

Article

# The Influence of Knowledge Sharing on Sustainable Performance: A Moderated Mediation Study

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Abstract: The past few decades showed inadequate discussion of the impact of employees' knowledge sharing and its diffusion on advancing banks' long-term sustainability. The objective of the study is to examine the role of employees' knowledge sharing on the sustainable performance of the banks operating in Bangladesh. Furthermore, this study tested the "moderated mediation model" of knowledge hiding and employees' ambidexterity on the association above. The researchers applied the deductive reasoning method through the application of quantitative techniques, using structural equation modeling. Finally, 287 respondents from different banks were chosen through a self-administered questionnaire survey in the capital city of Dhaka. The findings indicated that all the predictor variables significantly explain the outcome variable, except the influence of knowledge sharing. Mediation analysis showed that employees' ambidexterity mediated the association between knowledge sharing and sustainable performance. Surprisingly, moderation analysis revealed that the influence of knowledge sharing on employees' ambidexterity is not affected by knowledge hiding. This study adds to the existing literature by demonstrating the importance of knowledge hiding, along with explaining how knowledge sharing can motivate and influence employees to achieve sustainable performances. In addition, the main contribution of this study is to advance knowledge and add values in the forms of knowledge creation, preservation, and dissemination among practitioners, banking professionals, and academics for utilizing their domain-specific areas to increase long-term sustainability.

**Keywords:** knowledge sharing; knowledge hiding; employees' ambidexterity; sustainable performance

# 1. Introduction

Profit maximization as a mean of justifying a firm's long-term sustainability has faced concerns and debates at the organizational level, the national level, and the global level [1]. As a consequence, achieving a sustainable performance among organizations has become a vital focus of academic interests in the fields of management and environmental science [2–6]. In effect, research on ambidexterity and sustainable performance has achieved robust growth in the last few decades [7,8] and knowledge sharing has turned into the center of this fusion [8]. As such, researchers are increasingly exploring processes that lead to knowledge creation and knowledge integration to achieve a sustainable performance [9]. Due to the status of banks as knowledge-based organizations in Bangladesh, it is necessary to pay specific attention to employee ambidexterity because knowledge management affects their subsistence



and progress, which is adequately related to organizational sustainability [10]. Sustainability is reflected in the manifestation of fulfilling current desires without sacrificing the future needs of the next generation [6]. Tasleem, et al. [11] framed sustainable performance as the harmonization of the social, financial, and environmental performance of a business entity that drives it toward sustainable development [12–14].

Knowledge sharing emanates from the concept of knowledge management, which is defined as the identification and use of collective knowledge in an organization to regulate the business rivalry [15]. In this sense, an essential part of knowledge management is the dissemination and accessibility of knowledge within or between selected organizations. In knowledge management literature, knowledge sharing is defined as the exchange of information, data, and expertise to solve problems, develop new insights, or implement rules or measures [16,17] while other scholars define knowledge sharing as a multi-stage process of initiation, implementing, promoting, integrating [18], transferring or searching [19], or sharing and assimilation [20,21]. Surprisingly, human resource professionals neglected knowledge sharing for many years. Over time, especially in early 2000, they began to realize the importance of knowledge management. Since then, knowledge management and its processes have been at the center of the human resource field [22]. In particular, Macneil [23] highlights that tacit knowledge is the most valuable type of content involving experience, skills, or an understanding of people. Eventually, employees are encouraged to apply both explicit and tacit knowledge to problem-solving situations by creating a knowledge-sharing environment [24]. Earlier research found that knowledge sharing is more effective in influencing employees' ambidexterity in the workplace [25,26]

However, within the domain of knowledge-based research, most studies focus on knowledge sharing along with knowledge hiding, which is meant to interrupt knowledge transfer [27,28]. Knowledge hiding is defined as the deliberate attempt to conceal knowledge requested by others [29]. It is an avoidance response (i.e., silence or denial) that withholds pertinent ideas, information, or feedback as a form of self-preservation which stems from a fear of losing control of the possession of knowledge [30]. Sharing collective knowledge is the natural intent and instinct of humanity, and people are generally willing to share their knowledge. However, if there is a barrier such as losing self-control of personal resource disposition or face value lost due to the sharing of knowledge, the knowledge sharing behavior among its employees is hindered, and the deterrents can have an undulation effect [31]. Nevertheless, Connelly, Zweig, Webster, and Trougakos [29] mentioned that knowledge sharing and knowledge hiding are not reverse of one another, rather these are diverse concepts with separate constructs conceptually.

Additionally, ambidexterity pertains to people's ability to deploy their multi-dexterity, such as exploration and exploitative intents at work [32,33]. Employees' ambidexterity is the involvement of employees equally in exploitation and exploration activities [9]. Thus, exploitation and exploration activities are symbiotic procedures that need to be shared to achieve collective scores altogether [34]. Even though the concept of ambidexterity has been discussed for more than a decade, it remains indistinct how organizations can best improve the ambidexterity of their employees [35,36]. While the conspicuous importance of ambidexterity has now been conceptualized and analyzed as a temporally stable structure, the study of employees' ambidexterity is still in its infancy in developing and South Asian nations [37]. From the theoretical and empirical point of view, employee ambidexterity has been given remarkably little attention [26]. Empirical research showed that knowledge sharing is the central to employees' ambidexterity [38].

In the above-presented logic, the scholarly focus on sustainable performance has emerged as a relevant area of research over the past few decades [1,8]. To address this issue clearly, the following research questions (RQ) should be answered.

RQ 1: How does knowledge sharing contribute to the sustainable performance of banking institutions?

RQ 2: What is the magnitude of indirect effects, if there is any, of knowledge hiding and employees' ambidexterity in turning knowledge sharing into sustainable performance?

While there are few existing studies that use knowledge sharing processes and mechanisms to explain the impact of these impressive factors on organizational learning [39], innovation [40,41], and performance [25,42], the overall impression is that there is a lack of research investigating the relationship between knowledge sharing and employees' ambidexterity concerning sustainable performance. Considering these variables in an integrated model, it provides a holistic view of sustainable performance in the banking industry. Thereby, the present study has made some notable contributions advancing previously held knowledge and empirical observations.

First, it provides a new conceptual framework that links employees' ambidexterity with knowledge sharing and sustainable performance. This study fills the literature gap by providing further evidence of the predictor (knowledge sharing) and outcome (sustainable performance) of employees' ambidexterity. Second, this study advances the knowledge sharing research stream and explores the impact of employees' ambidexterity and sustainable performance in the banking sector. The present study is one of the first empirical studies to analyze the related factors of employees' ambidexterity, particularly in the context of the banking institutions. Third, we have observed that previous studies have focused typically on sustainable advantage or innovation capability, with very little focus on sustainable performance. Interestingly, we found that none of studies linked employees' ambidexterity to sustainable performance. Therefore, the present study on aforementioned variables with potential direct and indirect effects will advance prior conceptualization of employees' ambidexterity and sustainability performance. Fourth, a large number of studies on knowledge sharing, employees' ambidexterity, and sustainable performance shed light on researching developed countries, since most of the previous studies seem to have a Western-bias. Consequently, recent studies opined that future researchers should operationalize their research works in a different country context, particularly in non-Western contexts [8]. This study, conducted in the emerging Asian country of Bangladesh, will reinforce previous findings. Finally, while we observed few studies on sustainable performance in the context of developing countries, particularly in China [43–45], no study has been found encompassing knowledge sharing, employees' ambidexterity, sustainable performance, and knowledge hiding from the perspectives of multi-theoretical lenses, which will fill the vacuum of looking into a particular object from multiple angles.

Following this introduction, Section 2 introduces the theoretical background, the research summary of studied variables followed by literature review, hypothesis development based on correlated theories, and empirical findings. In Section 3, the study delineates a methodology in conducting research and data analysis. Section 4 illustrates the practical results of the measurement and structural model. Section 5 presents the findings and is followed by discussion in the light of theory and empirical observations in Section 6. Finally, Section 7 concludes by enclosing theoretical contributions, managerial implications for practice, and both limitations and the scope of future research.

#### 2. Theoretical Model and Hypothesis Development

#### 2.1. Knowledge Sharing and Sustainable Performance

"Knowledge sharing" is a multifaceted domain. Knowledge could constitute additional value for an organization and is an invaluable resource for the advancement of organizations [46]. In addition, knowledge sharing is related to the absorption and integration of knowledge [47]. According to Chiu, et al. [48], generous knowledge sharing facilitates an increase in the allocation of resource intensity. Many companies have recognized that knowledge plays a vital role and is a crucial resource in achieving sustainable performance in any industry [49]. For many firms, gaining a sustainable advantage depends on their ability to create and apply intellectual knowhow. According to Ishak, et al. [50], developing and implementing influential knowledge management culture will deliver to achieve consistently higher performance. However, as cited by Hoopes and Postrel [51], the unique knowledge sharing model resulting from such an integrated approach can create potential sources of competitive advantage and thereby magnify sustainable performance. Likewise, the theory of human capital postulates the influence of employees' knowledge, skill, ability, and other characteristics towards organizational sustainability [52]. In line with the ground of human capital theory, we attested that knowledge sharing behavior and attitudes among employees would accelerate and strengthen the organization's dynamic capabilities toward doing things sustainably [13,53]. Thus, this paper posits that knowledge sharing mechanisms-act as "enablers" that can convey the transmission of information which can lead to more sustainable performance. Thus, this assertion underpins the recommendation of hypothesis H1:

# Hypothesis 1 (H1). Knowledge sharing effects sustainable performance.

# 2.2. Knowledge Sharing, and Employees' Ambidexterity

As mentioned by Humborstad, Nerstad, and Dysvik [38], organizational level studies have shown that employee empowerment and a culture of knowledge sharing are critical to organizational sustainability [54]. Generally, the theoretical underpinning of these associations can be found in the social exchange theory. It explains an association between the organization and the employee, which is two-sided: reciprocal and interdependent [55–57]. Consistent with this theory, when an organization stimulates, motivates, and empowers employees, they develop an organizational culture that focuses on challenging and improving existing systems, procedures, structures, and strategies that generate innovation.

Therefore, a knowledge sharing culture may lead to employee ambidexterity. Currently, how a culture of knowledge sharing enables employee ambidexterity is not well known [26]. Knowledge sharing between employees allows for quick and easy access to relevant information [58]. Therefore, the culture of knowledge sharing will induce employees to motivate each other in the exploration of ideas. Van Grinsven and Visser [59] argued in their conceptual paper that a higher the employees are intensely aware that the organization is committed to knowledge sharing, they will be able to improve and enhance their exploitation activities. Based on the theoretical assumptions and prior empirical observations, this study puts forward the following hypothesis:

# Hypothesis 2 (H2). Knowledge sharing effects employees' ambidexterity.

# 2.3. Employees' Ambidexterity and Sustainable Performance

Employees' ambidexterity provides a favorable environment for an organization's individuals that dynamically adjusts through the process of exploration and exploitation, confirms the innate system, and enables the learning of new methods and improvements [32]. In contrast, sustainability performance has been marked as necessitating short-term actions to cover up compromising long-term actions that can be clustered into "triple bottom line" approaches, namely, financial, social, and environmental approaches [12]. Employees' ambidexterity is an important pipeline for applying and achieving organizational sustainability goals [25,60]. Organizational structures should be adapted over time to accommodate employees' exploitative and explorative desire to promote sustainability [61]. The influence of employees' ambidexterity can be advanced through the process outlined by social exchange theory [56]. Through a mutual exchange process, ambidexterity reimburses and provides returns in the future, involving unspecified future obligations with a positive contribution [57]. The social exchange theory posits that knowledge sharing among the peers strengthens the merit of their ambidextrous activities, which in turn drives organizational sustainable performance. Therefore, based on the theoretical grounds and the previous literature review, this study proposes the following hypothesis:

### **Hypothesis 3 (H3).** *Employees' ambidexterity influences sustainable performance.*

The reciprocal relationship between knowledge sharing and employees' ambidexterity is found with the domain of social exchange theory. The theory advocates that the relationship between employees and organizational processes be mutually rewarding, interdependent, two-sided, and reciprocal [56]. Hence, knowledge sharing behavior multiplies employees' ambidextrous abilities, which creates a sense of obligation toward regulating employees' behavior for achieving organizational sustainable performance. Caniëls, Neghina, and Schaetsaert [26] asserted that in a knowledge sharing culture, employees discuss their mutual problems, spot out alternatives to address them, and eventually identify a novel solution, which makes them ambidextrous. Employees' ambidexterity (exploratory and exploitive activities of employees) can contribute to any firm in a multi-faceted way, which triggers a more sustainable performance [21,62]. Based on the literature of the influence of knowledge sharing and employees' ambidexterity and the influence of employees' ambidexterity on sustainable performance, it can be presumed that employees' ambidexterity mediates the relationship between knowledge sharing and sustainable performance. Accordingly, we hypothesize the following:

**Hypothesis 4 (H4).** *Employees' ambidexterity mediates the influence of knowledge sharing on sustainable performance.* 

### 2.4. Moderating Effect of Knowledge Hiding

Peng [63] suggested that knowledge sharing in the social exchange mechanism enhances the sharing of knowledge, which leads to employees' ambidexterity. Perceived behavioral control as a consequence of shared knowledge among employees leads to hiding or sharing knowledge, depending on the type of control. Self-determination delineates that employee motivation plays a central role in determining the precise functioning of relationships between ambidexterity and organizational issues, such as knowledge sharing [64,65]. Contrastingly, Connelly, Zweig, Webster, and Trougakos [29] showed that knowledge hiding is the hidden secret of task information, concepts, or know-how that may interfere with the influence of knowledge sharing on ambidexterity.

Psychological ownership theory has been found to be an influential theory to justify the reason behind employees' knowledge hiding [66]. As stated by this theory, psychological ownership is the frame of mind in which an individual has a sense of ownership over the target corporeal or incorporeal object [31]. Psychological ownership also happens when a person is expressively connected to a purpose, and this state of disposition might trigger them to hide or withhold their knowledge if they feel threatened with a negative emotional state or a loss of control over a possession or ownership [31]. In line with the theoretical lens, we assert that employees will be prevented from sharing knowledge (hiding it) depending on their magnitudes of phobia or if they experience an emotional state of loss or ambiguity while acquiring their resource (knowledge, skill, ability, and other characteristics) without receiving any prolonged and sustained benefits. Thus, a higher or a lower level of knowledge hiding will consequently bring a negative change to the observed relationship between knowledge sharing and employee ambidexterity. The theoretical framework of self-determination theory and psychological ownership theory also supports this proposition. The following hypothesis is endorsed:

**Hypothesis 5 (H5).** *Knowledge hiding moderates the relationship between knowledge sharing and employees' ambidexterity.* 

# 2.5. Research Framework

Figure 1 demonstrates the conceptual model attesting to how knowledge sharing connects sustainable performance through the confounding effects of knowledge hiding and employees' ambidexterity. Hence, we design a conceptual research framework (Figure 1) that comprises of four primary latent constructs: knowledge sharing, employees' ambidexterity, knowledge hiding,

and sustainable performance. This model presumes that knowledge sharing could have a positive impact on sustainable performance through the moderating and mediating effects of knowledge hiding and employees' ambidexterity. It is noteworthy that all of the path relations are grounded through the lenses of multi-theoretical perspectives.

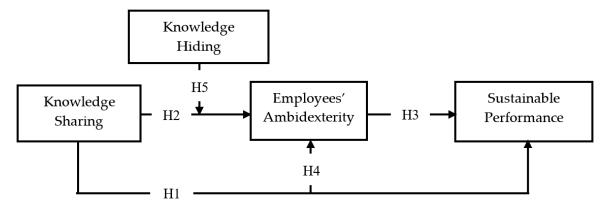


Figure 1. Hypothesized conceptual framework.

# 3. Research Design and Methods

In order to answer research questions, we collected data through a self-administrative survey and used the deductive reasoning method to examine relationships among variables. The population of this study is the professionals in the banking sector of Bangladesh. To test the associations between variables, cross-sectional data were collected from 31 different banks (five foreign banks, seven Islamic banks, four state-owned banks, and 17 private commercial banks) out of 59 banks located within the capital city of Dhaka [67]. The banking sector is preferred because it contributes to economic development by influencing production, commerce, and other economic activities through its financing, investing, and operating activities. Moreover, knowledge sharing is crucial for the banking sector to share information about the clients, personnel, and associates, thereby facilitating banking operations to achieve its goals [68–70].

# 3.1. Sampling and Data Collection Procedure

Bank branches located within the capital city of Dhaka were considered as sample respondents in this study. Data was collected primarily through a questionnaire survey. More than four hundred questionnaires were sent to different bank branches through personal visits and email attachments, of which 295 responses from bankers were received. Eight questionnaires have been excluded because of missing data and inappropriate data marking. In the end, we used 287 questionnaires, yielding a 70.52 per cent response rate.

# 3.2. Participants' Information

The demography of respondents revealed that out of the 287 valid respondents, 210 (73.20%) were male, and 77 (26.80%) were female. For their academic qualifications, 147 (51.20%) had a postgraduate degree, followed by 27 (9.40%) graduates, and 113 which constituted the rest (39.40%) had other degrees. The respondents' tenure experience in the banking sector ranged from six months to twenty years in different positions, varying from assistant officers to a vice-president of a bank who has been working in numerous branches. Data analytics revealed that 46 (16.02%) respondents were from foreign banks, 59 (20.56%) from Islamic banks, 40 (13.94%) from the state-owned bank, and 142 (49.48%) were from the private commercial banks. Table 1 demonstrates the demographic characteristics of the respondents from different banks.

Ger	nder		Age Category of Participants						
Male Female		Above 25 Years	Above 35 Years	Above 35 Years	Above 55 Years				
210 (73.20%)	77 (26.80%)	42 (14.6%)	115 (40.10%)	92 (32.10%)	38 (13.20%)				
Edu	cational Qualific	cations		Job Experience					
Graduate Master		Others	Below 10 Years Above 15 Ye		Above 20 Years				
27 (9.40%)	147 (51.20%)	113 (39.40%)	92 (32.10%)	163 (56.80%)	32 (11.10%)				
Bank Category and Number of Respondents		Foreign Bank	Islamic Bank	State Bank	Private Bank				
		46 (16.02)	59 (20.56)	40 (13.94)	142 (49.48)				
Employee Size in Branches		Below 20	Below 30 Below 40		Below 50				
		24	84	112	67				

Table 1. Estimates of the demographic variables (N = 287).

#### 3.3. Measurement Tools

We collected our survey instruments from prior studies, which were measured using a 5-point Likert scale (1 = strongly disagree, and 5 = strongly agree). To measure employees' ambidexterity, this study adopted the measures of Rosing and Zacher [9], who in turn adapted the original measures of Mom, et al. [71]. The items represent employees' exploratory and exploitative activities. There are five items for exploratory and six items for exploitative behavior. With regard to knowledge sharing, this study adopted the measures of O'Reilly, et al. [72]. There were four items used for knowledge sharing to self-assess the respondents' firms and apply knowledge sharing-related knowledge in an organization. Knowledge hiding behaviors of knowledgeable workers was measured by using the method developed by Connelly, Zweig, Webster, and Trougakos [29]. To measure sustainable performance in the organization, this study adopted the measures of Lee and Ha-Brookshire [13].

# 4. Results

# 4.1. Common Method Bias and Multicollinearity

We applied AMOS 20 to check the reliability and validity issues by running confirmatory factor analysis (CFA). In a line where two or more constructs were developed using a similar method, this can lead to inflated or deflated corrections between latent constructs [73]. To resolve the issue of common method variance and multicollinearity issues, Harman's single factor test [74] and variance inflation factors (VIF) [75] were calculated. Estimates showed that the first factor explained only 23.82% (<50%) [76] of the result and the VIF score was reported to be below 5 [77]. Finally, we also investigated associations among all variables, using the method recommended by Pavlou, et al. [78]. It depicted that the highest correlation between any two variables was 0.620 (exploratory and exploitative ambidexterity), which was lower than the minimum threshold score (<0.90). Therefore, we observed no issues with method bias and multicollinearity issues.

## 4.2. Model Evaluation

This study used structural equation modeling (SEM), using AMOS 20. We applied multivariate regression analysis through SEM in place of simple regression because the former tested the whole model in an integrated manner [57,79,80]. In addition, bootstrapping of 5000 cases was used to test and examine the observed relationships.

#### 4.2.1. Measurement Model Evaluation

We tested the measurement model to examine the items' suitability representing the construct critically. Hence, we tested CFA, reliability, and validity for substantiating estimates endorsing the

constructs. Figure 2 illustrated that the average regression weights of each construct are above 0.70, which yields good estimates. We also investigated alternative model fitness, as shown in Table 2. Table 2 shows the 7-factor model (CMIN/DF = 1.126, RMSEA = 0.029, RMR = 0.021, GFI = 0.913, TLI = 0.979, and CFI = 0.982) which is above the minimum cut-off value found in various studies [76,81].

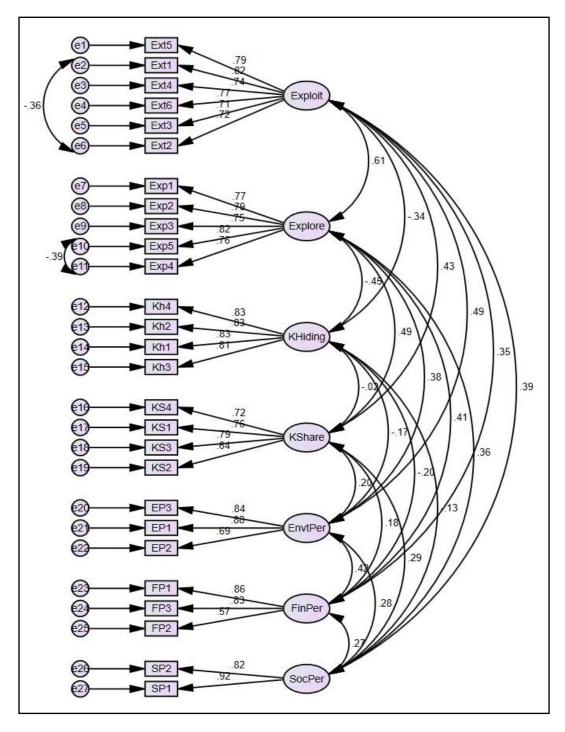


Figure 2. Confirmatory Factor Analysis Estimates.

Models	CMIN/DF	RMSEA	RMR	GFI	TLI	CFI	Alternative Models
7-Factor Model	1.126	0.029	0.021	0.913	0.979	0.982	EPI, EPO, KS, KH, SP, EP, FP
6-Factor Model	2.433	0.071	0.034	0.802	0.873	0.889	EPI + EPO, KS, KH, SP, EP, FP
5-Factor Model	4.682	0.113	0.072	0.673	0.673	0.709	EPI + EPO, KS + KH, SP, EP, FP
4-Factor Model	5.413	0.124	0.077	0.649	0.605	0.608	EPI + EPO, KS + KH, SP + EP, FP
3-Factor Model	6.040	0.133	0.077	0.622	0.552	0.593	EPI + EPO, KS + KH, SP + EP + FP
2-Factor Model	6.856	0.143	0.066	0.581	0.479	0.524	EPI + EPO, KS + KH + SP + EP + FP
1-Factor Model	7.120	0.146	0.065	0.583	0.456	0.501	EPI + EPO + KS + KH + SP + EP + FP
Threshold limit	< 0.050	< 0.050	< 0.050	>0.90	>0.90	>0.90	

Table 2. Investigating alternative models.

*Notes:* EPI. Exploitative ambidexterity, EPO. Exploratory ambidexterity, KS. Knowledge sharing, KH. Knowledge hiding, SP. Social performance, EP. Environmental performance, FP. Financial performance.

Table 3 exhibits the reliability, convergent validity, and discriminant validity reports of the study. The reliability score revealed the consistency of the results generated by the construct where the acceptable limit is >0.70 [75]. All of the constructs underlying the study were reliable, as the minimum reliability was 0.802 (Financial performance). Further, convergent validity refers to the magnitude of the constructs' suitability to measure what it intends to measure, and the minimum acceptable limit for being convergent valid is with no less than 0.50 of its average variance extracted (AVE) [75,76]. The present study has no issue with convergent validity, since the minimum score of AVE is 0.530 (Knowledge sharing) [57,79,80,82]. Furthermore, we also investigated the discriminant validity result. It signifies the distinctiveness of each independent construct from others as the construct's correlation with other constructs is lower than the square root of its AVE. [75,76,83]. Table 3 shows no correlation estimate with any construct that is higher than the square root of the given construct's AVE. Thus, all the measurement models are discriminately valid.

Table 3. Reliability, Convergent Validity, and Discriminant Validities.

Latent variable	CR	AVE	1	2	3	4	5	6	7
1. FP	0.802	0.582	0.763						
2. EPI	0.891	0.577	0.353	0.759					
3. EPO	0.880	0.595	0.424	0.620	0.771				
4. KH	0.895	0.682	-0.203	-0.341	-0.447	0.826			
5. KS	0.818	0.530	0.176	0.426	0.486	-0.024	0.728		
6. EP	0.849	0.655	0.419	0.488	0.386	-0.166	0.204	0.809	
7. SP	0.863	0.759	0.269	0.387	0.373	-0.134	0.288	0.284	0.871

CR. Composite reliability, AVE. Average variance extracted, EPI. Exploitative ambidexterity, EPO. Exploratory ambidexterity, KS. Knowledge sharing, KH. Knowledge hiding, SP. Social performance, EP. Environmental performance, FP. Financial performance.

## 4.2.2. Structural Model Evaluation

Using the same AMOS-SEM, we examined the structural model. Apart from the stipulated fit indices, we also investigated the  $\beta$ -coefficient, p-value, and R<sup>2</sup> to confirm the genuineness of the result. Structural model fit indices are recommended between 0.50 to 0.80 for social science and management science disciplines in Hair Jr, Black, Babin, and Anderson [76]. However, our estimates reflected better indices (GFI = 0.881, TLI = 0.941, and CFI = 0.948). The RMSEA and RMR were 0.048 (<0.08) and 0.046 (<0.08), respectively, which were also within the threshold limit [84,85]. About  $\beta$  and R<sup>2</sup>, the former ( $\beta$ ) reflects the vitality of the association between the observed variables, and the later (R<sup>2</sup>) asserts the overall predictability of the model [57,79]. According to Hair Jr., Hult, Ringle, and Sarstedt [75], any score above 0.20 is acceptable in social and behavioral sciences. Surprisingly, both  $\beta$  and R<sup>2</sup> in Figure 3 yielded above the cut-off value, except the impact of knowledge sharing on sustainable performance ( $\beta$  = 0.030). Thus, the overall model fit is acceptable in this study.

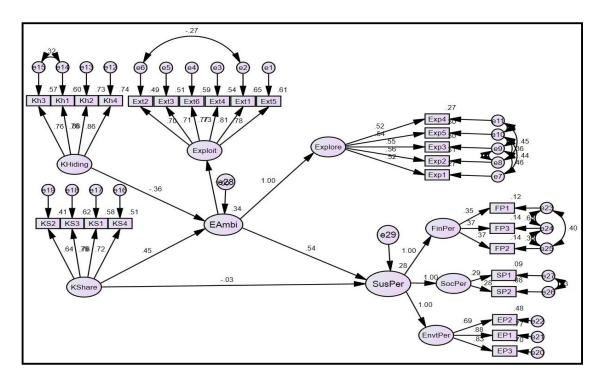


Figure 3. Structural Model.

# 5. Findings

# 5.1. Hypothesis Testing

Table 4 shows the direct effects of independent variables on depended variables. In H1, it is hypothesized that KS significantly influences SP. The result shows that the influence of KS on SP is not significant ( $\beta = -0.03$ , p = 0.692). Thus, H1 is not supported. Further, in H2, we proposed that KS significantly impacts EA. The result in Table 4 endorses that KS has a significant effect on EA ( $\beta = 0.45$ , p = 0.000). Hence, H2 is supported. Finally, we also contended that EA significantly influences SP. Estimates in Table 4 endorse that the proposed impact is significant ( $\beta = 0.54$ , p = 0.000). Therefore, H3 is also supported.

Hypotheses		Path Relation	s	Estimate	C.R.	р
H1	SP	<—	KS	-0.03	-0.396	0.692
H2	EA	<—	KS	0.45	3.726	***
H3	SP	<—	EA	0.54	3.966	***

SP. Sustainable performance, KS. Knowledge sharing, EA. Employees ambidexterity. \*\*\*. Significant at the 0.00.

# 5.2. Mediation Effect

We used process macros through bootstrapping of 5000 cases to test the mediation effect of EA on the influence of KS on SP because it involves a 95% bias-corrected confidence interval (meaning it is non-zero). According to Hayes [86], the indirect impact (the mediation effect) is supported if the upper and lower limits of the confidence intervals do not include zero. Table 5 exhibits the mediation effect (KS $\rightarrow$ EA $\rightarrow$ SP), which is significant because a 95% bias-corrected confidence interval does not include zero. Besides, the direct impact became insignificant after adding the mediating variable. Table 5 highlighted that the direct effect (c<sup>/</sup>) became insignificant after adding a mediating variable. Hence, there is a full mediating effect of employees' ambidexterity on the influence of knowledge sharing on

sustainable performance. We conclude that mediation (KS $\rightarrow$ EA $\rightarrow$ SP) exists because the upper and lower limit does not include zero. Thus, H4 is also supported.

		95% Confidence Interval					
Path	Estimate	<b>T-statistics</b>	Lower	Upper	Standard Error		
KS→EA→SP	0.184	3.309	0.084	0.302	0.055		
KS→SP ( $c^{/}$ )	-0.127	0.3102	-0.0681	0.0935	0.041		

Table 5. The Mediation Effect of Employees' Ambidexterity.

# 5.3. Moderating Effect of Knowledge Hiding

Similar to the investigation of the mediating effect, we also used process macros to examine the moderating effect [86]. Table 6 shows the moderating influence of knowledge hiding, which reveals that there is no significant moderating influence ( $\beta = -0.034$ , p = 0.599) of knowledge hiding over the hypothesized relationship. The insignificant influence of knowledge hiding on the hypothesized influence of knowledge sharing on employees' ambidexterity asserts that more or less knowledge does not contribute to the fluctuation of the influence of knowledge sharing on employees' ambidexterity. We plotted the statistical estimates in Figure 4. It unveils that knowledge hiding reduces, although not by a significant amount, the positive influence of knowledge sharing on employees' ambidexterity. Therefore, H5 is also not supported.

Table 6. The Moderation Effect of Knowledge Hiding.

Variables	β	SE	T-Value	<i>p</i> -Value	LLCI	ULCI
Constant	2.8053	0.4836	5.6829	0.0000	1.8336	3.7765
KS	0.4671	0.1173	3.9833	0.0001	0.2363	0.6979
KH	-0.1985	0.2672	-0.7427	0.4583	-0.7245	0.3275
KS×KH	-0.0336	0.0638	-0.5261	0.5992	-0.1591	0.0920

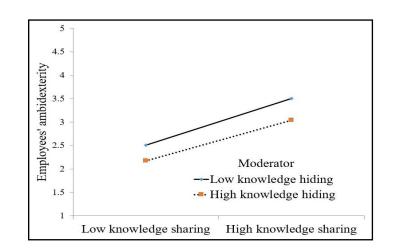


Figure 4. Moderating effect of Knowledge Hiding.

# 6. Discussion

The present study seeks to investigate the influence of knowledge sharing on sustainable performance with the influence of knowledge hiding as a moderator and employees' ambidexterity as a mediator. Accordingly, we describe and examine the structural relationships among four variables from the tenet of theoretical underpinnings such as social exchange theory, psychological ownership theory, human capital theory, and self-determination theory. Additionally, to test the model, five hypotheses were developed from the essence of both empirical and theoretical observations, and

the result summarized in Tables 4–6. It was hypothesized that (H1) knowledge sharing has a positive influence on sustainable performance, however, the test statistics of the study were not supported. Interestingly, the result is inconsistent with previous research and does not significantly influence the sustainable performance [8,87–90]. However, the insignificant effect of knowledge sharing is not very surprising because of the mediating influence of employees' ambidexterity. The dominant indirect effect via a mediating variable (full mediating influence) makes the significant direct influence insignificant [57,82,91]. In a way, employees' ambidexterity might be more focused through knowledge sharing for enhancing organizational sustainable performance.

As far as H2 is concerned, it is also found to be consistent with the results of prior studies [9]. Van Grinsven and Visser [59] mention that the more sophisticated the degree of employee alignment and networking, the higher the level of exploitation. When employees are acutely aware that their organization is committed to knowledge sharing, they will be able to improve and enhance their exploitative activities and exploitative abilities of employees. Hence, the study of Caniëls, Neghina, and Schaetsaert [26] confirms that knowledge sharing affects employees' ambidexterity. From the view of social exchange theory, we also contend that when employees share knowledge with their peers as to how they perform induction tasks and what they find, this interaction, in turn, stimulates enthusiasm and may further stimulate exploitative and explorative actions among employees.

H3 tested the influence of employees' ambidexterity on sustainable performance, which is also supported by earlier research [62] and is consistent with the findings of Quartey [92] and Rao and Thakur [62]. The result underlined that ambidextrous behavior could attain sustainability through exploration and exploitation using three different styles: structural, sequential, and contextual. In addition, the influence of employees' ambidexterity is found to have links to different types of performance, such as general performance [93,94], innovation performance [9,21,25], and environmental performance [21]. In this context, the reason behind the acceptance of H3 may be embedded in this inference that employees' ambidexterity might be more pertinent to sustainable performance [62].

H4 tested the mediation effect between the variables, and the result showed that employees' ambidexterity mediates the association between knowledge sharing and sustainable performance. The results underlined that employees' ambidexterity fully mediated the relationship between knowledge sharing and sustainable performance. Every organization must try to facilitate individual ambidexterity through the activation of knowledge sharing to grow, sustain themselves, and be viable [95]. There is substantial evidence that knowledge sharing is a significant source of increased sustainable performance [96]. A study of Kim and Park [97] showed that knowledge sharing stimulated the performance of sustainable organizations through the facilitation of stakeholders' engagement. Drawing our conceptualization from self-determination theory, human capital theory, and social exchange theory, we can conclude that an intention to share can improve employees' ambidexterity (self-determination theory) [98,99], which, as a consequence, (social exchange theory and human capital theory) gives rise to the enhancement of sustainable performance [52,55,56,100].

Finally, H5 stated that knowledge hiding moderates the influence between knowledge sharing and employees' ambidexterity. This finding concerning knowledge sharing and employees' ambidexterity is in line with what has been discussed and proposed by Connelly, Zweig, Webster, and Trougakos [29] as well as Rosing and Zacher [9]. The findings in this paper may be surprising but could be relevant to the current transformation of the banking sector of Bangladesh. Based on the notion of psychological ownership theory [101], it seems impracticable with no significant influence of knowledge hiding. However, the results provide a positive message to the banking professionals that knowledge hiding matters less due to a wave of influence from knowledge sharing toward sustainable performance through the mediation of employees' ambidexterity.

## 7. Conclusions

Knowledge sharing is one of the major research areas for academia in management science and other disciplines. However, only a few studies worldwide have focused on these factors. This study

provides a theoretical outline for shaping the impact of knowledge sharing on the sustainable performance of employees, especially in banks. This study maps the relationships among knowledge sharing, employees' ambidexterity, knowledge hiding, and sustainable performance in the Asian context. Overall, the study attempts to promote insight into how knowledge sharing pays attention to sustainable performance directly and indirectly. Henceforth, the study confirms that substantial knowledge sharing assists managers to promote employees' skills, and thereby significantly explains sustainable performance. Equally and important, it validates the perception that the more an organization recognizes the requirement of knowledge sharing and employees' ambidexterity, the more sustainability it can achieve.

Specifically, it contributes to advance the literature and empirical findings in three different ways. First, we criticized using structural equation modeling empirically through the theorization of knowledge sharing and employees' ambidexterity on methodological grounds. Second, we contended that previous studies were executed in individual settings. Hence, we advance the previous findings through the present study on a multi-level basis along with a multi-theoretical lens. Third, taken together, we suggest that connecting knowledge sharing, individual ambidexterity, and knowledge hiding might provide a wholesome view of conceptualizing organizational sustainable performance.

# 7.1. Theoretical Contributions

From the theoretical point of view, this study strengthens the existing literature of the banking industry in many respects. Particularly, the theoretical significance of this study can be divided into two parts: one related to sustainable performance and the other related to employee ambidexterity. First, the sustainable performance theme has become a major issue not only in the organization, but also in the academic arena, and this study has contributed to sustainability literature by demonstrating how employees' ambidexterity might predict sustainable performance. Additionally, the study extended the ambidexterity literature by linking knowledge sharing along with knowledge hiding. Second, our study reveals how employees' ambidexterity affects sustainable performance, while providing different consequences of knowledge sharing displays to those of previous studies. It signifies that practicing managers must shift their attention from the direct influence of knowledge sharing on sustainable performance can be better explained with the mediated model than directly using knowledge sharing. Finally, our research broadens the understanding of knowledge sharing and views of employees' ambidexterity as a predictor of sustainable performance, and responds to calls for more investigation to explore sustainability issues [62].

# 7.2. Managerial Implications

The results of this study imply that knowledge sharing enables employees to engage in ambidextrous activities. Notably, these findings are relevant for the banking companies, which want to be ambidextrous via their employees rather than by investing in ample training. Typically, banking businesses want to cater existing clients by continuously improving their services systems, while at the same time aim to remain practical by encouraging their employees to find anticipate future customer needs, creative insights, and search for new avenues for boosting sustainability. To stimulate the influence of employees' ambidexterity on sustainable performance, supportive actions should be conducted that empower the workforce to undertake useful initiatives. Meanwhile, the banking industry has opened up new opportunities for people to limit knowledge hiding. Findings of this research further revealed that people could have developed mechanisms for hiding knowledge or information that they do not want to share. This may hinder knowledge integration and prevent employees' ambidexterity from promoting sustainable performance. In a way, the inferential statistics might help practitioners and policymakers to suggest various insightful and practical implications that can help tackle the cross-cultural environment efficiently in distinct branches and further improve their level of performance to enhance sustainability.

# 7.3. Research Limitations and Further Research Directions

Even though the present study has various contributions, there are limitations that should be explicitly recognized and taken into account when interpreting its findings. First, the study explored the impacts of knowledge sharing on employees' ambidexterity and organizational sustainability at the firm level using a single source. To verify such reforms, this study suggests that future researchers could use participants' profile data and longitudinal data or an experimental research design [102]. Secondly, concerning the use of variables, the use of self-reports is another limitation, which leads to social desirability bias. In particular, the integration of knowledge sharing and employees ambidexterity might be prevented because of the presence of human boundary rationality [103]. Finally, in this study, we developed a research framework using prior valid constructs in the non-Western context. Nevertheless, the findings are sufficiently robust to provide experimental support for a direct explanation of knowledge sharing and indirect description of sustainable performance by employees' ambidexterity as well as knowledge hiding. Further studies in similar/dissimilar contexts will increase the generalizability of these findings.

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