in Start-Up businesses. Based on the results and discussion of the research, it can be concluded that servant leadership and knowledge sharing significantly affect the innovative work behavior of Millennial Start Up Software Development employees. Then creative self-efficacy can partially mediate the relationship between servant leadership and knowledge sharing on innovative work behavior.

Theoretical implications of this study contribute to understanding the processes of servant leadership and knowledge sharing and their impact on innovative work behavior. Previous research exists on the relationship between servant leadership and innovative work behavior (Bou Reslan et al., 2021) and the relationship between knowledge sharing and innovative behavior (Nguyen et al., 2019). However, this study integrates servant leadership and knowledge sharing impact on innovative work behavior. In addition, this study reveals that creative self-efficacy mediates the relationship between servant leadership and knowledge sharing to innovative work behavior. The practical implications of this study highlight the importance of servant leadership and knowledge sharing for innovative work behavior. Servant leadership and knowledge sharing provide the necessary support and confidence to enable employees to pursue innovative work behavior. Organizations provide their managers with the skills and understanding to follow servant leadership. Managers can stimulate knowledge sharing among employees by giving employees new challenges, encouraging employees to try new approaches, and initiating processes to develop knowledge and share experience and expertise.

However, keep in mind that the data was collected from several companies. The research results are still too general. Servant leadership, knowledge sharing, and creative self-efficacy in all Start Up software development will not necessarily affect employees' innovative work behaviour. For further research, it can be carried out on one particular company and, more specifically, for consideration in preparing company policies. The other recommendation for further research is to explore the other variables to support the improvement of the innovative work behavior of millennial employees, especially in Start Up Software Development. There may still be many variables outside this research model that can affect innovative work behavior in Start Up software development.

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## **Author Contribution**

Author 1: conceptualization, writing original draft, data curation, formal analysis, investigation, methodology. Author 2: review and editing, writing and editing, supervision, validation, visualization.

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The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

## References

Akbari, M., Bagheri, A., Imani, S., & Asadnezhad, M. (2021). Does entrepreneurial leadership encourage innovation work behavior? The mediating role of creative self-efficacy and support for innovation. European Journal of Innovation Management, 24(1). https://doi.org/10.1108/EJIM-10-2019-0283

- Anser, M. K., Yousaf, Z., Khan, A., & Usman, M. (2021). Towards innovative work behavior through knowledge management infrastructure capabilities. *European Journal of Innovation Management*, 24(2). https://doi.org/10.1108/ejim-09-2019-0250
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. In Annual Review of Psychology (Vol. 60). https://doi.org/10.1146/annurev.psych.60.110707.163621
- Bou Reslan, F. Y., Garanti, Z., & Emeagwali, O. L. (2021). The effect of servant leadership on innovative work behavior and employee knowledge sharing in the Latvian ICT sector. Baltic Journal of Management, 16(5). https://doi.org/10.1108/BJM-09-2020-0321
- Brouwer, J., & Jansen, E. (2019). Beyond grades: developing knowledge sharing in learning communities as a graduate attribute. *Higher Education Research and Development*, 38(2). https://doi.org/10.1080/07294360.2018.1522619
- Cai, W., Lysova, E. I., Khapova, S. N., & Bossink, B. A. G. (2018). Servant leadership and innovative work behavior in Chinese high-tech firms: A moderated mediation model of meaningful work and job autonomy. *Frontiers in Psychology*, 9(OCT). https://doi.org/10.3389/fpsyg.2018.01767
- Cundawan, A., Marchyta, N. K., & Santoso, T. (2021). Mediating effect of creative self-efficacy on the influence of knowledge sharing towards innovative work behavior among millennial knowledge workers. Jurnal Manajemen Dan Pemasaran Jasa, 14(2). https://doi.org/10.25105/jmpj.v14i2.8873
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1). https://doi.org/10.1111/j.1467-8691.2010.00547.x
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant Leadership: A systematic review and call for future research. *Leadership Quarterly*, 30(1). https://doi.org/10.1016/j.leaqua.2018.07.004
- Faraz, N. A., Ahmed, F., Ying, M., & Mehmood, S. A. (2021). The interplay of green servant leadership, self-efficacy, and intrinsic motivation in predicting employees' pro-environmental behavior. *Corporate Social Responsibility and Environmental Management*, 28(4). https://doi.org/10.1002/csr.2115
- Farhan, B. Y. (2021). Customizing leadership practices for the millennial workforce: A conceptual framework. Cogent Social Sciences, 7(1). https://doi.org/10.1080/23311886.2021.1930865
- Gong, Y., Huang, J. C., & Farh, J. L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. Academy of Management Journal, 52(4), 765–778. https://doi.org/10.5465/AMJ.2009.43670890
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate Data Analysis: A Global Perspective. In *Multivariate Data Analysis: A Global Perspective* (7th ed., p. 541). Pearson Education.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate Data Analysis Seventh Edition. In Pearson New International. https://doi.org/10.1007/978-3-319-01517-0\_3
- Hair, J. F. J., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). Advanced Issues in Partial Least Squares Structural Equation Modeling. In *Research Gate*.
- Hallak, R., Assaker, G., O'Connor, P., & Lee, C. (2018). Firm performance in the upscale restaurant sector: The effects of resilience, creative self-efficacy, innovation and industry experience. *Journal of Retailing and Consumer Services*, 40. https://doi.org/10.1016/j.jretconser.2017.10.014
- Hu, B., & Zhao, Y. (2016). Creative self-efficacy mediates the relationship between knowledge sharing and employee innovation. Social Behavior and Personality, 44(5). https://doi.org/10.2224/sbp.2016.44.5.815
- Jan, G., Zainal, S. R. M., & Lata, L. (2021). Enhancing innovative work behaviour: the role of servant leadership and creative self-efficacy. On the Horizon, 29(2). https://doi.org/10.1108/OTH-12-2020-0044
- Jensen, S. M., & Luthans, F. (2006). Relationship between entrepreneurs' psychological capital and their authentic leadership. *Journal of Managerial Issues, 18*(2).
- Khan, M. M., Mubarik, M. S., Islam, T., Rehman, A., Ahmed, S. S., Khan, E., & Sohail, F. (2022). How servant leadership

triggers innovative work behavior: exploring the sequential mediating role of psychological empowerment and job crafting. *European Journal of Innovation Management*, 25(4). https://doi.org/10.1108/EJIM-09-2020-0367

- Kim, T. Y., Liden, R. C., Kim, S. P., & Lee, D. R. (2015). The Interplay Between Follower Core Self-Evaluation and Transformational Leadership: Effects on Employee Outcomes. *Journal of Business and Psychology*. https://doi.org/10.1007/s10869-014-9364-7
- Kim, W., & Park, J. (2017). Examining structural relationships between work engagement, organizational procedural justice, knowledge sharing, and innovative work behavior for sustainable organizations. Sustainability (Switzerland), 9(2). https://doi.org/10.3390/su9020205
- Krog, C. L., & Govender, K. (2015). The relationship between servant leadership and employee empowerment, commitment, trust and innovative behaviour: A project management perspective. SA Journal of Human Resource Management, 13(1). https://doi.org/10.4102/sajhrm.v13i1.712
- Lai, H. M., Huang, Y. W., & Hung, S. Y. (2018). A meta-analysis of knowledge sharing in virtual communities: The moderating effect of membership types. *Communications in Computer and Information Science*, 877. https://doi.org/10.1007/978-3-319-95204-8\_8
- Lin, X. Q., Chen, Y. C., Liu, C. H., & Li, Y. Q. (2022). Measuring creativity: role of service quality management, knowledge sharing and social interaction. *Total Quality Management and Business Excellence*. https://doi.org/10.1080/14783363.2021.2021800
- Long, S. (2017). Exploring Which Leadership Styles are Effective with Millennial Employees. In ProQuest Dissertations and Theses.
- Marcinkus Murphy, W. (2012). Reverse mentoring at work: Fostering cross-generational learning and developing millennial leaders. *Human Resource Management*, 51(4). https://doi.org/10.1002/hrm.21489
- Natalia, L., & Sandroto, C. W. (2020). The Mediating Role of Knowledge Sharing Behavior on the Effect of Person-Organization Fit on Innovative Work Behavior. International Journal of Applied Business and International Management, 5(1). https://doi.org/10.32535/ijabim.v5i1.770
- Ngotngamwong, R. (2019). Working with millennials: from the perspective of Baby Boomers and Gen Xers. Human Behavior, Development and Society, 20(2).
- Nguyen, T. P. L., Nguyen, K. N., Do, T. D., & Nguyen, T. T. M. (2019). Knowledge sharing and innovative work behavior: The case of Vietnam. Uncertain Supply Chain Management, 7(4). https://doi.org/10.5267/j.uscm.2019.5.001
- Palumian, Y., Gunawan, K. A., Tarigan, Z. J. H., & Umbara, A. N. (2021). The Role of Knowledge Sharing and Learning Orientation in Improving Innovative Work Behavior among Millennials in Indonesia. *Petra International Journal of Business Studies*, 4(1). https://doi.org/10.9744/ijbs.4.1.74-84
- Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. *Creativity and Innovation Management*, 23(4). https://doi.org/10.1111/caim.12084
- Shaw, S., & Ogilvie, C. (2010). Making a virtue out of a necessity: Part time work as a site for undergraduate work-based learning. *Journal of European Industrial Training*, 34(8). https://doi.org/10.1108/03090591011080986
- Tierney, P., & Farmer, S. M. (2011). Creative Self-Efficacy Development and Creative Performance Over Time. Journal of Applied Psychology, 96(2), 277–293. https://doi.org/10.1037/a0020952
- Twenge, J. M., & Kasser, T. (2013). Generational Changes in Materialism and Work Centrality, 1976-2007: Associations With Temporal Changes in Societal Insecurity and Materialistic Role Modeling. Personality and Social Psychology Bulletin, 39(7), 883–897. https://doi.org/10.1177/0146167213484586
- Wang, H.-J., Lu, C., & Siu, O. (2015). Job Insecurity and Job Performance: The Moderating Role of Organizational Justice and the Mediating Role of Work Engagement. The Journal of Applied Psychology, 100, 1249–1258. https://doi.org/10.1037/a0038330

Yeşil, S., & Dereli, S. F. (2013). An Empirical Investigation of the Organisational Justice, Knowledge Sharing and Innovation

Capability. Procedia - Social and Behavioral Sciences, 75. https://doi.org/10.1016/j.sbspro.2013.04.023

- Yoshida, D. T., Sendjaya, S., Hirst, G., & Cooper, B. (2014). Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *Journal of Business Research*, 67(7). https://doi.org/10.1016/j.jbusres.2013.08.013
- Yulianti, P., & Arifien, F. P. (2019). Innovative behavior on millennials: antecedent proactive personality and task conflict with moderating job autonomy. *Jurnal Manajemen Dan Pemasaran Jasa*, 12(2). https://doi.org/10.25105/jmpj.v12i2.4358
- Yulianti, P., & Usman, I. (2019). Building employee creative performance: Through person-job fit, empowering leadership, and creative self efficacy. International Journal of Innovation, Creativity and Change, 9(8), 167–180.
- Zaky, M. A., Nuzar, I., Saputro, W. E., Praysuta, B. D. S., Wijaya, S. B., & Riswan, M. (2018). Mapping & Database Startup Indonesia 2018. *Badan Ekonomi Kreatif*.
- Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2020). Knowledge sharing direction and innovation performance in organizations: Do absorptive capacity and individual creativity matter? *European Journal of Innovation Management*, 24(2). https://doi.org/10.1108/EJIM-09-2019-0244