



Impact of Knowledge Sharing on Teamwork Quality in SMEs of KPK: Mediating Role of Employee Autonomy

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Purpose This study investigates the mediating role of employee autonomy in relations ship of knowledge sharing and Teamwork Quality in SMEs in KP. Pakistan, with employee autonomy as a mediator. Grounded in knowledge-based theory and social exchange theory, it addresses gaps in understanding how knowledge exchange translates into enhanced team performance through empowerment mechanisms. Research Design A quantitative, cross-sectional design was employed, using a survey of 250 employees from SMEs. Data was analyzed using SPSS. Findings Knowledge sharing positively influences Teamwork Quality, with employee autonomy partially mediating this relationship. Research limitations/implications The cross-sectional design limits causality inferences; future longitudinal studies could explore moderators like team conflict. Practical implications SME managers should foster knowledge-sharing cultures and grant autonomy to boost team performance and organizational goals in resource-constrained settings. Originality/value This research provides empirical evidence on the underexplored mediating role of employee autonomy in SMEs, contributing to knowledge management literature in developing contexts.

Keywords: Knowledge Sharing, Employee Autonomy, Teamwork Quality, SMEs, Mediation



INTRODUCTION

In contemporary organizational environments, the effective management of knowledge and experience has emerged as a cornerstone of growth. Organizations often fail to capitalize on the valuable lessons and insights gained from past projects, a shortfall that can hinder progress and innovation (Cooke-Davis, 2002). To achieve consistent success, it is imperative for organizations to establish robust mechanisms for learning from previous experiences, integrating both explicit and tacit knowledge, and applying these insights to current processes and practices. At the heart of this capability lies the practice of knowledge sharing, which involves the dissemination of information and expertise among individuals and teams to achieve common goals (Ipe, 2008; Szulanski, 2005).

Knowledge sharing is a multifaceted phenomenon and can be either solicited, occurring in response to a specific request, or voluntary, where information is offered without a prior request (Teng & Song, 2011). Davenport (1997), however, characterizes it as an inherently voluntary act. The information exchanged can be subjective, derived from personal expertise; objective, relating to specific tasks; or dispositional, concerning an individual's unique capabilities (Lowendahl, Revang, & Fosstenlokken, 2001). Main objective of knowledge sharing is to synthesize existing information and interdependencies within an organization to generate new knowledge, foster innovation, and solve problems more effectively (Christensen, 2007; Kim & Park, 2017). As a critical component of knowledge management, its impact on efficiency performance is widely acknowledged (Alavi & Leidner, 2001).

The concept of employee autonomy has gained prominence recently. It is defined as "the degree to which the job provides vast freedom, independence, and discretion to the individual in scheduling the work and in figuring out the methods to be used in carrying it out" (Burcharth, Knudsen & Sndergaard, 2017, p. 1), autonomy empowers employees and has been linked to positive workplace perceptions and enhanced self-efficacy (Dhar, 2017; Dedahanov, Rhee & Gapurjanova, 2018). This empowerment is crucial for fostering an environment where teams can thrive and achieve their objectives, a concept known as Teamwork Quality. Effective teams are fundamental to organizational success. Team performance is influenced by factors such as knowledge integration and the interpersonal dynamics within the group.

There is a gap in the literature concerning their interplay of knowledge sharing and Teamwork Quality in the context of Small and Medium-sized Enterprises (SMEs). Alsharo, Gregg, and Ramirez (2017) have stated that further research is needed to explore the relationships between team-building dynamics like knowledge sharing and overall Teamwork Quality. The mediating role of employee autonomy in the relationship between knowledge sharing and Teamwork Quality has received limited empirical attention. This study seeks to address this gap by investigating this dynamic within the specific context of SMEs KP.

The main objective of this research is to examine the influence of knowledge sharing on Teamwork Quality and mediation effect by employee autonomy. This study has been designed to answer the following research questions:

1. Does knowledge sharing impact Teamwork Quality in SMEs?
2. Does employee autonomy impact knowledge sharing in SMEs?
3. Does employee autonomy impact Teamwork Quality in SMEs?



4. Does employee autonomy mediate the relationship between knowledge sharing and Teamwork Quality in SMEs?

This study contributes to the existing literature by providing empirical evidence on the mediating role of employee autonomy. The findings will offer valuable insights for managers in SMEs. It can highlight the importance of fostering both a knowledge-sharing culture and granting employees greater autonomy to boost Teamwork Quality. The theoretical foundation for this study is the knowledge-based view of the firm and social exchange theory. These theories posit that individuals are motivated to share knowledge with the expectation of reciprocal benefits. This process creates a cycle of exchange that enhances collective capabilities (Blau, 1964; Kankanhalli et al., 2005).

LITERATURE REVIEW

Drawing from knowledge-based theory, the literature review synthesizes key concepts, empirical findings, and gaps. Literature regarding all the concerned variables has been reviewed for development of conceptual framework.

Knowledge Sharing

Knowledge sharing is a critical process in organizations. It involves the exchange of explicit and tacit knowledge to foster learning and innovation. Organizations often fail to realize the significance of experience and knowledge gained through social interaction (Cooke-Davies, 2002). Effective mechanisms are needed to learn from past experiences. One should combine explicit and tacit knowledge and incorporate it into practices and processes for consistent success (Cooke-Davies, 2002). Knowledge distribution depends on the actions of the knowledge distributor rather than mere exchange between suppliers and beneficiaries (Szulanski, 2005).

Solicited and voluntary sharing are two form of knowledge sharing (Teng & Song, 2011). Solicited sharing occurs in response to requests for information, while voluntary sharing involves no prior requests (Teng & Song, 2011). This contrasts with Davenport (1997), who views knowledge sharing as a voluntary act where individuals present knowledge without obligation or pressure. Shared knowledge includes subjective information from expertise and experience, objective information about activities and jobs, and dispositional information on individual abilities and capabilities (Lowendahl, Revang, & Fosstenlokken, 2001).

Stakeholders typically assess shared information, with dispersed stakeholders often assuming it fails to explain common interests or objectives simply, instead focusing on processes and goals (Leinonen & Bluemink, 2008). Collaborative new information construction requires clarifying mutual situations for all stakeholders, leading to effective knowledge sharing through interaction (Leinonen & Bluemink, 2008; Cohen & Bailey, 1997). Stakeholders must manage knowledge interdependencies effectively, knowing where to find required information, its location, and authenticity through expert coordination (Faraj & Sproull, 2000).

The primary aim of knowledge sharing is to integrate interdependencies and information within the organization to create new knowledge dimensions and resolve issues more successfully (Christensen, 2007). Exchange of assignment records and professional data fosters novel ideas and innovations. Knowledge sharing is an essential component of knowledge management (Alavi & Leidner, 2001).

Past research has examined authoritative settings for knowledge sharing (Kim & Lee, 2006). For instance, support from top administration influences the affiliation between



knowledge sharing and IS/IT vital arranging (Pai, 2006). Prolonged data commitment within organizations impacts knowledge sharing (Watson & Hewett, 2006). Studies on organizational benefits yield mixed results: reward frameworks influence employee knowledge sharing capacities (Kim & Lee, 2006), but authoritative benefits do not always affect individuals' capacity to share knowledge with associates (Lin, 2007).

Employee Autonomy

Employee autonomy refers to the degree to which a job provides substantial freedom and discretion in workplace (Burcharth, Knudsen, & Søndergaard, 2017). It is a complex notion with many distinctive characteristics (Chen & Zheng, 2018). Those experiencing high employee autonomy view their workplace and provider local weather more positively (Dhar, 2017).

Managers enhancing autonomy urge subordinates to make their own inclinations (individual commencement), provide valued information about tasks and rules, and capture sentiments through compassion (St-Hilaire, 2017). Employee autonomy could be a sophisticated idea (Chen & Zheng, 2018). People with of work-related autonomy prove to be in a position to create positive contribution that can enhance the operation of their work (Dedahanov, Rhee, & Gapurjanova, 2018).

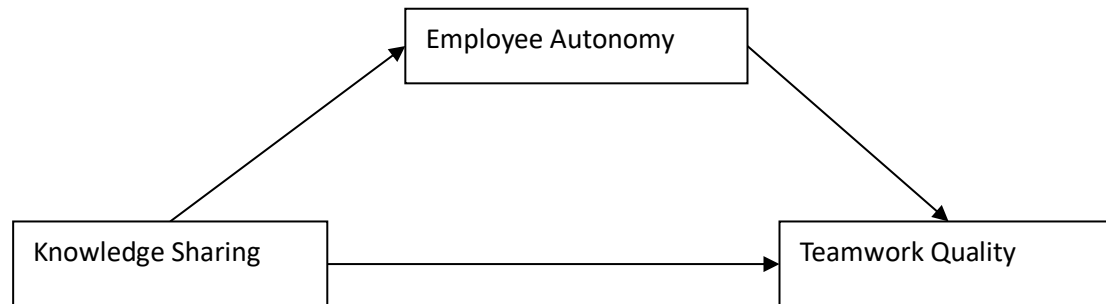
Teamwork Quality

Teamwork Quality is the overall performance of individuals on allotted tasks (Church, Elliot, & Gable, 2001). Effective teams have active work-associated support (Barua, 2016). Pleasure is important to Teamwork Quality, as it impacts crewmembers' self-efficacy, venture skills, level of effort, and pleasure in relation to their work (James, Anthony, & Ferris, 2013). One strategy assumes that assignment battle (intellectual clash) improves team adequacy, while association fighting is always inconvenient (Kuvaas, 2017).

A team's collective mood influences individual burnout, indicating the group setting's importance for prosperity (McLarnon & Rosehart, 2018). Differentiating healthy and unhealthy group conflict profiles shows team member burnout is more likely in the latter; teams with task conflict-dominant profiles engage in knowledge sharing and problem-solving, unlike those with useless conflict profiles restrained by relational pressures (McLarnon & Rosehart, 2018). Mission and relationship elements of conflict are distinct, with a possibility structure arranging results of intra-group conflict on individual and group execution (Flores, Jiang, & Manz, 2018). In vital basic leadership, the determination technique limits gathering strife (Lefley, 2018).

Theoretical Framework

The conceptual framework for this study is derived from the knowledge-based theory (Blau, 1964). This theory posits that individuals engage in knowledge sharing behaviors based on a self-interested analysis of costs and benefits in social exchanges (Molm, 2001; Gouldner, 1960). In this framework, knowledge sharing (i.e. exchange of information, skills, or expertise; Teng & Song, 2011; Davenport, 1997) serves as the independent variable, positively influencing Teamwork Quality (operationalized as the team's ability to achieve objectives through performance, coordination, and satisfaction; Church, Elliot, & Gable, 2001; Hoegl & Gemuenden, 2001). Employee autonomy (i.e. the degree of freedom, independence, and discretion in work; Burcharth, Knudsen, & Søndergaard, 2017) acts as a mediator, facilitating the translation of shared knowledge into enhanced team outcomes by empowering individuals to apply knowledge effectively (Dedahanov, Rhee, & Gapurjanova, 2018; Dhar, 2017).



1.1 Research Hypotheses

H₁: Knowledge sharing has a significant influence on Teamwork Quality.

H₂: Employee autonomy has a significant influence on Teamwork Quality.

H₃: Employee autonomy has a significant influence on Knowledge sharing.

H₄: Employee Autonomy mediates relationship of knowledge sharing and Teamwork Quality.

METHODOLOGY

The study is grounded in the knowledge-based theory framework discussed in the theory section (Blau, 1964). The study adopted a quantitative and cross-sectional research design to investigate the relationships among the variables (Creswell & Creswell, 2018). The survey method was adopted to gather self-reported data from participants (e.g., Kim & Park, 2017; Wang & Wang, 2012).

Sampling

The population of study is based on employees in teams within SMEs in KP. There are around 2,250 industrial units in the province (SMEDA, as cited in Ali et al., 2022). As properly compiled list of SMEs and their employees is not available with SMEDA, a non-probability sampling method i.e. convenience sampling was used. This method allows researchers to recruit readily accessible participants who meet the study's criteria (Etikan et al., 2016). The final sample included employees at different levels, with at least one year of experience. Based on the estimated population of over 2,250, a minimum sample size of 250 was set for the study. Questionnaires were distributed in person to employees in major industrial estates across KPK.

Data Collection Instruments

Data was collected using a structured questionnaire adapted from already validated scales. All items were rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) to ensure consistency and ease of response. Knowledge Sharing was measured using a 6-item scale adapted from van den Hooff and de Ridder (2004). Employee Autonomy was Assessed with a 9-item scale from Breugh (1985), which captures dimensions of work method, scheduling, and criteria autonomy. Teamwork Quality was evaluated using a 10-item scale from Hoegl and Gemuenden (2001), emphasizing communication, coordination, balance of member contributions, mutual support, effort, and cohesion.

RESULTS AND ANALYSIS

For the analysis of the data the statistical package for social sciences (SPSS) is used. Reliability was re-verified through Cronbach alpha. For the investigation of the relationships and mediation analysis; the Barron & Kenny (1986) procedure was used.



Reliability Analysis

Reliability analysis was conducted to ensure the consistency of variable scales. A Cronbach's alpha value of 0.7 or higher is the generally accepted threshold, signifying that the variables are reliable enough for further analysis. In table 4.1 the information about the scale reliability is shown. All the values are greater from threshold value of 0.7 which shows that it can be used for further analysis.

Table 4.1 Reliability Test

Variables	Cronbach's Alpha	Items
Teamwork Quality (DV)	.710	3
Knowledge Sharing (IV)	.731	6
Employee Autonomy (Med)	.807	5

Regression and Mediation Analysis

To investigate the causal relationship between variable regression analyses is conducted. For bivariate variable simple regression and for multivariate variables multiple regression tool is employed.

Step 1: Simple Regression Table 4.2.1

Teamwork Quality

Independent Variable	B	R ²	Sig
Knowledge Sharing	.828	.685	.000

* $P < 0.05$, ** $p < 0.01$, *** $p < .001$ N=250 Standardized regression coefficient reported From table 4.2.1. Hypothesis 1 is supported which claim a positive relationship between knowledge sharing and Teamwork Quality. The result indicates that knowledge sharing positively and significantly influence the Teamwork Quality. The standardized beta or coefficient value is 0.828 which mean that if the independent variable (knowledge sharing) increase by one standard deviation the dependent variable (Teamwork Quality) on average is increase by 0.828 standard deviation units. The coefficient of determination value is 0.68 approximately which means that about 68 % of variation result in Teamwork Quality due to knowledge sharing.

Step2

Simple Regression Table 4.2.2

Employee Autonomy

Independent Variable	B	R ²	Sig
Knowledge Sharing	.905	.894	.000

* $P < 0.05$, ** $p < 0.01$, *** $p < .001$ N=250 Standardized regression coefficient reported From table 4.2.2 hypothesis 2 is supported which claim a positive relationship between knowledge sharing and employee autonomy. The result indicates that knowledge sharing positively and significantly influence the employee autonomy. The standardized beta or coefficient value is 0.905 which mean that if the independent variable (knowledge sharing) increase by one standard deviation the dependent variable (employee autonomy) on average is increase by 0.905 standard deviation units. The coefficient of determination value is 0.89 approximately which means that about 89% of variation result in Teamwork Quality due to knowledge sharing.



Step 3
Simple Regression Table 4.2.3
Teamwork Quality

Independent Variable	B	R ²	Sig
Employee Autonomy	.943	.890	.000

P* < 0.05, *p* < 0.01, ****p* < .001 N=250 Standardized regression coefficient reported
From table 4.2.3 hypothesis 3 is supported which claim a positive relationship between Teamwork Quality and employee autonomy. The result indicates that employee autonomy positively and significantly influence the Teamwork Quality. The standardized beta or coefficient value is 0.943 which mean that if the independent variable (employee autonomy) increase by one standard deviation the dependent variable (Teamwork Quality) on average is increase by 0.943 standard deviation units. The coefficient of determination value is 0.89 approximately which means that about 89% of variation result in Teamwork Quality due to employee autonomy.

Step 4
Multiple Regression Multiple Regression Table 4.2.4
Test of Mediation
Teamwork Quality

Independent Variables	B	T value	Sig
Knowledge Sharing	.072	2.026	.000
Employee Autonomy	.142	2.918	.004

P* < 0.05, *p* < 0.01, ****p* < .001 N=250 Standardized regression coefficient reported
According to Baron and Kenny (1986) to investigate the mediating role of a variable, there should be significant relationship among the variables given in the above steps. As shown in table 4.2.1, table 4.2.2 and table 4.2.3 all the three simple relationship regression are highly significant which fulfill the condition for the mediating analysis of a variable. In the mediation table 4.2.4 as shown the mediating variable employee autonomy along with the predictor variable knowledge sharing effect on the dependent variable Teamwork Quality is analyzed. In table 4.2.4 knowledge sharing and employee autonomy is regressed on the dependent variable which is both significant at 1% of significance level. For the mediation to exist the direct path value from simple regression of table 4.2.1 is to be reduced in the indirect path regression in table 4.2.4 in which the mediator employee autonomy is introduced. As shown in table 4.2.1 the direct path value of standardized beta is 0.828 in step 1. After introducing mediator employee autonomy in step 4 the standardized beta for knowledge sharing become 0.072.

The total amount of the relationship between knowledge sharing and Teamwork Quality through mediation (0.905-0.072=0.833). The indirect path of knowledge sharing to employee autonomy and from employee autonomy to Teamwork Quality is (0.905*0.142=0.128). This whole process conforms a partial mediation between knowledge sharing and Teamwork Quality.



SUMMARY OF ACCEPTED/ REJECTED HYPOTHESIS

Table 4.4.1: Summary about Accepted Hypothesis

Hypothesis	Statements	Outcome
H1	Knowledge sharing has a positive influence on Teamwork Quality	Supported
H2	Knowledge sharing has a positive influence on employee autonomy	Supported
H3	Employee autonomy has a positive significant influence on Teamwork Quality	Supported
H4	Employee Autonomy mediates relationship of knowledge sharing and Teamwork Quality.	Supported

CONCLUSION

The findings show that knowledge sharing enhances Teamwork Quality by fostering innovation, problem-solving (Kim & Park, 2017; Alavi & Leidner, 2001). Employee autonomy mediates this relationship, as it empowers individuals with freedom and discretion. It leads to positive workplace perceptions and operational improvements (Burcharth, Knudsen, & Søndergaard, 2017; Dedahanov, Rhee, & Gapurjanova, 2018). The results show the critical role of voluntary knowledge exchange and autonomy in achieving team goals. It ultimately leads to organizational success (Wang & Wang, 2012; Park & Lee, 2013).

FUTURE RESEARCH DIRECTIONS

Future studies should expand on the identified gaps by exploring the association between team building and Teamwork Quality in diverse contexts (Alsharo, Gregg, & Ramirez, 2013). Additional research could incorporate moderators such as team conflict (McLarnon & Rosehart, 2018; Flores, Jiang, & Manz, 2018). Longitudinal designs can also provide insights into the long-term dynamics of knowledge sharing and autonomy (Chiu et al., 2006; Kankanhalli et al., 2005).

PRACTICAL IMPLICATIONS

For SME managers in KPK, the study highlights the need to cultivate knowledge (Kim & Lee, 2006; Faraj & Sproull, 2000). Granting employee autonomy can further enhance these benefits (Dhar, 2017; St-Hilaire, 2017). Organizations should implement training to encourage voluntary sharing and self-sufficiency (Christensen, 2007; Bartol & Srivastava, 2002). This approach is important for SMEs aiming to modernize and compete effectively (Wang & Wang, 2012).

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