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The Mediating Role of Creative Self-Efficacy in The Relationship Between Knowledge Sharing Behavior and Employee Innovation Behavior: A Study in The Recycling Industry

Bilgi Paylaşımı Davranışı ile Çalışan İnovasyon Davranışı Arasındaki İlişkide Yaratıcı Öz- Yeterliğin Aracılık Rolü: Geri Dönüsüm Sektöründe Bir Arastırma

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Abstract

The major objective of this study was to investigate the relationship between employees' propensity to share knowledge and their level of innovation readiness in the workplace. The other aim of the study is to determine the mediating role of creative self-efficacy in the relationship between knowledge- sharing behavior and employee innovation behavior. The recycling sector constitutes the study population, and a company that recycles fabric, textile, and garment wastes operating in Düzce constitutes the study sample. Empirical research was conducted to determine how creative self-efficacy affects the relationship between knowledge-sharing behavior and employee innovation behavior. Data on the relationships between knowledge sharing behavior, creative self-efficacy and employees' innovation behaviors in relation to their subordinates and superiors were collected through a questionnaire. The research data were evaluated using the variance-based structural equation model SMARTPLS program. The findings show that knowledge sharing behavior and creative self-efficacy have a positive relationship with employee innovation behavior and that creative self-efficacy mediates the relationship between employee innovation behavior and knowledge-sharing behavior.

Keywords: Knowledge sharing behavior, creative self-efficacy, employee innovation behavior, mediation

JEL Codes: C39; D23; L67; Z31

Öz

Bu çalışmanın temel amacı, çalışanların bilgi paylaşma eğilimleri ile işyerinde inovasyona hazır olma düzeyleri arasındaki ilişkiyi araştırmaktır. Çalışmanın bir diğer amacı ise bilgi paylaşma davranışı ile çalışanların inovasyon davranışı arasındaki ilişkide yaratıcı öz yeterliliğin aracılık rolünü belirlemektir. Çalışma evrenini geri dönüşüm sektörü, çalışma örneklemini ise Düzce'de faaliyet gösteren kumaş, tekstil ve konfeksiyon atıklarını geri dönüştüren bir firma oluşturmaktadır. Yaratıcı öz yeterliliğin bilgi paylaşma davranışı ile çalışanların inovasyon davranışı arasındaki ilişkiyi nasıl etkilediğini belirlemek için ampirik bir araştırma yapılmıştır. Bilgi paylaşma davranışı, yaratıcı öz yeterlilik ve çalışanların astları ve üstleri ile ilgili inovasyon davranışları arasındaki ilişkilere dair veriler bir anket aracılığıyla toplanmıştır. Araştırma verileri varyans tabanlı yapısal eşitlik modeli olan SmartPLS programıyla değerlendirilmiştir. Bulgular, bilgi paylaşma davranışının, yaratıcı öz yeterlik ve çalışan

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inovasyon davranışı üzerinde pozitif bir etkisi olduğunu ve yaratıcı öz yeterliliğin çalışan inovasyon davranışı ve bilgi paylaşma davranışı arasındaki ilişkiye aracılık ettiğini göstermektedir.

Anahtar Kelimeler: Bilgi paylaşma davranışı, yaratıcı öz-yeterlik, çalışan inovasyon davranışı, aracılık

JEL Kodları: C39; D23; L67; Z31

1. INTRODUCTION

Knowledge plays a major role in deciding how effectively a company or organization's most important resources compete in the market. People and businesses continue to learn as they adjust to the different effects of the outside and inside. Sharing knowledge refers to the process by which individuals collaborate to generate new knowledge through the exchange of implicit and explicit knowledge with one another. Increased focus has been placed on knowledge sharing since it fosters organizational learning through the development of new knowledge (Van den Hooff, Vijvers and De Ridder, 2003) and because of its value on innovation (Donate ve Guadamillas, 2011).

Employees sharing knowledge is one of the factors that increases the competitiveness of a company that creates knowledge (Nonaka, 1994; Verbeke, Belschak, Bagozzi and Wuyts, 2011). Knowledge ingrained in a firm's people and systems has the potential to give the company a sustainable competitive advantage because of its high value, limited availability, unmatched quality, and inability to replicate (Afiouni, 2007). To achieve and maintain a competitive advantage, one of the most crucial capabilities of any organization is the ability to foster an environment conducive to creative problem solving and the free flow of knowledge among its workers. The ability to innovate is the fundamental and most important force that can promote maintainable evolution in companies. The sharing of knowledge, along with contemporary infrastructure, cutting-edge technology, and available financial resources, all serve to foster innovation. Employees usually operate with each other as members of a group in a certain unit to accomplish their jobs, and this unit frequently collaborates with other organizational members. When workers collaborate on a project, they are able to pick up new knowledge and expertise from each other through informal social interactions (Amabile, 1988). This effect of sharing knowledge can inspire workers to think outside the box and come up with original suggestions that will help shape the development of ground-breaking new products and services (Zhou and George, 2001).

In order to acquire an all-encompassing comprehension of the connection between creative self-efficacy and innovative behavior, it is essential to investigate the relationship that exists between creative self-efficacy and work environments that encourage the sharing of knowledge and ideas. Although there are studies related to this research topic in the literature, no studies have been conducted in the recycling sector. The purpose of this research was to increase public understanding of the value of knowledge sharing in fostering innovative practices and evaluate its effectiveness. This study sheds light on the importance of knowledge sharing in fostering creative behavior. The Recycling industry is prioritized because of its emphasis on knowledge and innovativeness. Knowledge sharing is crucial to the success of the recycling industry. The dynamic relationship that exists between creative self-efficacy and knowledge sharing in recycling working environments should also be investigated to gain a complete understanding of the relationship between creative self-efficacy and innovative behavior, which can direct the growth of innovative practices within the recycling industry.

2. THEORY AND HYPOTHESES

This section includes reviews of the literature that look at the relationships between the variables that make up the research model.

2.1. Knowledge Sharing Behavior

Bukowitz and Williams (2000) outline knowledge sharing behavior (KSB) as the interchange of data, techniques, or know-how among individuals, groups, or communities. KSB is an organizational movement where members share their experience to assist one another, resolve issues, and create and implement innovative strategies, plans, and initiatives (Wang and Noe, 2010). Hoegl, Parboteeah and Munson (2003: 745) define KSB as the exchanging of expertise, techniques, implicit and explicit knowledge among people.

Sharing knowledge is a form of citizenship because it's a voluntary act that benefits a business (Casimir, Lee and Loon, 2012). According to the social exchange theory, the reason that people share their knowledge is because they want to get favors in return, such as maintaining future relationships, job stability, status, and the appropriate distribution of power (Bock, Zmud, Kim and Lee, 2005; Cabrera and Cabrera, 2005; Jarvenpaa and Staples, 2001). It is imperative for any business to have a KSB that is both efficient and effective in order to ensure its continued growth and continued existence over the long run (Gaál, Szabó, Obermayer-Kovács, Kovács and Csepregi, 2011).

KSB is the practice of transferring expertise and knowledge to business processes through channels of communication between employees (Oyemomi, Liu, Neaga and Alkhuraiji, 2016). Knowledge sharing, as well as the development and implementation of organizational knowledge (Hendriks, 2004; Huysman, Huysman and de Wit, 2002), is the central process of organizational innovation and knowledge management.

2.2. Creative Self- Efficacy

The idea of creative problem-solving in workplace Creative self-efficacy (CSE) was first proposed by Tierney and Farmer (2002: 1138), defined as the belief and ability of the employee to generate innovative solutions to existing challenges. CSE is a marker of an individual's self-assessed creative prowess and hence a reflection of his own subjective evaluation of his creative potential. Individuals with high levels of CSE believe in their own ability to generate original thoughts and suggestions, solve problems in novel ways, and act in creative ways (Hu, Wang and Runco, 2018; Shaw, Kapnek and Morelli, 2021). According to Bandura (1997), one's self-confidence affects the objectives pursued and the amount of effort made. The conceptual basis for the concept of CSE is the creation of the self-efficacy construct. In this way, CSE represents an individual's assessment of his or her individual unique capacities or aptitude, which influences the individual's activity selection, level of endeavor, and the success with which novel results are achieved. Lemons (2010) went so far as to say that what really matters is not the ability but rather the belief that one has it. As a result, it seems that CSE is a crucial cognitive and emotional trait for scholars to comprehend the presentation and enhancement of employee creativity.

2.3. Employee Innovative Behavior

The term "innovation" refers to "a process by which social or financial worth is produced through knowledge (Akram, Lei, Haider and Hussain, 2020:119). Employee innovative behavior (EIB) can be characterized as the proactive development and implementation of unique and refined thoughts, strategies, procedures, and regulations targeted at increasing organizational performance, commercial achievement, and long-term sustainable

development (Anderson, Potočnik and Zhou, 2014:1297; Janssen, 2000:288). In contrast to creativity, which is what defines the originality and audacity of opinions, EIB is such interactive socio-psychological mechanism that is primarily interested with the actualization and manifestation of ideas (Rank, Pace and Frese, 2004). Emphasizing the planned and practical characteristics of EIB, that innovative behaviors occur in the process of planned change with certain goals in mind (Kwon and Kim, 2020). Cardellino and Finch (2006) state that it includes actions such as seeking new ideas, advocating for new initiatives, and planning/financing for the implementation of ideas. Cardellino and Finch (2006) suggest that EIB frequently occurs during the process of strategic planning with certain aims in mind; it involves behaviors such as looking for unique thoughts, promoting novel strategies, and ensuring planning and money for the ideas' application. To face the latest obstacles posed by the accelerating financial, cultural, ideological, operational, and environmental changes, all types of organizations must innovate in order to be successful.

2.4. Knowledge Sharing Behavior and Employee Innovative Behavior

Organizational behaviors that foster innovation can give businesses an edge in the marketplace by encouraging sharing of knowledge and the systematic collection, analysis, and application of experience. The KSB is essential for creating innovative ideas (Kremer, Villamor and Aguinis, 2019). Hu, Horng and Sun (2009) claim that the sharing of knowledge leads to an increase in innovative ideas and a reduction in the amount of wasteful work. The most significant obstacle to innovation is a general deficiency of knowledge (Storey and Kelly, 2002). According to McNaughton (2002), a firm that promotes KSB will result in the production of unique concepts and the facilitation of innovative skills and abilities. However, Belso-Martinez and Diez-Vial (2018) discover that businesses that augment their ability to participate in knowledge network systems tend to improve their innovation capabilities. Knowledge acquisition encourages inventive ways of thinking by encouraging the sharing and flow of ideas among employees. This facilitates the transfer of inferred information that cannot be communicated through official channels, which is one example of how the acquisition of knowledge can stimulate innovative ways of thinking. Knowledge sharing will enhance the potential to benefit from experience and skill by facilitating the creation of improved and efficient problem-solving procedures. From these data, the following hypothesis was proposed:

H₁: Knowledge-sharing behavior positively predicts employee innovative behavior.

2.5. Knowledge Sharing Behavior and Creative Self-Efficacy

Knowledge-based behaviors, like innovating, depend heavily on the habit of sharing knowledge. The innovation area is fraught with perilous uncertainty, yet with enough positive psychological capital, any obstacle can be surmounted (Yuan and Woodman, 2010). Motivating oneself to conquer the challenges that have arisen as a result of this situation would need CSE. Although there have been numerous studies that confirm the effect of CSE on EIB, there have not been enough empirical studies on how KSB affects CSE. Work-related knowledge was indicated by Tierney and Farmer (2004) as a predictor of CSE, and Hänninen (2007) revealed that omniscient staff feel higher CSE than their colleagues in regard to fulfilling tough work tasks. In the research of Yang and Cheng (2009), it is emphasized that the KSB exhibited in the field of information technology has a positive impact on creative self-efficacy. In their study, (Parhamnia, Farahian and Rajabi, 2022; Sun, Hong and Ye, 2022) found that KSB had a positive impact on CSE. Considering this knowledge, it is possible to make the assumption that workers will improve their CSE as a result of the new knowledge they learn

and will engage in innovative behaviors as a result of the sharing of knowledge amongst themselves. From these data, the following hypothesis was proposed:

H₂: Knowledge sharing behavior positively predicts creative self- efficacy.

2.6. Creative Self-Efficacy and Employee Innovative Behavior

Tierney and Farmer (2011) claim that CSE is defined as one's faith or confidence in their abilities to do activities that need originality. This belief or confidence is essential to the successful completion of innovative work. In their experimental research, (Choi, 2004; Jaussi, Randel and Dionne, 2007; Tierney and Farmer, 2004) demonstrate that CSE is substantially related to EIB. Social cognitive theory (Bandura, 1986, 1997) claims that, when an employee is viewed as having a high level of CSE, this makes him feel more confident in himself, his talents, and his experience, increases the rate of innovation by allowing the worker to put his distinctive thoughts into practice for the betterment of the business (Kroes, 2015). As a result, workers who have CSE reflect a favorable view towards creative production and demonstrate EIB. From these data, the following hypothesis was proposed:

H₃: Creative self-efficacy positively predicts employee innovative behavior.

2.7. Mediation Role of Creative Self-Efficacy

Bandura (1977), arguing from the viewpoint of cognitive psychology, highlights the fact that the cognitive process of the person plays an essential part in the person's ability to shape his behavioral patterns. Employees who have CSE are inquisitive, willing to try new things, and creative minds; these traits inspire them to participate in innovation at their current workplace (Gong, Huang and Farh, 2009). Workers with high CSE welcome obstacles and choose unusual tactics, which is why Tierney and Farmer (2011) showed that it improves creativity. In turn, this enhances innovative behavioral patterns (Hirst, Van Knippenberg and Zhou, 2009; Mathisen, 2011). The EIB could well be influenced by institutional management, which does this through encouraging CSE (Tierney and Farmer, 2004). Researchers have also shown that creative self-efficacy serves as a mediator that indirectly affects employee innovation behavior (Gong et al., 2009). Employee innovation behavior may be promoted by enhancing creative self-efficacy (Tierney and Farmer, 2004), which in turn promotes the essential intrinsic desire to participate in innovative activities by increasing employees' creative self-efficacy (Gong et al., 2009). Creative self-efficacy is a powerful antecedent of employee innovation behavior, which mediates the relation between knowledge sharing on employee innovation behavior. In the research conducted by Hu and Zhao (2016) on a total of five different businesses, the authors discovered that CSE acts as a mediator in the relation between KSB and EIB. From these data, the following hypothesis was proposed:

H₄: The relationship between knowledge sharing behavior and employee innovation behavior is mediated by creative self-efficacy.

The author of the study established the research model as follows, referring to both the theory and the prior research:

Creative Self-Efficacy

H3

Knowledge Sharing
Behavior

H1

Employee Innovation
Behavior

Figure 1: Theoretical Framework

3. METHODOLOGY

3.1. Demography and Questionnaire Design

The recycling industry is the universe of the study, and the fabric, textile and garment recycling firm that operates in the city of Düzce in Turkey is the sample of the study. The institution, which is the subject of this research, is preferred because it is the world leader in the sector, and it is Turkey's largest recycled polyester fiber producer. The data was collected through the voluntary participation of managers and employees over the internet. The knowledge acquired from human resources suggests that there is a total of 1,000 people employed at the facility. The universe consisted of 900 male and 100 female employees. Bartlett, Kotrlik and Higgins (2001) determined that the minimum number of samples should be 278 to measure a population of 1000 people at a confidence level of 0.5. The researcher has a total of 320 completed surveys to analyze. The number of legitimate replies was reduced to 299 after missing value responses and non-engaged responses were removed from the data set. Table 1 summarizes the demographics of the 299 participants. The great majority of individuals who took part were male (81.9%) and were between the ages of 31 and 40 (43.8%).

	-	Frequency	Percent	•	•	Frequency	Percent
Gender	Male	245	81.9				
	Female	54	18.1				
Age	<30	85	28.4	Working	1<	11	3.7
-	31-40	131	43.8	Experience	2-5	111	37.1
	41-50	67	22.4	_	6-10	91	30.4
	50>	16	5.4		10>	86	28.8
Marital	Married	145	48.5	Education	Bachelor	284	95.0
Status	Single	136	45.5		Master	11	3.7
	Divorced	18	6.0		Doctorate	4	1.3

Table 1: The Demographics of the Participants

The majority of those who responded to the survey were married (%48.5). 95% of the participants had bachelor's degrees. The data for this investigation were collected using validated instruments in a cross-sectional design. The researcher obtained permission from the university ethics committee before distributing and administering the questionnaire to their subjects. KSB, EIB, and CSE are all important characteristics that are being investigated. In this study, KSB was measured using the 7-item scale used in the previous study by Chennamaneni (2006:117). To ensure the cultural adaptation and language validity of the measurement tool of 'knowledge sharing behavior', the original language of which is English,

the 5-stage method recommended by Brislin, Brislin, Lonner and Thorndike (1973) was followed in the scale adaptation process. Four independent academics who are bilingual in English and Turkish were responsible for translating the original form of the scale into Turkish during the first step of the process, known as the translation stage. In the second stage, six expert opinions were sought for the evaluation of the translations. Examining the translations by experts with field knowledge, intelligible and clear expressions that are thought to best reflect the original scale item were considered in the cultural context and the items that were thought to have high cultural equivalence were decided. In the third stage, the retranslation stage, the knowledge of three academicians who are experts in the field was consulted and the Turkish scale items were asked to be translated into English. In the fourth stage, to evaluate the translations again, two different academics who are fluent in English were asked to evaluate the translations together with the original scale. In the evaluation stage, which is the last stage, 3 more expert opinions were sought, and the final form of the scale was decided. Using a 5-point Likert scale, participants rated their level of agreement with each statement. The analysis revealed that the results were consistent with the scale's single-factor structure. The KMO analysis result of the scale was determined as 0.89 and the Bartlett's test of sphericity was found to be significant (p=.000). Following the completion of these analyses, a confirmatory factor analysis was carried out. As a consequence of the factor analysis, it was discovered that the data were suitable for the scale's single-factor structure. It was found to be between 66 and .85. EIB was measured using a scale designed by Scott and Bruce (1994) and adapted into Turkish by Çalışkan, Akkoç and Turunç (2019). The CSE scale, which was designed by Tierney and Farmer (2002), was utilized in order to evaluate the perceived creative capacity of employees in the workplace. The Turkish version of the scale was adapted by Cayirdag (2017). A five Likert scale allowed participants to indicate how much they agreed or disagreed with each statement. To determine the compliance of the questionnaire with the ethical principle's legislation, an ethics committee compliance report was obtained with the decision of Osmaniye Korkut Ata University numbered 2022/16/8 and document registration number E.87360.

3.2. Analyzing Statistical Data

To analyze the theoretical model, the approach known as Partial Least Square (PLS) path modelling is utilized. The PLS path modeling method employs a methodology that is comparable to that of the Structural Equation Modelling technique. The standard structural equation modelling (SEM) technique is based on covariance, however, the PLS path modelling approach, which is a special form of the SEM technique, is based on variance rather than covariance. PLS path modelling is a technique that is used in exploratory research to assist researchers in the process of hypothesis formation when the goal is to discover unexpected connections between variables that have not been predefined (Hair, Hult, Ringle & Sarstedt, 2021). The major goal of this study was to determine the impact of KSB on EIB that could be sufficiently accomplished via the implementation of SmartPLS. The results of the PLS analysis were computed with the help of the Smart PLS 3.3.7 program. The coefficients and t values of the variables are used to draw final conclusions about their relationships in the PLS path modelling approach.

Hair et al. (2021) developed a two-step procedure to calculate a path modeling technique in which both the measuring and the structural models should be evaluated. It is important to check that the tools that are used to evaluate the measurement model are reliable and valid (in terms of content, convergent validity, and discriminant validity) (Hair et al., 2021).

3.3. Reliability of the Constructs

External factor loading more than 0.4 was deemed acceptable after dependability statistics were calculated for each structure and the external factor loading of each structure was taken into consideration (Hair et al., 2021). The outer factor loadings for each of the latent variables in the research are shown in Table 2. It can be seen in Table 2 that all the values of outer loading increased significantly from 0.4, indicating that all variables in this study met the criterion for the dependability of independent items.

3.4. Internal Consistency Reliability

In the context of research tools, internal consistency reliability is a method of measuring how effectively a tool evaluates what the researcher intends the instrument to assess. A composite reliability coefficient is used to measure it, and a threshold value of 0.7 or above is deemed to be acceptable (Hair et al., 2021). A structure with a Cronbach Alpha value of 0.6 or higher is considered appropriate (Field, 2017).

Table 2 provides the study's latent variables' composite reliability coefficients. There are no values below 0.7, indicating that the metrics utilized in this research have high composite reliability. Furthermore, Cronbach's Alpha values show that all measures employed have a high level of internal consistency.

3.5. Convergent Validity

The degree to which one way of expressing a concept corresponds well to other ways of expressing the same concept is referred to as an indicator's convergent validity or reliability (Hair et al., 2021). Average Variance Extracted (AVE) statistics were used to test for convergent validity (Hair et al., 2021), a value of 0.5 or greater indicates convergent validity (Chin, 2010:671). Table 2 shows the AVE aggregated from the constructions, which is calculated as follows: Each AVE value is more than 0.5.

3.6. Discriminant Validity

The testing model includes the processes of analyzing convergent validity and discriminant validity. According to the findings of the reliability tests shown in Tables 2 and 3, Cronbach's alpha and the composite reliability value for each of the constructs were both higher than 0.7. To summarize, every single construct has achieved the level of reliability that was required.

Table 2: Items Loadings,	Cronbach's Alpha.	Composite Reliability	and Average	Variance Extracted
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Variables	Items	Loadings	Cronbach's Alpha	Rho_A	CR	AVE
Knowledge Sharing (KSB)	KSB1	0.842	0.921	0.910	0.921	0.660
Knowledge Sharing (KSb)	KSB2	0.883				
	KSB3	0.739				
	KSB4	0.848				
	KSB5	0.786				
	KSB6	0.766				
	EIB1	0.850	0.907	0.912	0.906	0.618
Employee Innovation Behavior (EIB)	EIB2	0.750				
	EIB3	0.700				
	EIB4	0.753				
	EIB5	0.920				
	EIB6	0.720				
Creative calf office as (CSE)	CSE1	0.913	0.907	0.923	0.908	0.766
Creative self-efficacy (CSE)	CSE2	0.890				
	CSE3	0.820				

To evaluate the discriminant validity of a construct's differences from others, the Heterotrait-monotrait (HTMT) ratio was used. The HTMT value needs to be under 0.9 to show discriminant validity (Henseler, Ringle and Sarstedt, 2015:121). It is clear from Table 3 that all study constructs exhibit discriminant validity because HTMT values are less than 0.9.

Table 3: Discriminant Validity (HTMT)

	EIB	CSE	KSB
EIB		0.465	0.492
CSE			0.435
KSB			

According to the findings of the discriminant validity test, which are indicated in Table 4, the entire construct has a square root value of AVE that is higher than the correlation value with the other latent constructs determined by Fornell and Larcker (1981).

 Table 4: Discriminant Validity (Fornell-Larcker Criterion)

	CSE	EIB	KSB
CSE	0.918		
EIB	0.424	0.826	
KSB	0.400	0.455	0.846

Table 5 illustrates the R-squared and significance test results that may be produced using the bootstrapping method. According to Table 5, the R² value of CSE is 0.19; therefore, the CSE variable might be described by the KSB variable with the percentage of 19%, while the remaining 81% is explained by different variables not covered in this study. However, the R² Square value for EIB is 0.323, which indicates that KSB and CSE variables explain 32.3% of the variation in EIB; the remaining 67.7% can be attributed to factors that were not taken into account in this analysis.

Table 5: R Square

	R Square	R Square Adjusted
EIB	0.323	0.319
CSE	0.191	0.188

When determining the validity of path coefficients, the basic bootstrapping procedure (5000 bootstrap samples) was utilized using 299 sample observations in the current research to determine their significance (Hair et al. 2011:145).

3.7. Hypotheses Testing

Table 6: Path Coefficient Estimation

Hypotheses	Relationship	Orig.Sample	Mean	TStat.	Р	Decision
H1	KSB→EIB	0.363	0.368	5.244	0.000	Supported
H2	KSB→CSE	0.437	0.440	5.962	0.000	Supported
H3	CSE → EIB	0.307	0304	4.015	0.000	Supported

As shown in Table 6, each path analysis has significant findings, and it can be concluded that all three hypotheses included in this model can be accepted. H_1 indicates that KSB has a positive and statistically significant impact on EIB (β = 0.363, t = 5.244, p <0.05). The research results are supported by (Al-Husseini, El Beltagi and Moizer, 2021; Putri and Etikariena, 2022; Setini, Yasa, Supartha and Giantari, 2021; Ye, Liu and Tan, 2021; Zhang, Zhang and Wang, 2022) study findings. H_2 indicates that KSB has a positive and statistically significant impact on CSE (β = 0.437, t = 5.962, p <0.05). The research results are supported by (Cundawan, Marchyta and Santoso, 2021; Hu and Zhao, 2016) study findings. H_3 indicates that CSE has a positive and statistically significant impact on EIB (β = 0.307, t = 4.015, p <0.05). The research

results are supported by (Atshan and Abdullah, 2022; Javed, Fatima, Khan and Bashir, 2021; Namono, Obanda, Ayebale, Isiagi and Wofuma, 2022; Niazi and Arshad, 2022; Setyorini, Muhdiyanto and Darmadi, 2022) study findings.

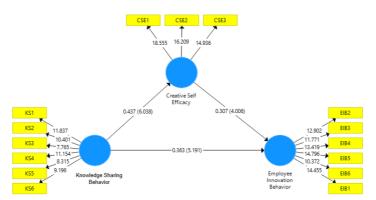


Figure 2: Partial Least Square SEM Model

The mediation analysis was conducted using the PLS-SEM bootstrapping technique.

T Statistics P value Knowledge Sharing Behavior **Total Effect** 0.499 9.596 P<.005 Innovation Behavior Knowledge Sharing Behavior → Creative Self Indirect 0.134 3.260 P<.005 **Effect** Efficacy → Employee Innovation Behavior

Table 7: Mediation Effect

Hair et al.(2021) suggested calculating the VAF (Variance Accounted For) coefficient in the mediation analysis. The VAF coefficient can be calculated by using the indirect and total effect coefficients in the formula.

$$VAF = \frac{IndirectEffect}{IndirectEffect+TotalEffect} = \frac{0.134}{0.134+0.499} = 0.211$$

According to Hair, Ringle and Sarstedt (2011), if VAF > 0.80, there is full mediation, if $0.20 \le \text{VAF} \le 0.80$, there is partial mediation. In the KSB \rightarrow CSE \rightarrow EIB pathway, where the indirect effect was significant in the model, VAF=0.211 was calculated. Hence, CSE has a mediating role in the relationship between KSB and EIB. In Table 7, H₄ indicates that CSE mediates the relationship between KSB and CSE positively and significantly (β = 0.134, t = 3.260, p <0.05). A drop in beta coefficient could be interpreted as a partial mediation. Research results are supported by (Cundawan, Marchyta and Santoso, 2021; Hu and Zhao 2016) study findings.

4. CONCLUSION AND DISCUSSION

The first hypothesis indicates that KSB has a positive and statistically significant impact on EIB (β = 0.363, t = 5.244, p <0.05.). According to Al-Husseini, El Beltagi and Moizer (2021), there are positive relationships between the sharing of knowledge and innovative practices in Iraqi public higher education. It showed that faculty are eager to contribute expertise and gather knowledge to improve their goods, curriculum, and innovation processes. The results of Putri and Etikariena's (2022) study, which included 306 students from 14 different faculties, were able to demonstrate that there is a significant relationship between the sharing of previously gained knowledge and innovation work behavior. According to the results of Setini, Yasa, Supartha and Giantari (2021), who explored how sharing one's knowledge affects the innovative process, it was found that doing so had a positive and discernibly significant

impact on the innovative process for women entrepreneurs. It was discovered by Ye, Liu and Tan, (2021) that 318 frontline workers' IB may be boosted by KS willingness. Knowledge is one of the most important aspects that can help businesses succeed when faced with intense competition. According to Zhang, Zhang and Wang (2022), workers willing to share knowledge are more likely to participate in innovation behavior.

The second hypothesis indicates that KSB has a positive and statistically significant impact on CSE (β = 0.437, t = 5.962, p <0.05). Staff members who believe in their own ability to find original solutions to challenges are said to have a high level of creative self-efficacy. According to Tierney and Farmer (2002), one of the factors that contributes to a person's level of creative self-efficacy is their level of job-related knowledge. Yang and Cheng (2009) found a positive impact of knowledge sharing behavior on creative self-efficacy in their research. Hu and Zhao (2016) and Cundawan, Marchyta and Santoso (2021) found that when workers share their knowledge with one another, they strengthen their creative self-efficacy level. By helping one another out and sharing what they know, workers will be able to boost their own sense of creative self-efficacy.

The third hypothesis indicates that CSE has a positive and statistically significant impact on EIB (β = 0.307, t = 4.015, p <0.05). Atshan and Abdullah (2022) in their research on teachers, found that creative self-efficacy has a positive impact on innovative behavior. The belief that one can do a given activity with a greater degree of originality is what is meant by "creative self-efficacy" (Tierney & Farmer, 2011). In their study, Javed, Fatima, Khan and Bashir (2021) suggested that creative self-efficacy motivates workers to meet innovation-based job objectives and participate in greater innovation behavior. The findings of studies conducted by (Namono, Obanda, Ayebale, Isiagi and Wofuma, 2022; Niazi and Arshad, 2022; Setyorini, Muhdiyanto and Darmadi, 2022) demonstrate that creative self-efficacy is positively related to innovative work behavior.

The fourth hypothesis indicates that CSE mediates the relationship between KSB and CSE positively and significantly (β = 0.134, t = 3.260, p <0.05). Knowledge sharing and innovative behaviors in the workplace are linked via a sense of creative self-efficacy, according to the research by Hu and Zhao (2016). They found that knowledge sharing had a positive impact on innovative behavior in the workplace if employees felt confident in their own ability to generate new ideas. According to Cundawan, Marchyta and Santoso (2021), an increase in knowledge sharing increases people's creative self-efficacy to think and act creatively, which motivates them to engage in riskier innovative behaviors. Increasing sharing of knowledge leads to more imaginative behaviors on the job. This will indirectly make people feel more confident in their ability to be creative. The findings of this study are consistent with those of previous research on these topics.

This study has the potential to contribute not only to organizations and industries but also to government bodies. It is envisaged that the business will be better equipped to equip its employees to build their knowledge-sharing capabilities as candidates for creative workers. These skills may be developed via conversation, questions, and answers, or presentation. As individuals acquire new knowledge, they should be encouraged to share it with their coworkers in the department as soon as possible. However, businesses should not only encourage workers to share the knowledge they have, but they should also require some type of activity, such as seminars, workshops, and other similar events, that are aimed at educating the employees. Building relationships and working together more closely across departments should be prioritized in business. When recruiting new employees, it is important to choose people who will be productive. Additionally, programs such as internship programs that may

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collaborate with a variety of businesses should be established so that workers can get experience in the business sector. These programs should be designed to benefit employees. In conclusion, the company needs to additionally plan development activities for its personnel, such as training or activities that occur outside of the workplace, with the intention of enhancing the employees' inventive approach to business. In conclusion, the company need to additionally plan development activities for its personnel, such as training or activities that take place outside of the workplace, with the intention of enhancing the employees' inventive approaches to business.

It is difficult to capture the dynamic process of how KSB influences EIB due to the brevity of the data collection in this research. Future researchers may want to explore doing longitudinal studies to address this gap. For subsequent research, it is suggested that respondents be able to meet directly with researcher aiming to increase their tendency to be honest when filling out surveys. In conclusion, it is suggested that the study can investigate mediators such as justice, innovation, climate and work engagement. These factors may have a greater impact on the relationship between variables, which would reinforce the research conclusions.

The fact that the impact of partial mediation is a limitation of this study; therefore, future research will be able to investigate other mediator factors that have a more significant influence. This study determines how employee knowledge sharing and creative self-efficacy affect their innovative actions in a recycling company. Given the diversity across businesses and the convenience sampling utilized in this study, the generalizability of the results may be limited. Further research is required to broaden their scope and examine various industries. The other limitation is due to transportation and cost problems; this study was carried out in a single city.

Etik Beyanı: Bu çalışmanın tüm hazırlanma süreçlerinde etik kurallara uyulduğunu yazarlar beyan eder. Aksi bir durumun tespiti halinde BİİBFAD Dergisinin hiçbir sorumluluğu olmayıp, tüm sorumluluk çalışmanın yazarlarına aittir. Bu çalışmanın Etik Kurul kararı Osmaniye Korkut Ata Üniversitesi Sosyal Bilimler Bilimsel Araştırma ve Yayın Etiği Kurulundan (Tarih: 06.10.2022; E-87360-2022/16/8 karar sayılı) yazısıyla alınmıştır.

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