

LOCAL VENTURES' SHARED LEADERSHIP PERSUASION: HOW KNOWLEDGE SHARING AND INTERACTIVE WORK CULTURE INFLUENCE EMPLOYEES' INNOVATION

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Abstract

This research investigates the effect of shared leadership on employee innovation and the mediating and moderating roles of knowledge-sharing and interactive work culture in the relationship between shared leadership and employee innovation. A total of 840 respondents from 120 local beverage companies in three provinces in Indonesia were selected using purposive sampling. The survey instruments were initially tested for validity and reliability as a preliminary analysis. Data obtained during the survey were then analyzed using the hierarchical regression method with Statistical Package for the Social Science (SPSS). This research reveals that shared leadership positively affects knowledge sharing and employee innovation. In addition, knowledge sharing partially mediates the relationship, while interactive work culture moderates the relationship between shared leadership and employee innovation behavior. This study is among the first to discuss the relationship between shared leadership and employees' innovative behavior using knowledge sharing as a mediator and interactive work culture as a moderator in the context of local beverage companies in Indonesia.

Keywords: Shared leadership, knowledge sharing, interactive work culture, innovative behavior, local beverage.

1. INTRODUCTION

The Covid-19 pandemic has caused extensive damage to the world's social, economic, and healthcare systems (Bacq et al., 2020). Furthermore, the global COVID-19 epidemic caused a worldwide recession, negatively affecting the industrial job market worldwide, particularly in Indonesia. Numerous businesses have seen a drop in sales due to rising economic uncertainty and a general lack of confidence over the risk of human coronavirus infection (Carnevale & Hatak, 2020). Many Indonesian businesses have recently adopted new policies to reduce the spread of the Covid-19 virus. However, establishing

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regulations has resulted in numerous fundamental issues for employees and companies. As a result of government policy, such as Large-scale social restrictions, economic disparities have emerged as a major problem during the COVID-19 epidemic. The social distancing policy has been shown to have negative social and economic effects (Purnama & Susanna, 2020). Indonesia's economy has been hit more by the COVID-19 outbreak than it was by the Asian financial crisis of 1997–1998. That crisis halted economic activity in the country as many businesses shut down. Bivona and Cruz (2021) found that only resilient businesses (flexible and adaptable) can survive a worldwide recession in the food and beverage industry. Resilient companies exhibit a propensity to effectively respond to crises by proactively creating novel avenues for producing revenue, such as making strategic investments in human capital, as opposed to implementing policies focused solely on reducing costs. To deal with unexpected events, businesses can take a “bricolage” approach (Tsilika et al., 2020) by rearranging their innovation processes to create new products and services by merging existing tangible and intangible assets. Hence, organizations require evidence-based frameworks to guide effective innovation in the face of health related and technological change. (Bunjak et al., 2022).

Businesses and communities recognize that innovation is essential to survival in shifting environmental conditions (Trkman & Cerne, 2022). An effective leader may inspire creativity in the workplace (Atatsi et al., 2019; Buil et al., 2019). To effectively manage the organization, a leader must adapt to new circumstances. This study utilizes a specific style of leadership based on the subject matter of the study, known as shared leadership, in which cooperation among team members and knowledge sharing are critical components in innovation production. Mitchell, Larson, and Green (1977) suggest that more than one person can influence a group despite the common belief that a single individual practices leadership. This form of leadership is defined as shared leadership. Shared leadership is “a leadership approach in which group members work together dynamically and interactively to inspire one another to achieve organizational goals” (Carson, Tesluk, & Marrone, 2007).

In addition, it is also necessary to comprehend how shared leadership affects employees' innovative behavior and how an interactive workplace culture influences the strength or weakness of the relationship between variables. The management of human resources has several issues, one of which is meeting the requirements of employees by providing them with a safe, healthy, and enjoyable workplace (Adawiyah *et al.*, 2020). To attain high productivity levels, companies and their employees must work together to maximize their individual and collective well-being (Colaco & Loi, 2019). However, Ojo's (2012) investigation yielded contradictory findings, claiming that many workers disregard company policies to reinforce the established culture at work. The company's work culture is a visible illustration of how the corporate culture has been implemented. It is an extensive program used to update the business's operational activities more efficiently and productively. Work culture serves as a moral compass for human resources as they strive to integrate into the business and address issues from the outside (Putri, Adawiyah, & Pramuka, 2017) so that everybody in the organization is on the same page in terms of what it stands for and how its members should conduct themselves. Hence, it is envisaged that the development of a positive work culture would increase employees' sense of self-worth and will lead to an improvement in the innovative behavior of employees. As a result, this study aims to determine how shared leadership affects employee innovation and knowledge sharing. Additionally, this research project will discuss the role of knowledge sharing as a mediating variable and interactive work culture as a moderating variable between shared leadership and employee innovative behavior

2. LITERATURE REVIEW AND HYPOTHESES

Human capital (HC) theory has profoundly impacted various disciplines, from economics to education and sociology. The HC theory was proposed by Schultz (1961), who suggested that HC consists of the “knowledge, skills, and abilities of people employed in an organization.” Although brief, Schultz’s initial definition of HC is somewhat limited because it does not consider “value” and the importance of “investment.” Schultz (1981) defined HC as: “...all the innate or acquired capabilities or valuable attributes of a human being, whether innate or acquired and which can be augmented by appropriate investment which will then become human capital...” (Schultz, 1981).

HC theory is closely related to the study of human resource management, as found in business administration and macroeconomics. This study uses HC theory as a basis, which emphasizes that in many cases, HC is accumulated specifically as the total amount of knowledge, skills, and intelligence of the employees of an organization or company (Boon et al., 2018). In addition, human capital is the collective knowledge, experience, abilities, skills, and creativity individuals possess that can be developed to produce innovative behavior (Wang & Zatzick, 2019).

It is argued that every cost incurred to increase capital quality and quantity is an investment activity. HC will be achieved optimally if the organization has a leader with a shared leadership style. HC motivates someone to share information, knowledge, team spirit, and goal orientation. Finally, as a novelty in this research, interactive work culture is inserted to strengthen the relationship between shared leadership and innovative behavior. The relationship between the research variables used is discussed below:

2.1 Relationship Between Shared Leadership and Employee Innovative Behavior

Innovative behavior has been recognized as a tool for promoting industrial competitiveness (Powell & Snellman, 2004). Innovation is the ‘adoption’ and ‘diffusion’ of new ideas within a company (Ballesteros-Rodríguez et al., 2020; Fausang et al., 2015). Creating new ideas or adopting something new can be considered an innovation if it can be commercialized into a product or service consumers want. Good innovation will produce new quality products or services at lower costs, improve products with unique attributes, and produce products that are different from the previous ones (Tuan, 2016). Innovation behavior is driven by a leadership style, such as a shared leadership style, that can create an innovative work environment.

Utilizing shared leadership is an essential asset that will foster innovative behavior within a team (Hoch, 2013). Shared leadership is a team process in which leadership is distributed among team members, rather than being given solely to a single designated individual (Tepper et al., 2004). Shared leadership is a crucial aspect of a team that can result in shared behavior among team members. (Al-Kurdi, El-Haddadeh, & Eldabi, 2020). Shared leadership has been described as a method for dispersing plans and ensuring their execution, resulting in improved performance (Kukenberger & D’Innocenzo, 2020). Shared leadership occurs when team members are motivated “to lead themselves and share influence with their peers in making decisions, solving problems, and identifying opportunities for the future; creativity and innovation are widely encouraged” (Gu *et al.*, 2018).

According to empirical data, team innovation behavior correlates favorably with shared leadership (Hoch, 2013). The primary function of individual inventive behavior is for individuals to “create, carry, react, and alter ideas” (Scott & Bruce, 1994). This study investigated the relationship between shared leadership at the team level and innovative

behavior at the individual level. The following hypothesis is offered based on the initial findings:

H1: Shared leadership is positively associated with employee innovative behavior.

2.2 Relationship Between Shared Leadership and Knowledge Sharing

Shared leadership is a management style that emphasizes delegating authority and empowering followers to make decisions on the job (Hoch, 2013). Shared leadership has been studied from two different perspectives. First, it focuses on the leader's actions, explicitly sharing power or giving employees more responsibility and autonomy. Second, it focuses on employee responses, particularly employee motivation, to "share" with other employees and leaders (Amundsen & Martinsen, 2015; Echebiri & Amundsen, 2020).

Shared leadership refers to a situation where numerous team members participate in leadership, including working together to make decisions and bearing responsibility for the team's or organization's results. Gregory *et al.* (2016) define shared leadership as owned, resulting from sharing influence among team members. Several earlier studies have shown a connection between shared leadership and information sharing. Hoch (2013) revealed that a team with a shared leadership style and more time for discussion indicates that the team is sharing information that will provide greater benefits as unique information is not only owned by one or a few people.

The following hypothesis is put forward in light of the facts above:

H2: Shared leadership is positively associated with knowledge sharing.

2.3 The Mediating Role of Knowledge Sharing

Knowledge has the potential to boost a company's competitiveness. According to Barney (1991), four criteria can help companies identify resources supporting competitive advantage: value, rarity, inimitability, and non-substitutability. An organization's competitiveness depends on knowledge-based resources, such as technological know-how and a deep understanding of its customers (Muhammed & Zaim, 2020). Knowledge has become the most helpful resource in today's business world. Knowledge includes theories, concepts, and tacit knowledge obtained from experience doing specific tasks (Almulhim, 2020).

Sharing knowledge entails communicating and interacting with the target individual to exchange ideas and facts. Knowledge sharing is "a culture of social interaction, which involves the exchange of knowledge, experiences, and skills of employees through entire departments or organizations" (Petrucci, 2013). The success of knowledge-sharing initiatives is contingent on the interaction between human resources, the eagerness to put acquired knowledge to use, and the skillsets of those involved.

Van Den Hooff and Ridder (2004) stated that knowledge sharing is "the process through which individuals exchange their knowledge and jointly develop new knowledge." Knowledge sharing ensues when employees are motivated to collect information and contribute knowledge for novel concepts (Bock & Kim, 2002). Further, knowledge sharing has been shown to play an important role in recent creativity studies, which have shown that it can help to galvanize employees' creative efforts. (Ford, 2004).

A recent study found that workers actively sharing information are more likely to channel their imaginations into novel products. (Wang & Cheng, 2010). In addition, knowledge sharing is crucial in fostering creativity among workers (Wang & Noe, 2010) and has been studied as a mediating variable between self-efficacy and employee creativity (Tseng, Wu, & Nguyen, 2011). Nonetheless, prior studies have only shown a moderate

interest in probing the mediating function of knowledge sharing. The knowledge-sharing role as a mediator between employee-leadership styles and innovation has been researched less, especially regarding local beverage enterprises. Following these data, the following hypothesis is suggested:

H3: A positive relationship exists between knowledge sharing and employee innovative behavior.

In addition, the study investigates the mediating effect of knowledge sharing on the relationship between shared leadership and workers' propensity to innovate. "Knowledge sharing" refers to transferring information from one person to another through verbal or nonverbal means of expression (Mittal & Dhar, 2015). Applying shared leadership in a particular field can boost individual creativity by encouraging widespread knowledge-sharing among workers. The effectiveness of leadership and employee communication can influence personal innovation. Omar Sharifuddin Syed-Ikhsan and Rowland (2004) explain that knowledge sharing is essential for companies to succeed, leading to faster knowledge dissemination and sharing for some organizations to provide more significant benefits in the future.

Shared leadership will be easier to implement if there is a desire to share knowledge with other members. Bolino et al. (2010) point out that teams are often required to juggle numerous responsibilities simultaneously. Thus, studying how often this occurs and what information is exchanged within teams is crucial. The primary definition of knowledge sharing in this study is as a team process in which team members share suggestions, information, and ideas relevant to tasks, with each other (Misra & Srivastava, 2018). Knowledge sharing is an activity that provides task information, allows knowledge exchange, generates ideas, increases organizational learning capacity, and improves the ability to achieve goals (Wang & Noe, 2010).

Employees may share knowledge and promote creativity most effectively (Wang & Noe, 2010) through effective knowledge sharing, as it allows businesses to convert the expertise of their employees into valuable assets (Z. Wang & Wang, 2012). Hence, a competitive advantage can be gained by improving creativity, innovation, reputation, and corporate profit through effective knowledge management (S. Wang & Noe, 2010). Based on the findings above, the following hypothesis is proposed:

H4: Employee innovative behavior and shared leadership are mediated by knowledge sharing.

2.4 A Moderating Variable of Interactive Work Culture

Work culture is the physical manifestation of the values and behaviors ingrained over time in a community, organization, or business (Benson, 2019). A company's human resources must transform to successfully implement a work culture that will help them rise to future challenges (Aguenza, 2012).

Companies that have implemented their work culture programs successfully will have employees who are accountable, disciplined, and compliant with established policies. Additionally, a good work culture can facilitate open lines of communication and cooperative dynamics between workers and management (Adawiyah, 2020). Strong company culture and shared values are valued by all parties involved, and productivity increases when workers adhere to established procedures. Culture at work positively or negatively impacts how productively workers complete their assigned tasks and fulfill their responsibilities (Ojo, 2009).

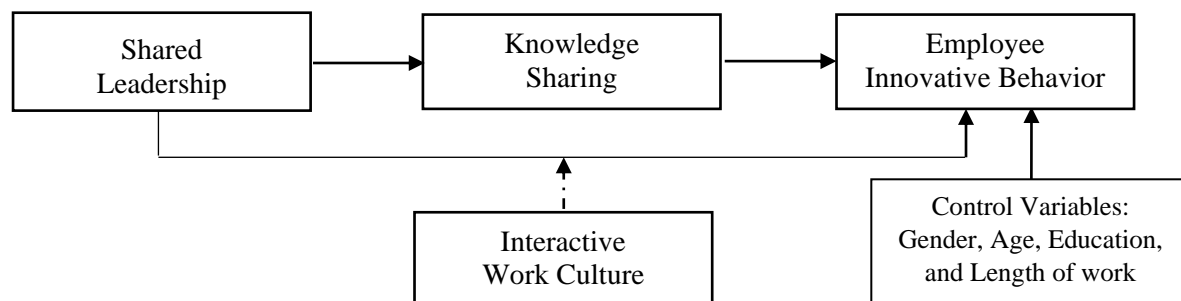
Wihuda et al. (2017) found that a company with a good work culture can help employees with high self-efficacy perform even better. Indicators of a high-performing work culture include reports of increased employee enthusiasm, dedication, innovation, competence, and commitment (Frijns, Dodd, & Cimerova, 2016). Hence, a more positive work environment leads to more productivity. Employees in service organizations must see the embedded values of their workplace culture to make the necessary behavioral and attitude shifts that will lead to increased productivity and higher quality work which aligns with their job specifications (Groysberg *et al.*, 2018; Payne *et al.*, 2018).

Based on the evidence above, the following hypothesis is proposed:

H5: An interactive work culture moderates the association between shared leadership and employees' innovative behavior.

Figure 1 demonstrates the research model as well as the hypotheses suggested.

Figure 1. Model for the Study and Hypothesis Path



3. METHODOLOGY

3.1 Sample and Data Collection Procedure

Yogyakarta, Central Java, and West Java, Indonesia, were the sites of this investigation, with data collected from one hundred and seventy local beverage producers among the three provinces (BPS-Statistics Indonesia, 2020). The Slovin formula was used with a value of $e = .05$ to determine the appropriate sample size, arriving at a total of 120 companies distributed throughout the three provinces (Sekaran, 2012). From 120 companies, 840 respondents answered the questionnaire completely with an effective rate of 94%, consisting of 720 employees and 120 supervisors representing each company to ensure the reliability of each employee's responses. The description of the sample is depicted in Table 1. Respondents were contacted after selection to explain the research purpose. Data were then gathered between November 2021 and December 2021. Respondents for the study were selected purposively based on certain criteria. Table 2 describes the respondent characteristics.

Table 1 Population and Sample

Province	Population (Companies)	Sample	
		Companies	Respondents
Yogyakarta	105	74	521
Central Java	50	35	245
West Java	15	11	74
Total	170	120	840

Table 2 Respondent Characteristic

Demographic factors	Frequency	(%)
Gender		
Male	342	40.7
Female	498	59.3
Marital status		
Single	312	37.1
Married	528	62.9
Age (years)		
21 - 30	314	37.4
31 - 40	264	31.4
41 - 50	148	17.6
Above 50	114	13.6
Education		
Graduate	645	76.8
Post Graduate	195	23.2
Work experience (years)		
1 – 5	176	20.9
6 – 10	268	31.9
11 – 15	185	22.0
16 – 20	104	12.4
21 - 25	62	7.4
Above 25	45	5.4

Notes. n=840.

3.2 Measures

A previously studied and validated scale was used in this investigation. A seven-point Likert-type scale was used in each measurement item (1 denotes a significant disagreement, and 7 denotes a strong agreement). Age, education, gender, and employment history were designated as the four control variables (Richter et al., 2012).

Shared leadership. As the indicator of shared leadership, the seven construct items created by Klasmeier and Rowold (2020) were deployed. Workers were asked to rate their managers on how often they engaged in shared leadership practices. An example of the statements used is “The leader provides opportunities for decision making and shares responsibility for the goals or performance the team wants to achieve.” The Cronbach’s alpha value for the shared leadership measurement used in this study was .918.

Knowledge sharing. Ten indicator items developed by Wang and Noe (2010) were used. For example, “I am always willing to share the knowledge I know with colleagues.” The Cronbach’s alpha value for the knowledge sharing measurement used in this study was .878.

Interactive Work culture. Valentine et al. (2011) identified six interactive work culture criteria indicators. An example is “I can distinguish between personal actions and work.” The value of the Cronbach’s alpha score for the interactive work culture measurement used in this study was .91.

Employee innovation behavior. Six indicator items developed by Lin (2014) were used for measuring employee innovation behavior. An example of the statements used include “Employees are always looking for opportunities to make work innovations.” The

Cronbach's alpha value for the measurement of employee innovation behavior used in this study was .951.

Non-independent observations were used, while data were evaluated with a one-way variance test to rule out discrepancies between the supervisors' and employees' scales. This evaluation was necessary to guarantee that the evaluation of any other worker did not influence a worker's response. Statistical analysis revealed no significant change in the order of the supervisors' dependent variables ($F = .926$, $p = .627$).

Two stages of analysis were carried out on the research data. As a first step, the reliability of the measurement model was validated and assessed by conducting a confirmatory factor analysis (CFA) on the research model. Second, a hierarchical regression analysis was used to evaluate the research hypothesis by splitting the independent and dependent variables over multiple models. SPSS 22.0 and AMOS 22.0 were utilized for the statistical analyses.

4. EMPIRICAL RESULTS

4.1 Measurement Model

The first stage of the analysis process was a robustness test using confirmatory factor analysis to ensure the validity and reliability of the questionnaire (CFA). The composite reliability (CR), average variance extracted (AVE), mean shared variance (MSV), and average shared variance (ASV) were assessed to validate the model measurements. All indicators were considered reliable as their loading factors were greater than .5 after the validation procedure had been carried out (see Table 4). The loading factors for employee innovation behavior varied from .758 to .891, while values for interactive work culture were between .752 and .891, and those for shared leadership were between .715 and .885. Similar measurements with the same instrument were subjected to a reliability test to ensure they consistently yielded the same findings. In addition, several tests of discriminant validity (DV) were conducted, since the square of the AVE (bold diagonal) value was bigger than any factor correlation. AVE values were also higher than MSV and ASV, which is indicative of discriminant validity (Kerlinger & Lee, 2000). Table 3 shows the total output reliability, including each item's reliability value. Values of .75 to .84 (more than the minimum required value of .6) were revealed for the overall structure reliability. (Hair Jr. et al., 2017). These results prove that validity and reliability criteria were achieved for the model structure.

Following the CFA tests, goodness of fit (GOF) was assessed. According to Bentler and Bonett (1980), testing the model can be conducted through a 2-stage approach, simultaneously testing the measurement model and the measurement and structural models. The GOF test was conducted 3 times in this study, including (1) the GOF test for each variable used, (2) the GOF test of the research model before the moderating variable was added, and (3) the GOF test of the research model after the moderating variable was added. Generally, the more size criteria a model satisfies, the better it performs with the data or sample (Henseler & Sarstedt, 2013; Schermelleh-Engel et al., 2003). In theory, drawing inferences from a model constructed using GOF criteria requires excellent caution when evaluating a theory based on sample data. The measurement model offers a good fit for the data ($\chi^2 = 514,345$; $df = 638$; $GFI = .931$; $CFI = .942$; $TLI = .933$; $RMSEA = .059$). All indicators of conformance are within the acceptable range after the moderating variable has been included (Hair et al., 2010). Table 3 displays the correlation matrix, mean, SD, and composite reliability.

Table 3 Descriptive Analysis

<i>n</i> =840	Mean (SD)	Correlation							
		1	2	3	4	5	6	7	8
1. Gender	1.86 (.82)								
2. Age	1.49 (.58)	.86**							
3. Education	1.34 (.66)	-.65**	-.53**						
4. Length of work	2.07 (.72)	.82	.65**	-.33**					
5. Shared leadership	3.34 (.75)	.02	.01	.12*	.05**	(.73)			
6. Knowledge sharing	3.42 (.84)	-.06	-.02	.11	-.02	.54**	(.78)		
7. Interactive work culture	3.29 (.79)	.05	.05	.08	.07	.41**	.42**	(.77)	
8. Employee Innovation behavior	2.48 (.85)	-.08	-.07	.18**	.03*	.57**	.67**	.44**	(.86)
9. Composite reliability						.81	.76	.75	.84

Notes. The italicised integers in a diagonal's cells represent the AVE for discriminant validity.

p* < .05; *p* < .01

Discriminant validity was also examined to identify critical differences between the variables (Henseler *et al.*, 2015). Table 2 displays the construct correlations significantly lower than the AVE square root among the dependent and independent variables. These findings provide strong evidence for the model's discriminant validity. In addition, the average value of the maximum shared variance (MSV) and the average value of the average shared variance (ASV) is added to the AVE value. The discriminant validity is applicable when all ASV and MSV values fall below their corresponding AVE values (Hair *et al.*, 2010). Table 4 demonstrates that every condition adheres to the requirements for discriminant validity.

Table 4 Confirmatory Factor Analysis

Variable	Indicators	AVE	MSV	ASV	Cronbach's Alpha/CR.	Factor loading	<i>t</i> -value
Shared leadership	SL1	.529	.366	.305	.918/.917	.772	12.260***
	SL2					.749	12.351***
	SL3					.756	11.494***
	SL4					.872	13.558***
	SL5					.777	11.641***
	SL6					.885	12.728***
	SL7					.715	12.860***

Table 4 (Continued)

Variable	Indicators	AVE	MSV	ASV	Cronbach's Alpha/CR.	Factor loading	t-value
Knowledge sharing	KS1	.607	.605	.392	.878/.880	.726	12.920***
	KS2					.712	12.046***
	KS3					.719	12.266***
	KS4					.725	12.490***
	KS5					.757	12.580***
	KS6					.771	13.641***
	KS7					.792	14.762***
	KS8					.779	12.832***
	KS9					.787	12.968***
	KS10					.773	12.086***
Interactive work culture	IWC1	.590	.226	.209	.929/930	.817	14.135***
	IWC2					.757	12.270***
	IWC3					.798	13.367***
	IWC4					.752	12.404***
	IWC5					.768	13.584***
	IWC6					.891	11.652***
Employee innovative behavior	IB1	.728	.605	.397	.951/.953	.758	14.784***
	IB2					.831	13.858***
	IB3					.867	13.932***
	IB4					.891	14.002***
	IB5					.869	13.161***
	IB6					.828	13.232***
	IB6					.828	13.232***

Notes. $n = 840$. *** = $p < .001$

An analysis of variance using the common technique was performed as the final step in the preliminary analysis procedure. In order to identify issues associated with CMVs, Harman's single-factor test was used (Eichhorn, 2014). Common Method Variance (CMV) represents the differences between measures that can be attributed to factors other than the constructs being measured. In this statistical method, every variable is treated as an independent variable. The outcome of conducting factor analysis without rotating the data must be lower than fifty percent. The results showed that for the unrotated component, each of the four factors evaluated had a value of 36.16% or lower. Podsakoff et al. (2003) suggested including a shared latent factor, which has also been included. The findings demonstrated no variance similarity between any of the variables. CMV is, therefore, not a concern in this investigation.

4.2 Structural Model

4.2.1 Hypothesis Testing

The models for hypothesis testing included both control and research variables. The control variable, also known as the independent variable or predictor, was manipulated to ensure that its effect on the criterion variable is neutralized. Before the main predictor could be included in the analysis, the control variable must be tested for its effect so that when the

Table 5 Hierarchical Regression Analysis

Dependent variables →	Knowledge sharing			Employee innovation behavior			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
<i>Control variable</i>							
Gender	-.37	-.51	-.22	-.42	-.06	-.02	.02
Age	.58	.52	-.73	-.83	-1.17	-.27*	-.26
Education	.87	.11	1.74	.67	.58	.14	.12
Length of work	.25	.08	.92	.72	.62	.13	.15
<i>Independent variable</i>							
Shared leadership		.18***		.24***	.12***		
<i>Mediator</i>							
Knowledge sharing					.71***	.61***	.63***
<i>Moderator</i>							
Interactive work culture						.20***	.22***
<i>Interaction</i>							
Shared leadership x Interactive work culture							.13***
F-value	1.19*	28.21***	3.62**	35.93***	65.34***	61.92***	53.31***
R ²	.02	.28	.05	.32	.51	.52	.53
Adjusted R ²	.00	.27	.03	.31	.53	.51	.52
Change R ²	.02	.26	.04	.28	.21	.03	.00

Notes. *p-value<.05; **p-value<.01; ***p-value <.001

primary predictor is included in the test; it is possible to find the changes in the level of influence on the criterion variable. Based on the results of previous research (Kerlinger and Lee, 2000), demographic factors, namely gender, age, education level, and length of service, significantly influence employees innovative behavior. As these variables are outside the research model, they are treated as control variables. Including control variables in data analysis allows manipulation so that the variation becomes minimal or disappears altogether and therefore does not affect the results of the hypothesis testing analysis (Noe, 1996). Table 5 shows that gender, age, education level, and length of work have no significant effect on the research variables ($p > .05$, Model 1).

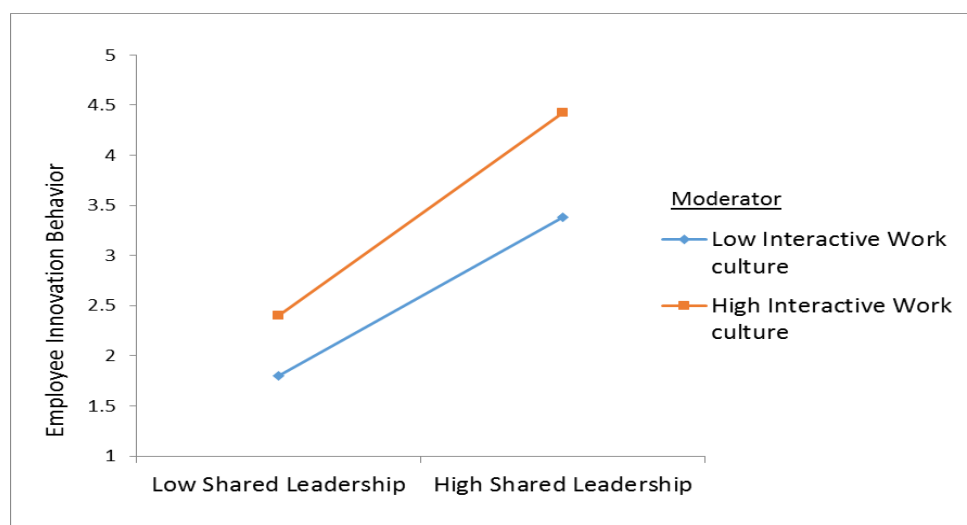
Table 5 displays the findings of the hierarchical regression analysis used to test hypotheses 1–4. The first hypothesis states that shared leadership positively and significantly influences employee innovation behavior. It can be seen in Table 4 that there is a positive and substantial association between shared leadership and employee innovative behavior ($\beta = .12$, $p = .001$). Consequently, this outcome is in line with H1. Hypothesis two asserts that shared leadership positively and profoundly impacts knowledge sharing. Shared leadership favors and significantly impacts knowledge sharing, as demonstrated by Model 2 ($\beta = .18$, $p = .001$). Therefore, the data lend credence to H2. Hypothesis 3 (H 3), which argues that the behavior of employees in terms of creativity is favorably and significantly affected by knowledge

sharing, is also supported. According to Model 5, the sharing of knowledge has a positive and statistically significant influence on employees' innovative behavior ($\beta = .71, p = .001$).

Baron and Kenny's (1986) three-condition technique was used to conduct a mediation test (H4). According to Table 5, shared leadership and employee innovative behavior are positively and significantly related ($\beta = .24, p = .001$, Model 4). The findings give legitimacy to Hypothesis 1. Model 2 and Model 5 results are consistent with Condition 2 because the correlation between shared leadership and information sharing ($\beta = .18, p = .001$) and between knowledge sharing and employee innovative behavior ($\beta = .71, p = .001$) was significant and positive. Model 5's findings support Condition 3, with the results suggesting that knowledge sharing strengthens the connection between shared leadership and employee innovative behavior ($\beta = .12, p = .001$). These findings, therefore, partially support H4.

Hypothesis 5 (H5) examines the moderating effect of interactive work culture to comprehend the connection between shared leadership and the propensity of employees to innovate. The association between shared leadership and employees' innovative actions is predicted to be moderated by an interactive work culture ($\beta = .13, p = .001$). Therefore, this study confirms H5. The moderating impact of an interactive workplace culture is shown in Figure 2. The effect of shared leadership on workers' propensity to innovate decreases in environments with low levels of interactive work culture. Consequently, shared leadership significantly impacts employees' propensity to innovate in highly interactive work cultures. As a result, it is concluded that an interactive work culture significantly enhances the positive correlation between shared leadership and employee innovation behavior.

Figure 2 Moderating Role of Interactive Work Culture on the Relationship Between Shared Leadership and Employee Innovation Behavior



5. DISCUSSION AND IMPLICATIONS

The primary purpose of this research was to examine the effect of shared leadership on employee innovation. Thus, the functions of knowledge sharing as a moderator and of interactive work culture as a mediator variable were investigated. Data analysis shows that shared leadership positively affects knowledge sharing and the innovation behavior of employees. In addition, the relationship between shared leadership and employees' innovative behavior is partially mediated by knowledge-sharing behavior among employees. Leadership is one factor that plays a role in maintaining the sustainability of the team in the

organization (Sudarmo, Suhartanti, and Prasetyanto, 2021). Lowe (2006) states that one of the more effective approaches in team management is shared leadership which is defined as a dynamic interaction where leaders can influence team members to influence or invite other members to increase knowledge sharing, which can improve innovative behavior.

Shared leadership reflects a situation where several team members participate in leadership, collaborating in decision-making and sharing responsibility for team and organizational outcomes. Coun, Peters, and Blomme (2019) define shared leadership as resulting from sharing leadership influence among team members. The key to shared leadership is that team members share knowledge to support each member's new ideas. A team that spends more time on discussion indicates that the team is sharing information that will provide more benefits as unique information is not only owned by one or a few people in the team (Fausing *et al.*, 2015). The contribution of this study made to the HC theory literature is that the relationship between leadership sharing can influence innovative behavior mediated by knowledge sharing.

The findings also indicate that interactive workplace culture is a moderating variable, strengthening the connection between shared leadership and employee innovative behavior. With globalization, companies face many opportunities and challenges in today's business world. Accordingly, for businesses to survive the falling demand for their products, it has become imperative for them to boost their productivity and encourage innovative workplace behaviors. This innovative behavior is not an act that is carried out by individuals alone but must be carried out by a team. The results of previous studies have shown the importance of work culture in increasing innovative work behavior (Rizki, Parashakti, and Saragih, 2019). Organizations and teams must improve interactive work culture and shared leadership values to improve innovative work behavior. Further discussion will focus on the theoretical and practical consequences of this study.

5.1 Theoretical Implications

This research has three major theoretical implications. First, numerous studies have demonstrated the positive effects of shared leadership style on employee attitudes, behavior, and performance (Liden *et al.*, 2014). The findings of this study provide novel empirical evidence that shared leadership directly and positively impacts knowledge-sharing and staff innovative behavior. These findings support the use of a shared leadership style in Indonesian businesses and suggest avenues for further research (Yang, Liu, and Gu, 2017).

Second, the findings demonstrate that knowledge sharing is a critical moderator of the effect of shared leadership on workers' propensity to innovate on the job. It can help an organization to learn how shared leadership might affect knowledge-sharing behavior among employees and promote employee innovative behavior. Consistent with prior studies, the findings show that knowledge sharing is a significant moderator between leadership variables and follower actions (Zhang & Bartol, 2010; and Woolley & Fishbach, 2018). These findings provide a foundation for further research into the multiple factors that link leadership style to employee innovative behavior, both individually and as a team (Vandavasi *et al.*, 2020).

In conclusion, it was found that an interactive work culture may attenuate the connection between shared leadership and employees' propensity to innovate on the job. This finding provides empirical backing to the established research paradigm (Shahid and Muchiri, 2019). This result also clarifies how the company's setting and culture may amplify the impact of leadership on employees' innovative actions.

5.2 Practical Implications

The results of this study also have some significant practical ramifications. First, shared leadership is the core driving force for innovation development. It offers new strategies for business owners and executives in a certain area to inspire more creativity among their staff. These results justify managers abandoning traditional top-down management in favor of a more collaborative bottom-up approach. Hence, businesses must foster shared leadership through well-designed training and mentorship initiatives. For instance, the organization may provide instruction to hone workers' innate ability to persuade one another to work together on a task until the desired results are reached. The ability of local businesses to maintain a competitive edge over their global counterparts depends in part on levels of employee creativity. Managers should learn more about the connection between leadership style and innovative conduct in the workplace. Therefore, it might be proposed that local corporate managers embrace a shared leadership style and encourage knowledge sharing among employees. Second, the mediation function of knowledge-sharing in the connection between shared leadership and employee innovative behavior enables managers to focus more on employees' potential or expertise. By fostering a culture of shared leadership, wherein decision-making and leadership duties are allocated among team members, organizations can utilize knowledge-sharing as a pivotal method to augment employee innovation. Knowledge-sharing serves as an intermediary, enabling the exchange of information and expertise among team members in this particular situation. Shared leadership fosters a culture of collaboration and transparent communication, enabling employees to leverage one another's expertise and abilities. Consequently, managers have the ability to redirect their attention from a conventional hierarchical method to one that utilizes the combined capacity and knowledge of the entire team.

Additionally, from the employee's viewpoint, knowledge sharing is critical to raising performance. Consequently, throughout the hiring process, managers must employ more personnel with a high knowledge level and a desire to share it. This strategy can be achieved by giving extra examinations measuring general knowledge and leadership skills.

Shared leadership fosters an environment where all staff members feel empowered to contribute to the business's success and generate new ideas. This climate promotes the growth of creative thinking. A high level of innovation in the workplace is also crucial, as it is widely acknowledged as a critical factor in creating productive work outcomes. The results also show that encouraging employees to share their knowledge can boost their creativity and ability to accomplish assignments properly. Furthermore, this research has added to the body of knowledge by introducing the shared leadership theory. In particular, the research emphasizes how leaders who adopt an optimistic and enthusiastic shared leadership style encourage their subordinates to work successfully using the company's appreciation and incentive system. It broadens the horizons of those confident to think outside the box and develop original solutions to their firm's problems. The findings also indicate that employee productivity can be improved if employees are encouraged to trust their abilities and practice greater self-determination.

Knowledge sharing may be a mediator as people have an innate drive to be creative, fostered by their acquired expertise. Managers in the finished food and beverage sector must realize that innovation is how their firms can gain and sustain an advantage over the competition. Thus, local beverage firms are advised to invest more in training their staff and boosting morale so that their employees might exhibit more inventive behavior. In addition, businesses can aid workers in attaining the high productivity required by teaching them to create shared leadership. This condition encourages workers to have more confidence in their abilities and leads to employees being more invested in the success of their projects.

The final implication concerns the value of interactive work culture for businesses. Shared leadership significantly impacts employees' innovation propensity when the workplace is very interactive (Hilman, Ali, and Gorondutse, 2019). Therefore, management must understand the significance of fostering a positive and productive work environment. Managers can also take various steps, such as providing incentives for employees who produce results and establishing transparent policies for the company's working hours and overall goals. More importantly, for employees to recognize their managers as leaders more readily, they must listen to and value the feedback they receive from the staff. Continuous surveys allow workers to share their thoughts with the organization. Ensuring equity and encouraging employees to boost innovation, creativity, and productivity, can be accomplished by following up on employee feedback and making processes and choices more transparent.

5.3 Limitations and Future Research

There are limitations to this study, the most notable of which is that the sample group is limited to local beverage manufacturers. In light of this, the research findings cannot be generalized to other local company sectors in Indonesia, even though they contribute considerably. Data collection on additional fields will require further study in the future. Second, this study utilized employee self-perceptions of shared leadership and innovative behavior. Hence, future studies should examine the effects of shared leadership on innovative employee behavior utilizing a team or organizational unit of analysis or multi-group analyses to avoid self-evaluation bias. In conclusion, while the findings support the hypothesis that shared leadership positively affects employees' innovative behavior, the study's cross-sectional methodology prevents the drawing of any firm conclusions regarding the direction of any causal relationships. The study could be replicated in future with an different experimental setting or longitudinal research approach.

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