

## Article

# Improving Quality of Human Resources through HRM Practices and Knowledge Sharing

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**Abstract:** One of the objectives of this paper is to examine the empirical effects of certain Human Resource Management (HRM) practices and reciprocity as antecedents of knowledge-sharing (KS) behavior. In an organization, human resource knowledge quality plays a key role in the effective performance of the organization by communicating their knowledge with management and co-workers to perform their tasks in a better way. This is possible only when useful and relevant quality knowledge is successfully shared. Despite various studies on this topic, there is little research on KS and HRM practices in developing countries like Pakistan. A survey-based approach is used for data collection from different employees in the banking sector of Pakistan. The hypotheses are formulated based on the four HRM practices and reciprocity. The dataset is critically investigated using structural equation modeling (SEM). The results of this study suggest that reciprocity, recruitment and selection, and performance appraisals have a significant relationship with KS behaviour. Furthermore, KS is independent of employees' training and development along with incentive systems in organizations. The contribution of this paper is how certain HR practices and employees' perceptions about reciprocity influence employees' knowledge sharing in an organization. This paper assists employers, employees, policymakers, and scholars to understand the factors that can promote knowledge sharing. This study also highlights the significant role of Human Resource Practices (HRP).



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**Keywords:** employee recruitment; employee training; knowledge sharing; performance appraisal; reciprocity

## 1. Introduction

In the current knowledge economy, most organizations desire to achieve competitive advantage through people because the current economy has shifted from tangible resources to intangible resources, for instance, individual knowledge, skills, and capabilities (Unger 2022). This shift highlights the need for an individual's relevant and quality knowledge and makes knowledge management (KM) vital in these organizations (Demir et al. 2023). For the last two decades, individual knowledge has been considered a highly contributory factor to organizational success (Bacon et al. 2019) for differentiating people on the basis of what they recognize. Along with organizational support, employees' willingness to share their knowledge plays a key role in organization success (Pereira and Mohiya 2021). Hence, an employee's perception is very important in the knowledge-sharing context because, in organizations, tasks are interdependent and one individual does not possess enough knowledge to solve all issues in the organization (Castellani et al. 2021). For this purpose, KS is considered a significant process to share quality knowledge that can help to improve quality human resources in organizations and ultimately better performances (Obeso et al. 2020).

If we can define, and concisely professionally describe some main features, directions, and trends of the current global economy and management, the current global market,

and the long-term development of the market—it is a very difficult, very complex task (Castellani et al. 2021). We are aware of this fact and, as such, we need a large set of knowledge and experience for this task, but we also need to know the context, a brief historical overview of how the global economy and the market developed and are developing, and what preceded the economy in the past to its current state. We also need to know and understand the connections and sharing.

Although knowledge sharing is important to achieve organization success and profitability, most individuals share irrelevant and not useful knowledge that can lead to anxiety due to criticism. One of the reasons for sharing low quality and irrelevant knowledge is due to the panic of losing authority and losing ownership of knowledge. This action can be reversed with fair and transparent rewards (Lee et al. 2020). As a consequence of unfair rewards, people tend to store their quality relevant knowledge (Serenko 2019). Precious human knowledge resources will be exhausted unless management recognizes the efforts to collect, transform, record, and share knowledge (Caballero-Anthony et al. 2021). Therefore, organizations need to find ways to engage employees in knowledge sharing (Saffar and Obeidat 2020; Tadesse 2020).

This study aims to explore antecedents of KS behaviour in employees. In developing countries like Pakistan, most people do not consider their employees and their knowledge as assets for the organization. This is because human resources are considered a cornerstone in organizations and are not properly measured in the context of employees' knowledge. For instance, HR functions may act as a barrier to employee's knowledge growth if the right person is not appointed at a right place and time. Hence, this can lead to the poor management of key resources. Although HR measurement methods are beyond the scope of our study, there is a gap in considering the suggestions of Human Resource Management (HRM) practices for the growing concern of KM (Cooke et al. 2021; Ferreira et al. 2022). Hence, this study fills the gap by covering employees' perceptions of knowledge-sharing behaviour by incorporating HR practices and reciprocity through the lens of the social exchange theory. Reciprocity is considered one of the strongest and most pervasive social forces that drive knowledge sharing behaviour. It is most probable in our culture that individuals will not share their knowledge until they receive something in return.

The next section will explain a review of the existing literature related to the concepts used in this study, followed by an explanation of the methodology and how the data analysis was performed. Finally, the data are interpreted and conclusions are drawn.

## 2. Literature Review

Managing human resources plays a vital role in organizations. While other resources, like machinery, buildings, and capital can be exhausted, humans as a resource always provide valuable contributions to organizations which cannot be exhausted (Obeso et al. 2020). Managing human resources positively influences organizational performance, which is possible when employees change their perceptions with increased commitment (Anwar and Abdullah 2021).

Generally, in an organization, the role of the manager is considered to represent the actions of the company itself. This is an appearance of the desire of a company. Further, the constitutional body may have one or more senior managers or executives decided by the company board (Peráček and Kaššaj 2023). However, in this study, the role of manager is not like the executives but a team player, who also participates in the process and monitors the employees as a participant. Knowledge sharing is a behavior that cannot be influenced through policies and rules but rather through flexibility and providing opportunities to the employees who have the knowledge. Similarly, HR managers focus not only on organizational objectives but also on employees' mental and financial contributions through psychological benefits (Caballero-Anthony et al. 2021; Nie et al. 2018). Such benefits may be based on an employee's knowledge, skills, and abilities for better outcomes. Similarly, some organizations focus on the right person for the right job and recruit those individuals who have the knowledge and demonstrate potential (Saffar and Obeidat 2020).

### 2.1. Quality Knowledge Sharing (KS)

Knowledge (tacit) is useful, not codified, knowledge and a source of information and creativity. The reason for this is that knowledge resides in an individual's brain, and learning activities and processes take place there (Castellani et al. 2021). The current business dynamic environment focuses on the learning and validity of knowledge; hence, an individual in an organizational setting may share their knowledge to gain validity (Caballero-Anthony et al. 2021). A study explained that KS, as the process of jointly swapping knowledge and applying that knowledge, may alert employees that the knowledge that resides in individuals' brains is still useful or obsolete to the organization (Cao et al. 2022). To understand this, a few decades ago, Polanyi (1966) suggested the separation of an individuals' knowledge into two main types: tacit and explicit. More importantly, it is tacit knowledge that is difficult to share and codify (Mitchell et al. 2022). Explicit knowledge refers to knowledge that is generally shared and transferred by employees' willingness, such as products' technical details, tools, and resources. In contrast, tacit knowledge means knowing the ledge that is unwillingly shared between employees (Asher and Popper 2021). This includes perceptions, beliefs, and experiences. The theme of this paper is that tacit knowledge is hard to quantify and is only transferred by the individual employees' willingness to do so (Fayyaz et al. 2021).

### 2.2. Reciprocity and Knowledge Sharing Behaviour

Several studies show that reciprocity and knowledge sharing have a positive relationship (Asher and Popper 2021; Fayyaz et al. 2021; Choi et al. 2020). It is an important social force that influences a person to return the favour against receiving favourable treatment from others (Gervasi et al. 2022; Gouldner 1960). Hence, reciprocity can act as an influencing factor for people to display discretionary behaviours (Li et al. 2020) like knowledge-sharing behaviour. According to the study of Blau (1964), reciprocity is an individual's benefit in becoming involved in social exchange. For instance, reciprocity benefits people who share their knowledge and they look forward to forthcoming help from others in return for sharing the knowledge (Li et al. 2020).

This study identifies several benefits of knowledge-sharing behaviour, such as promotion, status, and job security (Demir et al. 2023). From this perspective, knowledge-sharing behaviour can be positively affected by the perception of being reciprocated with some future benefit (Davidavičienė et al. 2020). Several researchers (see, for example, Cugueró-Escofet et al. 2019; Lee et al. 2020) suggest the positive influence of reciprocity on knowledge-sharing behaviours. The following hypothesis is, therefore, postulated:

In the literature, studies have had the most significant contribution regarding the definition of reciprocity (Gouldner 1960). These further state that individuals (employees) like to assist or help those individuals who have helped them, irrespective of any previous interaction. Hence, it shows that, at workplaces, employees act positively by sharing ideas, knowledge, and experience with other employees (Gope et al. 2018). Similarly, employees hoard information when others do so, even when asked; therefore, the act of reciprocity may be mentioned as a mutual exchange of knowledge and behavior. In this study, we used reciprocity as an independent variable to theorize that it independently influences knowledge-sharing behavior.

We suggest that several databases' research in the field of KS were based on HRM practices using technology, although most of the knowledge resides in an individual's brain, (i.e., tacit knowledge). Hence, employee's knowledge based on experience could be shared when it is informal and people-driven, rather than being driven by technology (Iqbal et al. 2015). Once knowledge sharing culture is developed, the knowledge in an organization is socially constructed and later transferred from tacit to explicit, which can be accessed by others.

**H1.** *Employees' reciprocity affects individuals' knowledge sharing behaviors.*

### 2.3. HRM Practices in the Context of KS

Prior literature suggests associations among HRM and KS in organizations because the primary concern of HRM is to manage human resources effectively. However, this is considered as managing headcounts, whereas, in the knowledge economy, organizations are managing employees' knowledge as a major source of improved performance (Hamadamin and Atan 2019; Andrej et al. 2023).

Properly managed human resources can achieve a competitive advantage by contributing to basic organizational objectives like quality, profits, and customer satisfaction (Elrehail et al. 2019). Academic research conducted at an organizational level suggests that HRM practices are the primary source used by organizations to shape and influence individuals' skills, attitudes, and behaviours for performing their tasks and achieving organizational objectives (Anwar and Abdullah 2021). Other authors suggest that HRM practices influence the knowledge sharing of the employees (Naeem et al. 2019). The study in this paper chose four HRM practices. These are as follows: incentive systems; performance appraisal; employee training and development, and employee recruitment and selection. We selected these as they are highly recommended in the knowledge management literature (Fong et al. 2011; Hamadamin and Atan 2019; Anwar and Abdullah 2021).

#### 2.3.1. Incentive Systems

Incentives, such as compensation, rewards, and recognition, are the primary HR practices that organizations used to strengthen employees to fulfil organizational goals (Anwar and Abdullah 2021). From the study of organizations that implement incentive systems, it was found that these practices are used in organizations as tools to obtain, boost, and maintain employees' desired knowledge sharing behaviours (Zhang et al. 2018). Reward, for instance, identifies organizational values that are considered standards of conduct and these values are important for guiding and shaping the desired behaviour in the organization (Lee et al. 2020). Several organizations use rewards and recognition to boost employees' positive behaviours to share their knowledge and increase their KS vision (Cugueró-Escofet et al. 2019). Hence, incentive systems encourage employees to share their knowledge and contribute to organizational benefit (Gope et al. 2018).

Furthermore, according to the social exchange theory, employees' knowledge sharing is valued by rewarding and recognizing them and, in turn, employees perceive a supportive work environment that better obligates individuals to respond with useful actions for their organization (Hameed et al. 2019). Empirical evidence supports the argument that compensation and reward are essential to enhance employees' KS behaviour (Ooi et al. 2009; Hameed et al. 2019).

**H2. Incentive systems positively influence knowledge sharing behaviour.**

#### 2.3.2. Performance Appraisal to Improve Quality Human Resource

In the current business environment, knowledge is a key resource; hence, organizations focus on individuals' knowledge sharing. Knowledge intensive organizations focus more on individuals' knowledge and evaluate the performance of the individuals on the basis of their quality-sharing initiatives with colleagues and management (Ahmed et al. 2020; Jha and Ray 2022). Research indicates that performance appraisal is an essential step for the performance and development of human resources (Abbas and Kumari 2021). It also suggest that a well-planned performance appraisal system supports knowledge management activities and recognizes these activities by creating employees' perception for the valuation of knowledge-sharing activities by organization. In addition, the most important part of performance appraisals is the evaluation of employees which helps them to understand and track their performance in a knowledge-sharing context (Obeso et al. 2020). Prior research shows that when employees in an organization perceive that the performance appraisal is fair and unbiased, according to social exchange theory, they will subsequently receive a positive viewpoint about their organization, and that will boost

their intention to be involved in knowledge sharing (Kim et al. 2018; Moldoveanu and Narayandas 2019). This argument leads to the following hypothesis:

**H3.** *Performance appraisals positively affect knowledge sharing behaviour.*

### 2.3.3. Training and Development

The existing literature on the current business environment suggests that updating employees' knowledge frequently requires relevant training programs. This is due to the fact that for leading top positions in their professional fields, employees need continuous awareness of developments within their specific disciplines (Moldoveanu and Narayandas 2019). A study explained training in a way that it is a strategic procedure to change attitudes and behaviour with learning skills to obtain efficient enactment in any activity (Carter et al. 2020), whereas development is explained as a long-term activity that is achieved through constant training in the workplace (Bos-Nehles and Veenendaal 2019). For knowledge sharing, training involves teaching communication skills, what knowledge is, and how to share the knowledge (Singh et al. 2021). The rationale for knowledge-sharing behaviour in teams stems from (Blau 1964) social exchange theory, which argues that a member will share his or her knowledge with the team because he or she expects reciprocity from fellow members (Babič et al. 2019). On the basis of the previous literature, the following hypothesis is proposed:

**H4.** *Training and development positively influence knowledge sharing behaviour.*

### 2.3.4. Recruitment and Selection

In the current emerging economy, it is important to acquire talent, and the recruitment strategy is changing from headcount to talent count for survival (Masenya 2022; Marica 2022). HRM introduced a significant staffing function that includes recruitment and selection practices to attain appropriate employees who have particular knowledge, skills, and abilities to achieve superior working performance (Wilton 2019). The organization will focus on getting a match between the KSAs of the applicant with the job requirements of the organizations (Mensah and Bawole 2020). However, the selection of the exact candidate who has knowledge-sharing perception is highly valuable and the recruitment methods facilitate organizations to attract candidates that have knowledge-sharing tendencies (Zhang et al. 2018). In the last couple of years during the pandemic, recruitment and selection strategies are vital as the nature of the work is also changing and changing knowledge sharing behaviour (Ahmed et al. 2020).

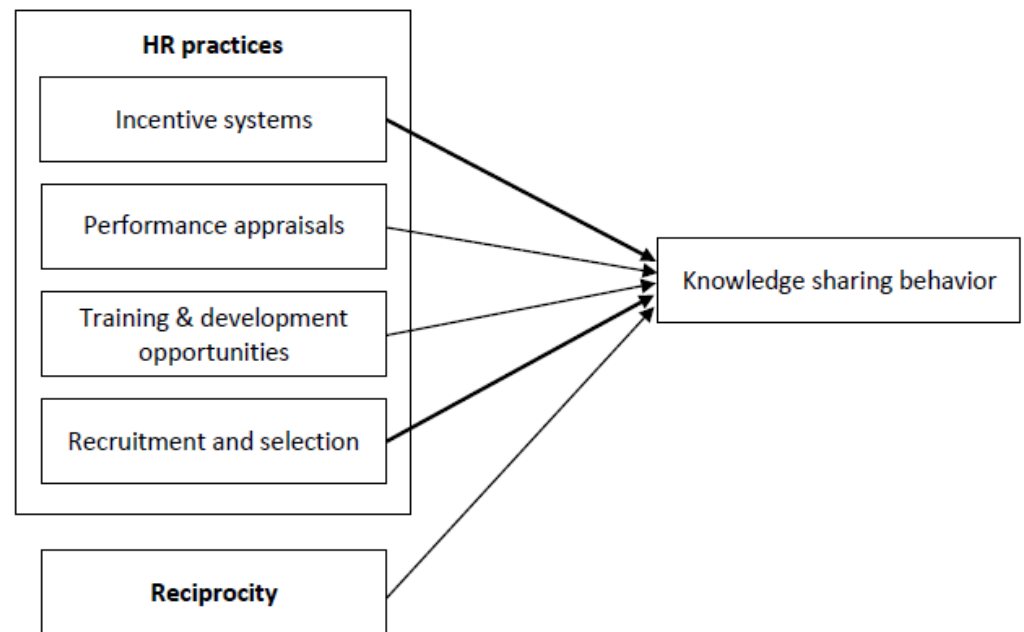
**H5.** *Employees' Recruitment and selection influence knowledge sharing behavior.*

One of the objectives of this study was to emphasize a developing country, like Pakistan, and examine the strength of the associations between HRM practices and employees' knowledge sharing behaviors, based on employees' perceptions. In this study, we focus on a few HRM practices that are relevant to this study. However, there are significant practices that can also influence employee's knowledge sharing, for instance, employees' staffing plays a vital role in knowledge-sharing culture, employees' collaborations, especially informal ones, appraisal systems, learning and development, job satisfaction, and analysis in general, etc. Along with HRM practices, there are other antecedents of knowledge sharing like communities of practices, interpersonal trust, and communication (Iqbal et al. 2015).

## 2.4. Conceptual Model

The research model (Figure 1) is constructed based on the prior literature.





**Figure 1.** Research model.

### 3. Methods

The research design is cross-sectional, where a questionnaire survey-based research method was used (see Figure 2 for the item source). The population used was the banking sector in Pakistan. The samples of this study were banks located in Lahore. Convenient sampling was used for sample selection (i.e., banks' employees). The main reason behind choosing the Pakistani banking sector was due to growth; almost every bank has branches all over the country, especially in rural areas. Knowledge-sharing behaviour is also important in this sector to sustain performance in the competitive market (Gillani et al. 2018). Another reason for choosing the banking sector is that there is tremendous competition among banks in different area to attract customers and this leads to positive growth in technological efficiency in Pakistani banks (Shair et al. 2021).

Data collection took place in Lahore where 300 questionnaires were distributed among employees in the banking sector over four weeks. First of all, we met the branch manager there and explained the purpose of the visit. After obtaining permission from the Branch Manager, we explained the importance of this study and motivated them as to how their participation played an integral part in completing this study. Employees agreed to complete this questionnaire. After three weeks, the questionnaires were collected for the sample. Out of 300, only 216 questionnaires were completed by the respondents (response rate of 72%). These data were used for data analysis. Data were analysed using the IBM statistical package for social sciences (SPSS) and IBM AMOS software by applying the structural equation modeling (SEM) technique. The survey is mentioned in Appendix A.

Item source table

Concept	Dimensions	Items	Sources
Human resource practices	Incentive systems	Item 1-4 Item 5	(Davenport & Prusak, 1998; Hargadon, 1998) (Lau & Idris, 2001; Edgar & Geare, 2005; Lopez, Peon, & Ordas, 2006)
	Performance appraisals	Item 1-2 Item no 3 Item no 4	(Delery & Doty, 1996) (Lau & Idris, 2001; Edgar & Geare, 2005; Lopez, Peon, & Ordas, 2006) (Kim & Ko, 2014)
	Training and development	Item 1-2 Item 3 Item 4 Item 5-6	(Lau & Idris, 2001; Edgar & Geare, 2005; Lopez, Peon, & Ordas, 2006) (Kim & Ko, 2014) (Boselie, Dietz, & Boon, 2005) (Delery & Doty, 1996)
	Recruitment and selection	Item 1-2 Item 3 Item 4* Item 5 Item 6-7	(Lau & Idris, 2001; Edgar & Geare, 2005; Lopez, Peon, & Ordas, 2006) (Delery & Doty, 1996) Designed by researcher* (Kim & Ko, 2014) (Ghosha & Gurunathanb, 2015)
Reciprocity	Reciprocity	Item 1-6	(Kankanhalli, Tan, & Wei, 2005)
Knowledge sharing Behavior	Knowledge sharing Behavior	Item 1-4 Item 5-9	(Bock, Lee, Zmud, & Kim, 2005; Davenport & Prusak, 1998) (Ameleh, Gazor, Koohkan, & Kiarazm, 2012; Kim & Lee, 2004; Lin W., 2008)

Figure 2. Item source.

#### 4. Results

The descriptive results of this study show that 65.7% of the respondents were male and 34.3% were female. The majority of the respondents (72.7%) fell between the age limit of 20–30 years, most having master's and bachelor's degrees (88.4%). More than half of them (53.2%) had between 1 to 3 years of experience.

##### 4.1. Reliability Test

The Cronbach's alpha of this study is shown in Table 1, thereby falling under an acceptable rule of thumb as suggested by (Nunnally and Bernstein 1994). In applying the statistical treatment of the hypotheses in the proposed model, several researchers have suggested a two-stage model-building process for applying SEM (Hair et al. 1998; Lin and Lee 2004). First of all, we developed a confirmatory factor analysis (CFA)-based measurement model. This is followed by the structural model.

**Table 1.** Reliability Test.

Constructs	Cronbach's Alpha
Employee's Incentive	0.83
Employee's Appraisals	0.81
Employee's Training	0.79
Recruitment and Selection	0.81
Knowledge Sharing Behaviour	0.79
Reciprocity	0.76

#### 4.2. Confirmatory Factor Analysis (CFA)

The results show that the CFA fit indices are in line according to the previous statistician's (Lin and Lee 2004; Ryu et al. 2003). Our study reports the ratio of statistics that measures absolute fit  $\chi^2/\text{d.f} = 1.468$ , GFI = 0.845, RMR = 0.059 values show a goodness-of-fit index and root mean square residual. Likewise, incremental fit measures include the values of the comparative fit index (CFI = 0.924), a familiar goodness-of-fit index (AGFI = 0.817), and a root means square error of approximation (RMSEA = 0.04). Moreover, parsimonious fit measures include PGFI = 0.714 and PNFI = 0.717 values that explained the model fit values. This analysis indicated that all the items loaded significantly with the CFA model yielding a good fit to the current data.

Table 2 shows that all goodness of fit indices fall under the acceptable threshold, indicating that the structural model depicting the relationship among HRM practices, reciprocity, and KS behaviour is a good fit (Browne and Cudeck 1992; Bagozzi and Yi 1988).

**Table 2.** Overall fit indices of CFA model.

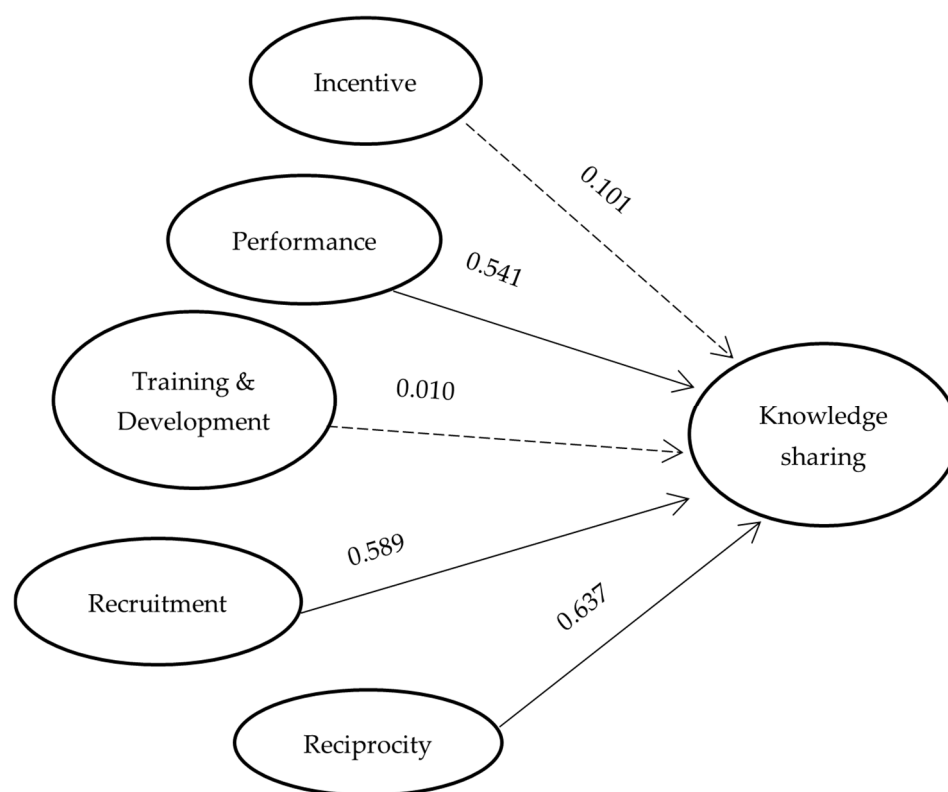
Fit Index	Scores	Recommended Cut-Off Values
Measures of Absolute Fit		
$\chi^2/\text{df}$	1.468 **	<2; <3 or 5
GFI	0.845 *	>0.90; >0.8
RMR	0.059 **	<0.05 or 0.08
Incremental Fit Measures		
AGFI	0.817 **	>0.90; >0.8
CFI	0.924 **	>0.90
RMSEA	0.04 **	<0.08
Parsimonious Fit Measures		
PGFI	0.714 **	The higher, the better
PNFI	0.717 **	0.06–0.09

Acceptability; \*\* (acceptable) \* (marginal).

#### 4.3. Hypothesis Testing

For the path validity of this model, the statistical implications of all essential parameter values are observed. As shown in Figure 3, the outcomes suggest that the relationship between performance appraisal and KS behaviour (H2) ( $p$ -value < 0.05), recruitment and selection and KS behaviour (H4) ( $p$ -value < 0.05), reciprocity and KS behaviour (H5) ( $p$ -value < 0.01) are significant and supported by the results of current studies (see Table 3 for details). On the other hand, there is no significant relationship between incentive systems and KS behaviour (H1) ( $p$ -value > 0.05), training and development and KS behaviour (H3) ( $p$ -value > 0.05), not supported by the results of current research.





**Figure 3.** Structural Model with standardized coefficient weights.

**Table 3.** Hypotheses testing result.

Hypothesis	Path	Path Coefficient	Std. Error	Critical Ratio	<i>p</i> -Value
H1	Incentive Systems → KSB	0.101	0.63	−1.209	0.227
H2	Performance Appraisal → KSB	0.541	0.123	2.005	0.045
H3	Training and Development → KSB	0.010	0.101	−0.305	0.760
H4	Recruitment and Selection → KSB	0.589	0.138	2.326	0.020
H5	Reciprocity → KSB	0.637	0.83	5.452	0.000

Note:  $p < 0.05$ , KSB (Knowledge Sharing behaviour).

## 5. Discussion

Our results suggest that reciprocity, performance appraisal, and recruitment have a positive relationship with KS behaviour. Incentives and training and development are, however, not found to be significant in KS behaviour. The significant relationship between performance appraisal and KS behaviour is consistent with studies conducted in the past (see, i.e., [Jha and Ray 2022](#); [Ahmed et al. 2020](#); [Fong et al. 2011](#); [Gope et al. 2018](#)). These results indicate that it is important to have knowledge sharing criteria in the Key Performance Index (KPI) to extend employees' work performance, which might result in effective knowledge sharing behaviour in organizations.

Consistent with [Naeem et al. \(2019\)](#), employees' recruitment and selection is significant in enhancing employees' knowledge sharing behaviour in organizations. Also, the relationship between reciprocity and knowledge sharing behaviour is significant and hypothesis five (H5) has been accepted. This result is consistent with the findings of ([Tsai and Kang 2019](#); [Davidavičienė et al. 2020](#); [Li et al. 2020](#)). This finding indicates the feeling of obligation in reciprocity as an influencing factor for employees to engage in discretionary behaviours like knowledge sharing for the organization. [Cugueró-Escofet et al. \(2019\)](#) also confirm the positive influence of reciprocity on KS. Similarly, [Tsai and Kang \(2019\)](#) found that knowledge sharing will not happen freely without reciprocity.

A key finding of our study shows that the relationship between incentive and a KS behaviour relationship is not supported. With reference to (Naeem et al. 2019; Zhang et al. 2018), incentives include compensation, rewards, and recognition, which organizations use to strengthen and influence employees' knowledge sharing behaviour. Rewarding and recognizing knowledge sharing behaviours gives a positive perception to the employees for the valuation of their knowledge sharing behaviour (Friedrich et al. 2020). Nonetheless, our study proposes that employees' KS behaviour is independent of incentives. Firstly, this surprising finding is consistent with different studies conducted in Pakistan, such as (Gillani et al. 2018). Previous studies by Islam et al. (2018) and Javaid et al. (2020) suggest that rewards (routine annual monetary rewards) have a negative impact on employees' KS behaviour where everyone will focus on how to gain the rewards and will subsequently ignore other work. Hence, the incentives have no effect on knowledge sharing behaviour. Second, it could be argued that in Pakistan mostly young employees are working in KIFs, due to the hiring of young graduates from the local universities to software houses, banks, and universities. The young employees focus more on the affiliation with their organization rather than on monetary benefits during their initial years of employment. Third, sharing relevant knowledge depends on individuals' willingness and formal HR practices in Pakistan may not be successful in motivating employees. Hence, informal knowledge sharing linked with HR practices could be used to tap the employee's knowledge in Pakistan.

The relationship between training and development opportunities and knowledge sharing behaviour (H3) is also not supported. In essence, formal and informal pieces of training are important because they encourage employees to share knowledge during formal and informal interactions between individuals so that they can exchange information and ideas beneficial for the organization (Naeem et al. 2019). Prior research showed that training opportunities are investments in employee development and career enhancement by the organization that oblige employees to reciprocate by initiating knowledge sharing behaviour (Kuvaas 2008; Ishak et al. 2023). In addition, there is the possibility that training sessions are not organized properly. Poorly presented training is not as effective in changing employees' attitudes or behaviours after they attend a poorly presented training session (Carter et al. 2020). Consequently, training programs are not meeting their standards. Previous studies reported that 95% of training reached a liking level, 37% of the training reached a learning level, only 13% of the training reached a level where learning is applicable in the workplace, and only 3% of training reached a level where this learning impacted the organization (Haugen et al. 2019). Therefore, it can be supposed that training and development are not linked with knowledge sharing behaviour as is suggested by the results of this current study.

The current research contains several limitations, First, the study used cross-sectional data collection methods, i.e., data were collected from one city at one time, which may lead to the common method bias. In the future, the researcher may gather data in different cities at different times, which may lead to the longitudinal method and mixed method approach to reduce biases. Second, data are based on employees' perceptions and could have limitations; management information may also be used to validate the results. Future studies might involve management to obtain better results. Third, the current study considered the one-dimensional nature of knowledge sharing, and future research may conduct studies that use the two-dimensional nature of knowledge sharing such as the knowledge sharing process or explicit and tacit knowledge sharing. Fourth, the selection of HR practices is limited and specific. The future researcher might consider other practices such as job analysis and others. Future research might consider the mediation analysis of reciprocity between HR practices and knowledge sharing behavior to obtain a better insight.

## 6. Conclusions

The main purpose of this study is to study the antecedents of quality knowledge sharing behaviour, as most scholars have focused on the outcomes of knowledge sharing behaviour. Once some key antecedents of knowledge sharing initiatives are clarified then

the outcome can be investigated. A vernacular version of reciprocity in an organization allows for the significant role of HR, which helps to manage quality knowledge behaviour starting from recruitment, performance appraisal, incentives, and employment opportunities for training and development. Keeping in mind that an arbitrary sample was selected, which includes employees primarily working in service sectors, the structured equation modeling techniques are valid and reliable as different fit indices have been examined in the results.

It is established in this study that, based on our sample, employee training is independent of knowledge sharing behaviour. This could be due to the fact that employees share their knowledge due to their willingness and formal training opportunities may not influence an employee to share their skills and knowledge with others. This finding suggests that it is independent, and no significant results are observed. Further, the incentives schemes alone formally cannot motivate employees to share knowledge. In the future, organization knowledge sharing culture, and management support may also be investigated to understand this phenomenon. It can be said that the key HR practices that focus on employee recruitment and evaluation can enhance the culture of knowledge sharing. These results demonstrate that managing knowledge is very vital for any organization.

The current outcomes suggest that, if any country in the world wants to be competitive and remain competitive in the future in the strong competitive environment of the global market economy, it must improve in the following areas: the quality of the business environment, the quality of institutions, the quality of the education system, science and research, innovations, etc., since we operate on academic grounds and are therefore part of educational systems. Furthermore, our results suggest managers at workplaces can diligently manage the organizations' human capital by applying HR practices. Moreover, it can be ascertained that extensive knowledge management capacity can lead to more inspiration and ground-breaking ideas and is readily followed by capability in the organization. If this is investigated and has significant results, then the organization can further develop and maintain the knowledge to improve organizational learning.

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**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data will be made available on request from the co-author salman Iqbal at salman.iqbal@ucp.edu.pk.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

The appendix contains the details of the survey questionnaire.

### Concept measurement

#### Human resource management practices

	<b>Incentive systems</b>
	receive a higher salary in return for my knowledge sharing
	receive promotion opportunities in return for my knowledge sharing.
	job security in return for my knowledge sharing with my colleagues.
	higher annual bonus in return for my knowledge sharing with my colleagues.
	<b>Performance appraisal</b>
	Performance appraisals are used primarily to set goals for personal learning.
	Performance appraisals are used to plan knowledge related skill development and training for future advancement within the organization.
	Performance management feedback systems improve the knowledge competencies of individuals.
	performance appraisal is a fair reflection of my performance.
	<b>Training and Development</b>
	Organization provides frequent training opportunities.
	Employee training and development policies cover all the personnel in the firm.
	organization always provides me real opportunity to improve my skills in this organization.
	<b>Recruitment and selection</b>
	The recruitment and selection processes in this organization are impartial.
	Favoritism is not evident in any of the recruitment decisions made in my organization.
	selection system focuses on the potential of the candidate to learn and grow with the organization.
	organization offer trial period to check person organization fit.
	recruitment team is able to recruit people with the right skills.

#### Reciprocity

	Sharing knowledge strengthen ties between existing members with provider.
	Sharing knowledge with colleagues, expand the scope of association with other organization members.
	Answer received when needed
	expect somebody to respond when individual in need.
	Expectation to get back some experience sharing
	Sharing knowledge, and in return queries for knowledge sharer will be answered in future.

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