

# **Determinants Of Innovative Work Behavior: The Role Of Job Satisfaction As Mediation And Environmental Dynamism As Moderating Variable**

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## **Abstract**

Companies engaged in any field need to realize the importance of having innovation to increase growth and productivity in all sectors. Innovative work behavior becomes an important factor for organizational performance and long-term survival of employees. Quantitative techniques are used in this study by involving 100 respondents in F&B manufacturing industries beverages focused in Indonesia. The analysis of this study is a Structural Equation Model (SEM) approach with the help of smart PLS. The results show that knowledge acquisition does not affect innovative work behavior; leader role expectations affect innovative work behavior; perceive organizational support affect innovative work behavior; job satisfaction affect innovative work behavior. In the mediation hypothesis, it is found that job satisfaction is able to mediate the relationship between knowledge acquisition and leader role expectations; job satisfaction is not able to mediate the relationship between perceived organizational support and innovative work behavior. Then, the environmental dynamism variable is not able to moderate the relationship between knowledge acquisition and perceived organizational support on innovative work behavior; environmental dynamism is able to moderate the relationship between leader role expectations and innovative work behavior.

## **Keywords**

innovative work behavior, environmental dynamism, job satisfaction.

## **1. Introduction**

Companies engaged in any field need to realize the importance of having innovation to increase growth and productivity in all sectors. The development of innovation in companies requires contributions from each individual; thus, it is important for companies to realize and improve innovation at the level of each individual (Akram et al. 2020). Innovative work behavior refers to activities related to employee development, promotion, and implementation of useful innovations at any level of the organization. Innovative work behavior includes the development of new ideas, technologies, and techniques, as well as testing and implementing new methods related to business procedures, in certain work areas with the aim of providing satisfaction to customers (Saeed et al. 2019). Innovative work behavior is an important factor for organizational performance and long-term survival of employees. Employees with innovative work behavior can solve problems, provide good solutions, and improve performance (Y. Li et al. ??? ).

Rodrigues et al. (2019) found that 80% of an idea is initiated by company employees and another 20% is the result of an innovation plan that the company had set. Therefore, employees are an important part of generating innovation.

The challenge that then arises is how to apply innovation in their respective contexts. Employees are one source of changes that occur in the company, including innovation (Saether 2019.). Various factors have been studied to see their effect on innovative behavior in the workplace. Hammond et al. (2011) stated that individual factors have a moderate effect on the phases in the innovation process of internal individuals such as age, gender, educational background, years of service, cognitive skills, and risk behavior and also individuals related to demographic factors, namely gender, age, ethnicity, education level.

The form of work innovation for employees also needs to be grown in the F&B manufacturing industry. The food and beverage industry is one of the mainstay manufacturing sectors in making a major contribution to the growth of the national economy. According to the Ministry of Industry of the Republic of Indonesia, the achievement of F&B manufacturing performance has been consistently and continuously positive, starting from its role in increasing productivity, investment, exports to employment (Hooi and Leong 2017). From time to time, more companies that focus on food and beverages are trying to develop creativity to attract customers. This condition needs to be considered by every company, that innovative work behavior plays an important role.

In their research Li et al. (2020) mention that in order to increase employees' innovative work behavior, leaders need to try to engage them effectively in their work by gaining their trust, which can help them participate in creative activities. In addition, Afsar & Umrani (2020) stated that transformational leadership has a positive impact on innovative work behavior and employee learning motivation mediated by the transformational leadership-innovative work behavior relationship. From the research results of Akram et al. (2020) stated that the confirmatory factor analysis showed a good fit of the model, while the structural equation model provided a significant and positive influence of organizational justice on employees' innovative work behavior and knowledge sharing; in addition, knowledge sharing also mediates the relationship between justice on employees and innovative work behavior in employees.

In a dynamic external environment, the operations and performance of an organization may be affected due to shifting customer choices, technological advances, and fluctuations in demand and supply (Murcio and Scalzo 2021). The literature suggests that innovation may be riskier in organizations facing a changing environment. Therefore, understanding the relationship between environmental dynamism and employee innovative work behavior is important for employee job performance. Previous studies confirmed that environmental changes have a negative impact on employees' innovative work behavior and job performance. In addition to the environment, job satisfaction can also increase if employees have work innovation and a positive work environment. In the research of Thneibat (2021) stated that knowledge acquisition mediates the relationship between performance-based rewards and innovative work behavior. Akhtar et al. (2019) stated that perceived organizational support has a relationship with innovative work behavior.

This study aims to determine the variables that affect the innovative work behavior of employees with job satisfaction and dynamic work environment conditions. Therefore, in this study, this research is entitled "Determinants of Innovative Work Behavior: The Role of Job Satisfaction as Mediation and Environmental Dynamism as Moderating Variable".

## **2. Literature Review**

### **2.1 Knowledge Acquisition**

Knowledge is a process of translating information (such as data) and past experiences into a unified, meaningful relationship so that it can be understood and applied by an individual (Altmeyer et al. 2020). Knowledge acquisition is an organizational process to obtain the knowledge needed by an organization. When an organization realizes the limited knowledge they have, it needs to get knowledge either from within the organization or from outside the organization to fill the knowledge gap in the organization. Organizations can also work with other organizations to assist them in developing their knowledge acquisition skills. The process that describes relationships with outside parties, such as customers, suppliers, competitors, and other business partners who work together to provide potential knowledge. Companies can also buy knowledge that they cannot build themselves by recruiting experts or acquiring them from companies (Bloodgood 2019 ). Dimensions and Indicators of Knowledge Acquisition in this research is adopted (Forero et al. 2014)

### **2.2 Leader Role Expectations**

In theory "leader role theory", it is explained that the main variables of a leader are action, interaction, and sentiment. When the interaction and participation in joint activities increases, feelings of belonging will arise and group norms will become clearer. The higher a person's position, the higher the adaptability of the leader to the group characteristics and the higher the level of interaction and involving many people. The role of leader is one of the 10 most important roles that a manager should play. It is described as a set of activities and behaviors that serve a specific function in the organization such as encouraging subordinates, setting the work atmosphere, and aligning the needs of subordinates and the organization (Gjerde and Ladegård 2019). Indicators of Leader Role Expectations in this research is adopted by (Suifan et al. 2018).

### **2.3 Perceive Organizational Support (POS)**

Perceive organizational support focuses on the strong incentives and support provided by the organization to motivate employees at all levels to develop a more productive mindset and create a superior work environment. POS has become one of the top strategies to help employees dramatically reduce stress levels and regain control over work-life balance (Sun 2019). Perceived Organizational Support (POS) refers to employees' perceptions of the extent to which the organization values employee contributions and cares about employee welfare. Perceived organizational support also refers to employees' overall beliefs about the extent to which the company values employees, cares about their well-being, and supports employees' socio-emotional needs by providing resources to help employees (Linda and Yonita 2018). Indicators of POS in this research is adopted by (Linda and Yonita 2018).

## **2.4 Job Satisfaction**

Job satisfaction is an employee's attitude towards work related to work situations, cooperation between employees, rewards received at work, and matters relating to physical and psychological factors. Job satisfaction is a general attitude towards a person's job that shows the difference between the number of awards they receive at work and the amount they believe they should receive (Dilig-Ruiz et al. 2018). Job satisfaction is one of the variables that can affect the productivity or work performance of employees. Job satisfaction is a form of emotional attitude that is pleasant and loves the work he is doing. Job satisfaction in work is job satisfaction that can be enjoyed at work by getting results from achieving work goals, placement, treatment, and a good working environment. Employees who can enjoy job satisfaction in this job, will choose to prioritize their work rather than the remuneration/wage they get from the job. Employees will feel more satisfied if their remuneration is proportional to the work done (Cansoy). Indicators of Job Satisfaction in this research is adopted by Hanafiah et al. (2020).

## **2.5 Environmental Dynamism**

Environmental Dynamism (ED) refers to the instability or volatility of the firm's environment and has been recognized as one of the key situational elements in dynamic capability theory (Kumar and Bhatia). ED is defined as a change in the competitive environment that has an impact on the character of competitors and the way they react to client demands and the situation in the branch of business. The dynamic environment is related to the high uncertainty of clients and competitors as well as high indicators of changing market trends and innovation in the business branch. In a dynamic environment, where demand is still changing, opportunities are getting bigger, and the best results must be owned by new change-oriented companies, because they have a good match between strategic orientation and environment (Petrus 2019). Indicators of ED in this research is adopted by (Tindika et al. 2020).

## **2.6 Innovative Work Behavior**

Innovative work behavior is defined as all employee behavior directed at the creation, introduction or application of a related role, group or organization, which includes an idea, process, product or procedure, new to the relevant adoption unit. This definition limits innovative behavior to a deliberate attempt to provide new results that benefit the organization. Innovative work behavior is the intention of employees to create, introduce and implement new ideas that they have in the group or organization where they work, intended to optimize the performance of the group or organization (Shanker et al 2017). Innovative work behavior is also defined as a complex behavior consisting of three different tasks, such as idea formation, idea promotion, and idea realization. Innovative work behavior begins with the creation of ideas, or the production of new ideas or solutions, which can be original or adapted from existing products or processes. Akram et al. (2020) and Bos-Nehles & Veenendaal (2019) describe IWB as all individual actions directed at generating, processing and implementing/implementing new ideas about how to do things, including new products, ideas, technologies, procedures or work processes with the aim of increasing effectiveness and success. Indicators of Innovative Work Behavior in this research is adopted by (Woods et al. 2018);(Muchiri et al. 2020).

## **2.7 Thinking Framework**

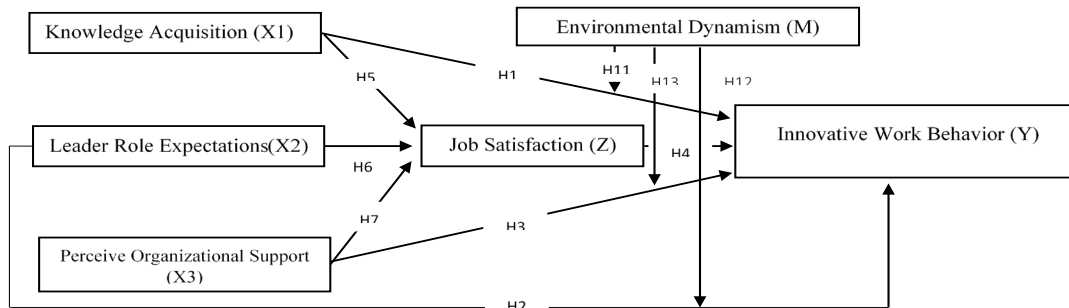


Figure 1. knowledge acquisition and innovative work behavior

H1: There is an effect between knowledge acquisition and innovative work behavior

H2: There is an effect between leader role expectations and innovative work behavior

H3: There is an effect between perceive organizational support and innovative work behavior

H4: There is an effect between job satisfaction and innovative work behavior

H5: There is an influence between knowledge acquisition and job satisfaction

H6: There is an effect between leader role expectations and job satisfaction

H7: There is an effect between perceive organizational support and job satisfaction

H8: There is an effect between knowledge acquisition and innovative work behavior mediated by job satisfaction

H9: There is an effect between leader role expectations and innovative work behavior mediated by job satisfaction

H10: There is an effect between perceive organizational support and innovative work behavior mediated by job satisfaction

H11: There is an effect between knowledge acquisition and innovative work behavior moderated by environmental dynamism

H12: There is an effect between leader role expectations and innovative work behavior moderated by environmental dynamism

H13: There is an effect between perceive organizational support and innovative work behavior moderated by environmental dynamism

### 3. Methods

Quantitative technique is used in this study. The purpose of quantitative studies is to test known hypotheses. This method uses the numbers generated from measurements made with a questionnaire on study variables. In this study, it involves 100 respondents from F&B manufacturing industries beverages focused in Indonesia. The analysis of this study is a Structural Equation Model (SEM) approach with the help of smart PLS (Ghozali 2018). SEM is a multivariate analysis technique that is useful for analyzing the pattern of relationships between variables and their indicators, between variables, as well as direct measurement errors for a comprehensive picture of a model.

#### Outer Model Analysis

Validity and reliability tests are carried out to ensure that the measurements used are accurate and reliable (valid and reliable). Testing the validity and reliability can be seen at the following: 1) convergent validity, 2) discriminant validity, 3) composite reliability, and 4) cronbach's Alpha. Then, The dependent construct (R-square) is used to analyze the effect of the specific independent variable on the dependent latent variable, which shows the magnitude of the effect.

#### Inner Model Analysis

Deep model analysis, also known as structural modeling, is a technique for predicting causal relationships between model variables. Hypotheses are tested during deep model analysis in Smart PLS testing. The value of t-statistics and

probability values can be shown in evaluating the hypothesis. The results of the t-statistics used to test the hypothesis by using the statistical value is 1.96 for alpha 5 percent, while the beta score is used to determine the direction of the influence of the relationship between variables. The criteria for acceptance/rejection of the hypothesis are:

$H_a = t\text{-statistic} > 1.96$  with p-values  $< 0.05$ .

$H_0 = t\text{-statistic} < 1.96$  with a score of p-values  $> 0.05$ .

## 4. Result

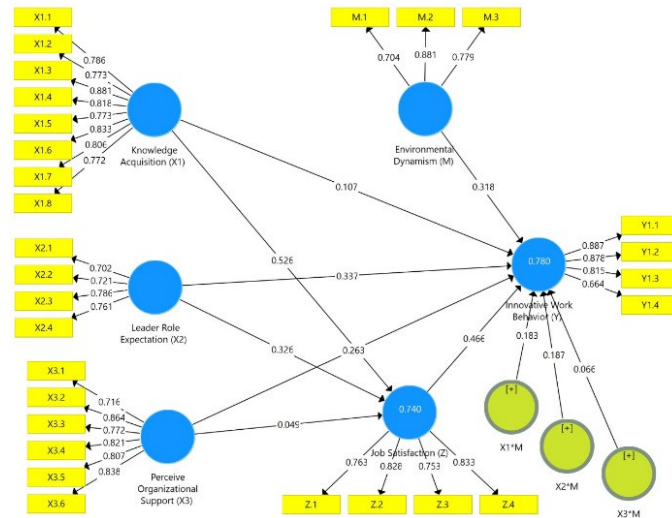


Figure 2. Analysis Result

### Outer Model Analysis

#### Validity test

Validity test is used to measure the validity or validity of a questionnaire. In this research, validity testing is carried out using convergent validity and AVE. The instrument is declared valid if the AVE value is  $> 0.05$  and the outer loading value is  $(> 0.6)$ .

Table 8. Validity Test Results

Variable	Indicator	AVE	Outer Loading	Result
Knowledge Acquisition (X1)	X1.1	0.650	0.786	Valid
	X1.2		0.773	Valid
	X1.3		0.881	Valid
	X1.4		0.818	Valid
	X1.5		0.773	Valid
	X1.6		0.833	Valid
	X1.7		0.806	Valid
	X1.8		0.772	Valid
Leader Role Expectations (X2)	X2.1	0.524	0.615	Valid
	X2.2		0.721	Valid
	X2.3		0.786	Valid
	X2.4		0.761	Valid
Perceive Organizational Support (X3)	X3.1	0.647	0.716	Valid
	X3.2		0.864	Valid
	X3.3		0.772	Valid
	X3.4		0.821	Valid
	X3.5		0.807	Valid
	X3.6		0.838	Valid
	Y1.1	0.666	0.887	Valid

Innovative Work Behavior (Y)	Y1.2		0.878	Valid
	Y1.3		0.815	Valid
	Y1.4		0.702	Valid
Environmental Dynamism (M)	M.1	0.622	0.704	Valid
	M.2		0.881	Valid
	M.3		0.779	Valid
Job Satisfaction (Z)	Z.1	0.632	0.763	Valid
	Z.2		0.828	Valid
	Z.3		0.753	Valid
	Z.4		0.833	Valid
Knowledge Acquisition (X1) * Environmental Dynamism (M)	X1*M	1,000	0.842	Valid
Leader Role Expectation (X2) * Environmental Dynamism (M)	X2*M	1,000	1.035	Valid
Perceive Organizational Support (X3) * Environmental Dynamism (M)	X3*M	1,000	0.914	Valid

### Reliability Test

Researchers used 2 types of reliability tests, namely the Cronbach Alpha test and the Composite Reliability test. Cronbach Alpha measures the lowest value (lowerbound) reliability. The data is declared good if the data has a Cronbach alpha value > 0.7. Meanwhile, composite reliability measures the actual reliability value of a variable. Data is declared to have high reliability if it has a composite reliability score >0.7.

Table 9. Reliability Test Results

	Cronbach's Alpha	Composite Reliability
Environmental Dynamism (M)	0.701	0.830
Innovative Work Behavior (Y)	0.827	0.887
Job Satisfaction (Z)	0.805	0.873
Knowledge Acquisition (X1)	0.923	0.937
Leader Role Expectations (X2)	0.721	0.814
Perceive Organizational Support (X3)	0.890	0.916
X1*M	1,000	1,000
X2*M	1,000	1,000
X3*M	1,000	1,000

### R-Square Test

Coefficient determination test (R-Square) is used in the measurement to measure how much the endogenous variables are influenced by other variables. Based on the data analysis carried out using the smartPLS program, the R-Square value is obtained as shown in the table below.

Table 10. R-Square Test Results

	R Square	R Square Adjusted
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<b>Innovative Work Behavior (Y)</b>	0.780	0.760
<b>Job Satisfaction (Z)</b>	0.740	0.732

Based on the test results, obtained a score of r-square for innovative work behavior is 0.780 which means that innovative work behavior is influenced by environmental dynamism, job satisfaction, knowledge acquisition, leader role expectations, and perceived organization support by 78% and the rest is influenced by variables that have not been explained in this study. Then, the r-square score for job satisfaction is 0.740, which means that job satisfaction is influenced by environmental dynamism, innovative work behavior, knowledge acquisition, leader role expectations, and perceived organization support

## Hypothesis Test

Table 11. Hypothesis Test Results

	Original Sample (O)	T Statistics ( O/STDEV )	P Values
<b>Direct influence</b>			
<b>Job Satisfaction (Z) -&gt; Innovative Work Behavior (Y)</b>	0.466	4.149	<b>0.000</b>
<b>Knowledge Acquisition (X1) -&gt; Innovative Work Behavior (Y)</b>	0.107	0.748	<b>0.455</b>
<b>Knowledge Acquisition (X1) -&gt; Job Satisfaction (Z)</b>	0.526	4.037	<b>0.000</b>
<b>Leader Role Expectation (X2) -&gt; Innovative Work Behavior (Y)</b>	0.337	2.282	<b>0.023</b>
<b>Leader Role Expectation (X2) -&gt; Job Satisfaction (Z)</b>	0.326	2,773	<b>0.006</b>
<b>Perceive Organizational Support (X3) -&gt; Innovative Work Behavior (Y)</b>	0.263	2.862	<b>0.004</b>
<b>Perceive Organizational Support (X3) -&gt; Job Satisfaction (Z)</b>	0.049	0.548	<b>0.584</b>
<b>X1*M -&gt; Innovative Work Behavior (Y)</b>	0.183	1,419	<b>0.156</b>
<b>X2*M -&gt; Innovative Work Behavior (Y)</b>	0.187	2,068	<b>0.039</b>
<b>X3*M -&gt; Innovative Work Behavior (Y)</b>	0.066	0.640	<b>0.522</b>
<b>Indirect Influence</b>			
<b>Knowledge Acquisition (X1) -&gt; Job Satisfaction (Z) -&gt; Innovative Work Behavior (Y)</b>	0.245	2,759	<b>0.006</b>
<b>Leader Role Expectation (X2) -&gt; Job Satisfaction (Z) -&gt; Innovative Work Behavior (Y)</b>	0.152	2,347	<b>0.019</b>
<b>Perceive Organizational Support (X3) -&gt; Job Satisfaction (Z) -&gt; Innovative Work Behavior (Y)</b>	0.023	0.532	<b>0.595</b>

## 5. Discussion

### 5.1 Knowledge Acquisition does not Affect Innovative Work Behavior

Hypothesis testing results knowledge acquisition on innovative work behavior get a score ( $p = 0.107$ ) with p values of 0.455 ( $p < 0.05$ ) and t statistic of 0.748 ( $p > 1.96$ ) indicating that there is no relationship between variables. This result is not in accordance with the research of (Thneibat et al. 2021) which shows that performance-based rewards have a positive effect on knowledge acquisition. In addition, knowledge acquisition mediates the relationship between performance-based rewards and IWB. Same results also found in the research conducted by Zaman & Abbasi (2020) who stated that reflective learning and knowledge acquisition (organizational learning dimension) are positively related to IWB. Knowledge acquisition is a creative activity related to the development of knowledge through interactions with customers and other co-workers (Kim et al. 2021).

### 5.2 Leader Role Expectation Affects Innovative Work Behavior

Hypothesis testing results leader role expectation on innovative work behavior get a score ( $p = 0.337$ ) with p values 0.023 ( $p < 0.05$ ) and t statistic of 2.282 ( $p > 1.96$ ) indicates that there is a significant positive relationship between variables. The higher the leader role expectation is, the higher the innovative work behavior will be. Javed, et al.



(2019) also stated that leader role expectations increase employee IWB. IWB as 'individual' behavior is directed at the initiation and introduction of a new idea, process, product or procedure and useful in a work, group, or organizational role. With a good leader in a company will be able to increase the innovation and creativity of employees Saeed et al. (2019) This condition will benefit the company and be able to help the company to be superior to competitors in other F&B manufacturing companies.

### **5.3 Perceive Organizational Support Affect Innovative Work Behavior**

Hypothesis testing results perceive organizational support on innovative work behavior got a score ( $p=0.263$ ) with  $p$  values of 0.004 ( $p<0.05$ ) and  $t$  statistic of 2.862 ( $p>1.96$ ) indicating that there is a significant positive relationship between variables. The higher perceive organizational support is, the higher the innovative work behavior will be. Bos-Nehles & Veenendaal (2019) explained that IWB employees can be encouraged by providing a supportive work environment in creating creative ideas and concepts. Innovation requires several elements of intrinsic motivation that underpin the notion of an innovative work environment that sets the stage for the realization of such ideas as meaningfulness, sense of competence, autonomy and effectiveness. In addition, Saether (2019) stated that organizational support needed for creativity increases intrinsic motivation and positively influences innovative work behavior in this regard. Similarly, Le & Lei (2019) stated that there is a positive relationship between supervisor support and innovative work behavior in their study.

### **5.4 Job Satisfaction Affect Innovative Work Behavior**

Hypothesis testing results job satisfaction on innovative work behavior get a score ( $p = 0.466$ ) with  $p$  values 0.000 ( $p < 0.05$ ) and  $t$  statistic of 4.149 ( $p > 1.96$ ) indicating that there is a significant positive relationship between the variables. The higher job satisfaction is, the higher the innovative work behavior will be. This result is not in line with research conducted by Nasir, Halimatussakdiah, & Suryani (2019) stating that work innovation behavior has no effect on job satisfaction. In another study conducted by Danish et al. (2019) stated that job satisfaction has a significant relationship with IWB. These employees more often exhibit innovative behavior that feels intrinsically motivated. Individuals who feel great at work are naturally persuaded to explore new things in unique ways. This is important in developing a company engaged in food and beverage.

### **5.5 Knowledge Acquisition affect job satisfaction**

Hypothesis testing results knowledge acquisition to job satisfaction get a score ( $p=0.526$ ) with  $p$  values 0.000 ( $p<0.05$ ) and a  $t$  statistic of 4.037 ( $p>1.96$ ) indicates that there is a significant positive relationship between variables. The higher knowledge acquisition is, the higher job satisfaction is knowledge is present as the most important resource for organizational strategy. Knowledge management covers a wide range of topics, but knowledge sharing is a particular focus of knowledge management (Usmanova, et al. 2020). Knowledge sharing is a culture of social interaction that involves sharing knowledge, experience and staff skills across departments or organizations. When employees have an awareness of the importance of knowledge management in the world of work, it will help lead to job satisfaction. In addition, Kianto, Vanhala, & Heilmann (2016) mentioned that knowledge acquisition is not a factor that can affect job satisfaction.

### **5.6 Leader Role Expectations Affect Job Satisfaction**

Hypothesis testing results leader role expectation to job satisfaction get a score ( $p = 0.326$ ) with  $p$  values of 0.006 ( $p < 0.05$ ) and  $t$  statistics of 2.773 ( $p > 1.96$ ) indicating that there is a significant positive relationship between the variables. The higher leader role expectation is, the higher job satisfaction will be. Li et al. (2018) stated that good leadership will affect employee job satisfaction in a company.

### **5.7 Perceive Organizational Support does not Affect Job Satisfaction**

Hypothesis testing results perceive organizational support to job satisfaction get a score ( $p = 0.049$ ) with  $p$  values 0.584 ( $p < 0.05$ ) and  $t$  statistics of 0.548 ( $p > 1.96$ ) indicating that there is no relationship between variables. Yan, Huang, & Chen (2018) states that organizational support can increase employee satisfaction; this is clearly not in line with the results of research on this F&B manufacturing company. Support will help employees feel comfortable and have openness with the entire company structure so that this can increase job satisfaction. The existence of job satisfaction can improve employee performance.

### **5.8 Job Satisfaction is able to Mediate Knowledge Acquisition and Innovative Work Behavior**

Variable hypothesis testing results job satisfaction mediate the relationship between knowledge acquisition and innovative work behavior to get value ( $p=0.245$ ) with  $p$  values of 0.006 ( $p<0.05$ ) with a  $t$ -statistic of 2.759 ( $p>1.96$ )

showing the relationship between variables that knowledge acquisition to innovative work behavior is strengthened by job satisfaction. The research of Usmanova et al. (2020) focuses on the level of IWB in the workplace, known as “Kreativitas yang Disengaja, Pengenalan dan Penerapan Ide Baru” (Intentional Creativity, Introduction and Application of New Ideas) to face new challenges in complex environments. In addition, colleagues or potential partners promote ideas that arise when individuals engage in social activities in order to create ideas and get supporters around ideas. Hameed et al. (2019) found that knowledge is the result of organizational fairness influenced by employee psychological ownership mechanisms. Job satisfaction is an individual's emotional, cognitive, and evaluative response to an action. Expatriates are an important part of an organization's workforce, and international mission failures can harm the organization and lead to poor performance. Job satisfaction reflects people's feelings about their work in different ways and is an indicator of emotional well-being.

#### **5.9 Job Satisfaction is able to Mediate Leader Role Expectation and Innovative Work Behavior**

Variable hypothesis testing results job satisfaction mediate relationship of leader role expectations towards innovative work behavior get value ( $p=0.152$ ) with  $p$  values of 0.019 ( $p<0.05$ ) with a  $t$ -statistic of 2.347 ( $p>1.96$ ) showing the relationship between variables that leader role expectationsto innovative work behavior is strengthened by job satisfaction. IWB refers to the deliberate efforts of employees to create new ideas, promote these ideas and realize their application in order to benefit the team or group, and the organization. Research on innovation reveals that employees with a wide range of experience, communication, and relationship skills are involved to make the innovation process effective (Yun, Zhao et al.). The existence of a view of good leadership will increase employee innovation, which will lead to an increase in job satisfaction (Op den Kamp et al. 2018).

#### **5.10 Job Satisfaction is unable to Mediate Perceive Organizational Support and Innovative Work Behavior**

Variable hypothesis testing results job satisfaction mediate relationship of perceive organizational support towards innovative work behavior get value ( $p=0.023$ ) with  $p$  values 0.595 ( $p<0.05$ ) with a  $t$  statistic of 0.532 ( $p>1.96$ ) showed no relationship between variables that perceive organizational support to innovative work behavior is mediated by job satisfaction. Employees involved in open innovation must face the aforementioned challenges through trust creation and goal setting together with other stakeholders. On the other hand, the open innovation process begins with a mindset known as an open innovation culture. This type of culture is motivated through openness because people with diverse backgrounds improve the ability to respond quickly to changing markets (Yun, Lee et al. 2019 ).

#### **5.11 Environmental Dynamism is unable to Moderate Knowledge Acquisition and Innovative Work Behavior**

Variable hypothesis testing results environmental dynamism moderates the relationship of knowledge acquisition to innovative work behavior gets value ( $p=0.187$ ) with  $p$  values of 0.039 ( $p<0.05$ ) with  $t$  statistic of 2.068 ( $p>1.96$ ) showed no relationship between variables that knowledge acquisition to innovative work behavior moderated by environmental dynamism. However, according to Javed et al. (2019) these new ideas are different from the traditional ideas prevailing in the work environment. Therefore, in the context of innovation, employees need the support of the organization's work environment

#### **5.12 Environmental Dynamism is able to Moderate Leader Role Expectationand Innovative Work Behavior**

Variable hypothesis testing results environmental dynamism moderate the relationship of leader role expectations towards innovative work behavior get value ( $p=0.152$ ) with  $p$  values of 0.019 ( $p<0.05$ ) with a  $t$ -statistic of 2.347 ( $p>1.96$ ) showed that there is a relationship between variables that leader role expectations to innovative work behavior is moderated by environmental dynamism. Afsar & Umrani (2020) shows that transformational leadership has a positive impact on employees' innovative work behavior and learning motivation mediated transformational leadership-innovative work behavior relationships. Further studies show that the complexity of the task and the climate of innovation moderate the relationship between transformational leadership and the innovative work behavior of employees.

#### **5.13 Environmental Dynamism is unable to Moderate Perceive Organizational Support and Innovative Work Behavior**

Variable hypothesis testing results environmental dynamism moderate the relationship of perceive organizational support towards innovative work behavior get value ( $p = 0.023$ ) with  $p$  values of 0.0595 ( $p < 0.05$ ) with a  $t$  statistic of 0.595 ( $p > 1.96$ ) indicating there is a relationship between variables that perceive organizational support to innovative work behavior moderated by environmental dynamism. The process of individual innovation among team members consists of three stages: Idea generation, filtering, and modification. The study argues that individual information

exchange behavior plays a role in promoting the three stages of individual innovation. First, members of the entrepreneurial team can obtain more varied information and ideas through the exchange of information, which provides them with additional raw materials for generating new and innovative ideas. Secondly, sharing personal ideas also helps them increase their understanding of other people's comments and suggestions regarding their ideas, allowing them to better filter and improve their innovative ideas. Finally, the behavior of information exchange can increase trust and cooperation among team members, which allows the realization of innovative ideas (Deng et al. 2021).

## 6. Conclusion

From the research above, it can be concluded that there is no relationship between the variables knowledge acquisition with innovative work behavior. There is a significant positive relationship between leader role expectations and innovative work behavior. There is a significant positive relationship between perceived organizational support and innovative work behavior. There is a significant positive relationship between the job satisfaction and innovative work behavior. There is a significant positive relationship between knowledge acquisition and job satisfaction. There is a significant positive relationship between leader role expectations and job satisfaction. There is no relationship between perceived organizational support and job satisfaction. In the mediation hypothesis, it is found that job satisfaction is able to mediate the relationship between knowledge acquisition and leader role expectations with innovative work behavior. Job satisfaction is not able to mediate the relationship between perceived organizational support and innovative work behavior. Then, the environmental dynamism variable is not able to moderate the relationship between knowledge acquisition and perceived organizational support on innovative work behavior. Environmental dynamism is able to moderate the relationship between leader role expectations and innovative work behavior.

## References

- Afsar, Bilal, and Waheed Ali Umrani. "Transformational Leadership and Innovative Work Behavior: The Role of Motivation to Learn, Task Complexity and Innovation Climate." *European Journal of Innovation Management*, vol. 23, no. 3, Emerald Group Holdings Ltd., Apr. 2020, pp. 402–28, doi:10.1108/EJIM-12-2018-0257/FULL/PDF.
- Akhtar, Muhammad Waheed, et al. "Person-Organization Fit and Innovative Work Behavior: The Mediating Role of Perceived Organizational Support, Affective Commitment and Trust." *Pakistan Journal of Commerce and Social Science*, 2019.
- Akram, Tayyaba, et al. "The Impact of Organizational Justice on Employee Innovative Work Behavior: Mediating Role of Knowledge Sharing." *Journal of Innovation and Knowledge*, 2020, doi:10.1016/j.jik.2019.10.001.
- Altmeyer, Kristin, et al. "The Use of Augmented Reality to Foster Conceptual Knowledge Acquisition in STEM Laboratory Courses—Theoretical Background and Empirical Results." *British Journal of Educational Technology*, 2020, doi:10.1111/bjet.12900.
- Bloodgood, James M. "Knowledge Acquisition and Firm Competitiveness: The Role of Complements and Knowledge Source." *Journal of Knowledge Management*, 2019, doi:10.1108/JKM-09-2017-0430.
- Bos-Nehles, Anna C., and Andre A. R. Veenendaal. "Perceptions of HR Practices and Innovative Work Behavior: The Moderating Effect of an Innovative Climate." *International Journal of Human Resource Management*, 2019, doi:10.1080/09585192.2017.1380680.
- Cansoy, Ramazan. "The Relationship between School Principals' Leadership Behaviours and Teachers' Job Satisfaction: A Systematic Review." *International Education Studies*, 2018, doi:10.5539/ies.v12n1p37.
- Danish, Rizwan Qaiser, et al. "Spirit and Innovation at Work in Software Houses of Pakistan : How Does Job Satisfaction Intervene the Relationship ?" *European Online Journal of Natural and Social Sciences*, 2019.
- Deng, Xiao, et al. "Perceived Environmental Dynamism Promotes Entrepreneurial Team Member's Innovation: Explanations Based on the Uncertainty Reduction Theory." *International Journal of Environmental Research and Public Health*, 2021, doi:10.3390/ijerph18042033.
- Dilig-Ruiz, Alison, et al. "Job Satisfaction among Critical Care Nurses: A Systematic Review." *International Journal of Nursing Studies*, 2018, doi:10.1016/j.ijnurstu.2018.08.014.
- Forero, Diana Magally, et al. "Systematic Review of Knowledge Acquisition and Representation Techniques." *TECCIENCIA*, 2014, doi:10.18180/tecciencia.2014.16.5.
- Ghozali, Imam. "Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 (Sembilan)." *Semarang, Universitas Diponegoro*, 2018.
- Gjerde, Susann, and Gro Ladegård. "Leader Role Crafting and the Functions of Leader Role Identities." *Journal of Leadership and Organizational Studies*, 2019, doi:10.1177/1548051818774553.
- Hameed, Zahid, et al. "Organizational Justice and Knowledge Sharing Behavior: The Role of Psychological

- Ownership and Perceived Organizational Support.” *Personnel Review*, vol. 48, no. 3, Emerald Group Holdings Ltd., Mar. 2019, pp. 748–73, doi:10.1108/PR-07-2017-0217/FULL/PDF.
- Hammond, Michelle M., et al. “Predictors of Individual-Level Innovation at Work: A Meta-Analysis.” *Psychology of Aesthetics, Creativity, and the Arts*, 2011, doi:10.1037/a0018556.
- Hanafiah, Hanafiah, et al. “Work Motivation and Satisfaction and Its Impact on Lecturer Performance.” *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 2020, doi:10.33258/birci.v3i3.1113.
- Hooi, Lai Wan, and Tat Yuen Leong. “Total Productive Maintenance and Manufacturing Performance Improvement.” *Journal of Quality in Maintenance Engineering*, 2017, doi:10.1108/JQME-07-2015-0033.
- Javed, Basharat, et al. “Impact of Inclusive Leadership on Innovative Work Behavior: The Role of Psychological Safety.” *Journal of Management and Organization*, 2019, doi:10.1017/jmo.2017.3.
- Kianto, Aino, et al. “The Impact of Knowledge Management on Job Satisfaction.” *Journal of Knowledge Management*, 2016, doi:10.1108/JKM-10-2015-0398.
- Kim, Minseong, et al. “Innovative Behavior Motivations among Frontline Employees: The Mediating Role of Knowledge Management.” *International Journal of Hospitality Management*, 2021, doi:10.1016/j.ijhm.2021.103062.
- Kumar, Saurabh, and Manjot Singh Bhatia. “Environmental Dynamism, Industry 4.0 and Performance: Mediating Role of Organizational and Technological Factors.” *Industrial Marketing Management*, 2021, doi:10.1016/j.indmarman.2021.03.010.
- Le, Phong Ba, and Hui Lei. “Determinants of Innovation Capability: The Roles of Transformational Leadership, Knowledge Sharing and Perceived Organizational Support.” *Journal of Knowledge Management*, vol. 23, no. 3, Emerald Group Holdings Ltd., Apr. 2019, pp. 527–47, doi:10.1108/JKM-09-2018-0568/FULL/XML.
- Li, Xiaoya, et al. *A Unified MRC Framework for Named Entity Recognition*. 2020, doi:10.18653/v1/2020.acl-main.519.
- Li, Ying, et al. “The Impact of Digital Technologies on Economic and Environmental Performance in the Context of Industry 4.0: A Moderated Mediation Model.” *International Journal of Production Economics*, 2020, doi:10.1016/j.ijpe.2020.107777.
- Linda, Muthia Roza, and Riza Yonita. *The Effect of Job Satisfaction and Perceived Organizational Support on Organizational Commitment of Banks Employees in Padang*. 2018, doi:10.2991/piceeba-18.2018.50.
- Muchiri, Michael K., et al. “Mapping Antecedents of Innovative Work Behavior: A Conceptual Review.” *The Journal of Developing Areas*, 2020, doi:10.1353/jda.2020.0047.
- Murcio, Ricardo, and Germán Scalzo. “Person-Centered Leadership: The Practical Idea as a Dynamic Principle for Ethical Leadership.” *Frontiers in Psychology*, 2021, doi:10.3389/fpsyg.2021.708849.
- Nasir, et al. *Psychological Empowerment, Innovative Work Behavior and Job Satisfaction*. 2019, doi:10.2991/icame-18.2019.68.
- Op den Kamp, Emma M., et al. “Proactive Vitality Management in the Work Context: Development and Validation of a New Instrument.” *European Journal of Work and Organizational Psychology*, 2018, doi:10.1080/1359432X.2018.1483915.
- Petrus, Barbara. “Environmental Dynamism: The Implications for Operational and Dynamic Capabilities Effects.” *Management Sciences*, 2019, doi:10.15611/ms.2019.1.04.
- Rodrigues da Costa, Liliana, and Sandra Maria Correia Loureiro. “The Importance of Employees’ Engagement on the Organizational Success.” *Journal of Promotion Management*, 2019, doi:10.1080/10496491.2019.1557811.
- Saeed, Bilal Bin, et al. “Leader-Member Exchange and Innovative Work Behavior: The Role of Creative Process Engagement, Core Self-Evaluation, and Domain Knowledge.” *European Journal of Innovation Management*, 2019, doi:10.1108/EJIM-11-2017-0158.
- Saether, Erik Andreas. “Motivational Antecedents to High-Tech R&D Employees’ Innovative Work Behavior: Self-Determined Motivation, Person-Organization Fit, Organization Support of Creativity, and Pay Justice.” *Journal of High Technology Management Research*, 2019, doi:10.1016/j.hitech.2019.100350.
- Shanker, Roy, et al. “Organizational Climate for Innovation and Organizational Performance: The Mediating Effect of Innovative Work Behavior.” *Journal of Vocational Behavior*, 2017, doi:10.1016/j.jvb.2017.02.004.
- Suifan, Taghrid S., et al. “The Impact of Transformational Leadership on Employees’ Creativity: The Mediating Role of Perceived Organizational Support.” *Management Research Review*, vol. 41, no. 1, Emerald Group Publishing Ltd., 2018, pp. 113–32, doi:10.1108/MRR-02-2017-0032/FULL/PDF.
- Sun, Li. “Perceived Organizational Support: A Literature Review.” *International Journal of Human Resource Studies*, 2019, doi:10.5296/ijhrs.v9i3.15102.
- Thneibat, Motasem M., et al. “Promoting Radical Innovation Through Performance-Based Rewards: The Mediating

- Role of Knowledge Acquisition and Innovative Work Behavior.” *International Journal of Innovation and Technology Management*, 2021, doi:10.1142/S0219877022500055.
- Tindika, O. K. N., et al. “Moderating Role of Environmental Dynamism on the Relationship between Opportunity Evaluation and Growth of NGOs in Kenya.” *Expert Journal of Business and Management*, 2020.
- Usmanova, Nargiza, et al. “Impact of Knowledge Sharing on Job Satisfaction and Innovative Work Behavior: The Moderating Role of Motivating Language.” *VINE Journal of Information and Knowledge Management Systems*, 2020, doi:10.1108/VJKMS-11-2019-0177.
- Woods, Stephen A., et al. “Innovative Work Behavior and Personality Traits: Examining the Moderating Effects of Organizational Tenure.” *Journal of Managerial Psychology*, 2018, doi:10.1108/JMP-01-2017-0016.
- Yan, Biaobin, et al. “Does the Employee’s Work Attitude and Work Behavior Have the Same Stability? —A Empirical Study Based on Psychological Contract Breach.” *Open Journal of Social Sciences*, 2018, doi:10.4236/jss.2018.610014.
- Yun, Jinhyo Joseph, Min Hwa Lee, et al. “Open Innovation and Serial Entrepreneurs.” *Sustainability (Switzerland)*, 2019, doi:10.3390/su11185055.
- Yun, Jinhyo Joseph, Xiaofei Zhao, et al. “Sustainability Condition of Open Innovation: Dynamic Growth of Alibaba from SME to Large Enterprise.” *Sustainability (Switzerland)*, 2020, doi:10.3390/su12114379.
- Zaman, Umer, and Maha Abbasi. “Linking Transformational Leadership and Individual Learning Behavior: Role of Psychological Safety and Uncertainty Avoidance.” *Pakistan Journal of Commerce and Social Science*, 2020.
- , et al. “THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP AND WORK MOTIVATION ON EMPLOYEE PERFORMANCE MEDIATED BY JOB SATISFACTION.” *Jurnal Aplikasi Manajemen*, 2018, doi:10.21776/ub.jam.2018.016.01.20.

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