International Journal of Knowledge Management
Volume 18 • Issue 1

Co-Worker Support and Communities of Practice:
Mediating Role of Employee Personal Interaction

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ABSTRACT

Communities of practice foster sharing of knowledge in the organisations. For the creation of such an organisational-level practice community, a motivating environment for the development of such practice communities should be created by the support perspective among co-workers, supervisors, and the organisation. The present study examines the relationship between co-worker support and communities of practice with the mediating role of personal interaction. The data were collected from 178 respondents representing the manufacturing and service sector Indian organisations with various demographic characteristics. In accordance with the hypotheses developed, the findings supported the hypotheses. The structural equation modelling showed that the path from co-worker support to communities of practice is mediated by personal interaction with highly significant results. The theoretical and managerial implications concerning the importance of support, most importantly co-worker support, are mentioned in the study. Future scope of research is suggested based on the current findings of this study.

KEYWORDS

Communities of Practice, Co-Worker Support, Indian Organization, Mediation, Personal Interaction, Research Methods

INTRODUCTION

Globalization and industrialization have created knowledge-intensive organizations and other than knowledge-based organizations to heighten knowledge sharing in these organizations. As a means of tacit knowledge transfer (Bertels et al., 2011), communities of practice (COP) can help them move towards their goals and achieve more extraordinary performance (Lesser & Storck, 2001) and productivity through knowledge transfer. The spread of knowledge in organizations can occur through training interventions and formal and informal COP. The original concept of COP is based on self-directed participation, familiarity, and naturally growing, community-oriented tasks (Kirkman et al., 2013). In organizations, COP can occur informally and formally; in the form of traditional COP and corporate teams (Kirkman et al., 2011). Confidence and trust among the members are the basis

DOI: 10.4018/IJKM.297607 *Corresponding Author

for COPs (Kimble et al., 2001), paving the way for high employee empowerment and interpersonal member dependence (Kirkman et al., 2011).

The organizations can strive better by active employee forces concerning their support and managing interpersonal relations and interactions. Theoretically, Social Exchange Theory (SET) (Blau, 1964), explaining the importance of social exchange and cooperation among the members, is considered as a framework for explaining the model and essential aspects of social exchange and social learning at the workplace where lateral relationships can be built (Käser & Miles, 2001). There can be various types of social support agents in the organization, but the significant impact is due to co-workers' support because the primary interaction occurs between the co-workers in the organization (Taormina, 1997).

Interpersonal interaction among co-workers plays a significant role in creating a supportive climate. Networking in organizations occurs through interaction and communication between employees to share knowledge (Balle et al., 2020). Such informal interactions between the co-workers also lead to a positive affect (Dimotakis et al., 2011), creating support from co-workers. Similarly, the creativity among the group or an individual may result from the interactions with the colleagues through social media and face to face interactions (Zhou et al., 2009). Thus, the value of personal interaction among co-workers may lead to higher sharing of knowledge and skills, leading to better job performance. Prior studies have shown the role of co-worker support in elevating job satisfaction (Chiang & Wu, 2014), safety performance (Guo et al., 2019) and occupational self-efficacy (Tomas et al., 2019), but a thorough analysis of the role of co-worker support for COP in the organizations are missing. Additionally, the status of their relationship has not been understood earlier in the presence of a mediator variable. Moreover, the underlying mechanism of the relationship between co-worker support and COP mediated by personal interaction is also unidentified. Thus, with the realization of the dearth of studies on the relationship between the underlying variables of the present study, the authors anticipated a positive association between co-worker support and COP mediated by personal interaction. Therefore, this research aims to study the relationship between co-worker support and COP with personal interaction as a mediator. Also, co-worker support and personal interaction are analyzed as two different antecedents to COP. The study proposes that co-worker support and personal interaction at workplaces enhance the organization's COP. Accordingly, the authors propose to address the subsequent research questions of the study, which are as follows:

1. Does co-worker support enhances the interpersonal interactions among the employees?
2. Does personal interaction among the employees promote the creation of COP in the organization?
3. Does co-worker support leads to the development of COP in the organization?
4. Does personal interaction mediate the relation between co-worker support and COP?

The organization of the study is elaborated further. The following section explains the theoretical framework of the study, followed by theoretical background and hypotheses formulation based on the literature evidence. Next is the research methodology section, which describes the objectives, research design, sample and data collection technique, measures used for the constructs and analytical approach. This is followed by the data analysis and results section followed by the discussion section. The final section consists of the conclusion, implication, limitations and future research avenues.

Theoretical Framework

The relationships established hypothetically are based on the social exchange theory (Blau, 1964). According to the SET, social exchange relationships comprise exchanging socio-emotional benefits and associating with close personal affections and open-ended obligations (Cropanzano & Mitchell, 2005). The Social Exchange Theory suggests that when there exists a greater level of supervisory and co-worker support, norms of reciprocity will develop, inducing an individual to use internal ways to affect behaviour change (Mesmer-Magnus & Viswesvaran, 2005). Following the basic concept

of COP, the social capital theory emphasizes social connectivity, leading to learning benefits for the employees (Sandefur & Laumann, 1998). Also, the social learning system is fostered by augmenting social relationships at the workplace for knowledge transfer and learning (Lave & Wenger, 1991).

THEORETICAL BACKGROUND

Co-Worker Support

There is an empathetic perspective towards social support among the employees in organizations. When there is cooperation among the co-workers, there is a reduced possibility of conflict and competition, leading to reduced job insecurity (Glambek et al., 2014). An earlier study argued that lower co-worker satisfaction reduces employee interactions and support from co-workers (Golden, 2007). A good amount of literature has emphasized the role of social support in the organizational setting (Vera et al., 2016; Yoon & Lim, 1999); while the consideration of co-worker support as a single construct is considered to be consistent with a previous study (Lehner et al., 2013). In addition, a previous study has reported the role of co-worker support in providing network resources in the organizational setting (Newman et al., 2011). Thus, the organization's perceived and actual social support, including co-worker support, may align with the socialization perspective, enhancing job effectiveness.

Personal Interaction

Interpersonal interaction theory suggests that reasonable and creative interactions occur when two individuals have a compatibility characteristic (Carson, 1969; Sadler et al., 2012). A previous study stated that personal interaction influences employees' capability to be friendly, understandable, and willing to contribute (Chen et al., 2013) and acts as a critical facilitator in transferring knowledge (Gertner et al., 2011). Learning in the organization instead of virtual communication may also occur based on personal behaviour (Halberstadt et al., 2019). Personal interaction among co-workers in the organizations necessitates a social structure created within the organizational boundaries (Fontana et al., 2017). Thus, personal interaction and formal or informal communications motivate the employees to cooperate and work effectively in teams and achieve group and organizational objectives. The meta-analysis on team outcomes found the positive effect of internal communication on team members' innovation (Hülsheger et al., 2009). Moreover, the valence-symmetric results indicated that an organization's resources should best be assigned to raise positive interactions (Dimotakis et al., 2011) among the employees, leading to a happy work environment and supportive climate at the workplace.

Communities of Practice

The concept of COP was first developed by Lave & Wenger (1991). COPs are developed based on situational social learning theory (Bettiol & Sedita, 2011). COPs are a set of associations midst persons, activity, and world, and concerning other peripheral and overlying COPs (Lave & Wenger, 1991). COP has a characteristic of self-organizing, and it intends to improve organizational and individual performance by adapting personal knowledge and information into organizational knowledge (Choi et al., 2020). Drawing from the earlier study, COP comprises three essential baseline factors: joint enterprise, share repertoire, and mutual engagement (Wenger, 1998). Mutual engagement is witnessed when community members work on a crass problem via an informal interaction (Sole & Edmondson, 2002). The collective adaptation of a set of concerns of common interests that the members consider positively pursuing is collectively called joint enterprise in COP (Brown & Duguid, 1991), where the knowledge disseminating perspective is socialized.

A piece of innovative knowledge is shared through personal interactions between individuals even when working alone, and the collective action assumed by these organizational communities fosters close linking of the social and cognitive dimensions (Paraponaris & Sigal, 2015). Knowledge

creation and sharing focus on producing a competitive advantage for companies, enhancing the performance of employees and organizations and can add to the development and transfer of services and activities that are valuable to society (Ngulube, 2019). The concept of online virtual COP has led the members to interact freely and engage in knowledge sharing to a greater extent (Haas et al., 2021). The availability of an online knowledge interface needs to be effective and integrated for knowledge creation and sharing (Jennex & Olfman, 2006) and hence organization based online COP could hence be promoted virtually.

HYPOTHESIS DEVELOPMENT

The hypotheses developed to address the research questions are as follows.

Relation Between Co-Worker Support and Personal Interaction

Co-worker support as an organizational socialization tactic denotes the employees' apparent acceptance by co-workers and the level to which they offer aid during the day-to-day interactions at the workplace (Taormina, 2004). These interactions are the most viable as the most social and interpersonal interactions occur between co-workers in the organization (Taormina, 1997). Hence, co-worker support may lead to higher personal interactions among the employees at their workplaces. Thus, the first hypothesis of the study is:

Hypothesis 1: Co-worker support is positively related to personal interaction among the employees.

Relation Between Personal Interaction and Communities of Practice

Personal interactions with expert members involve acquiring and applying knowledge that empowers individuals to address issues and tasks for which the solutions were not noticeable earlier (Neufeld et al., 2013). The shared repertoire among the member employees is achieved through interpersonal interactions (Wenger, 1998), thus implying employees' interaction to share knowledge and skills better. The mutual engagement perspective of COP paves the way for informal interaction among the employees for collective exposer to solve work-related problems (Sole & Edmondson, 2002), hence creating a sense for a second hypothesis. The personal interactive systems in the organizations give rise to COP, wherein employees interconnect and interact on matters of their shared interest in a shapeless and non-routine arrangement (Earl, 2001). This community interaction leads to the development of the second hypothesis. Therefore:

Hypothesis 2: Personal interaction among the employees is positively related to COP.

Relation Between Co-Worker Support and Communities of Practice

The supportive integration of the members in organizations is operative where wider community involvement occurs (McClaren et al., 2010), and other external factors are considered. The cooperation among the employees in the organization drives to create a social exchange culture (Siemsen et al., 2007). An earlier study argued that community practices and support are critical areas of work-life fostering work engagement and better output (Maslach & Leiter, 2008). Thus, co-workers' support may lead to an agreeable climate at the workplace, paving the way for COP, where employees can discuss and solve work-related issues. Thus, the third hypothesis can be stated as:

Hypothesis 3: Co-worker support is positively related to COP.

The Mediating Role of Personal Interaction

Interpersonal interaction among co-workers may create a social support perspective in the organization. While during knowledge sharing, the donor's knowledge is provided to the recipient in various ways, such as networking and personal interaction (Daghfous & Ahmad, 2015) through COPs in the organizations. The interpersonal interactions among the community members may create a clear perspective and generate ideas (Gertner et al., 2011) related to jobs and team tasks. Social learning occurs even through co-workers' support, mediation, and supervision (Warhurst, 2008), creating a social learning perspective through COP. Thus, the argument leads to the hypothesis:

Hypothesis 4: The relation between co-worker support and COP is mediated by personal interaction among the employees.

RESEARCH METHODOLOGY

Objectives

The objectives of the study are:

1. To study the relationship between co-worker support and personal interaction among the employees at the workplace.
2. To study the relationship between personal interaction among the employees and COP in the organizational setting.
3. To study the relationship between co-worker support and COP.
4. To comprehend the mediating role of personal interaction among the employees in the relation between co-worker support and COP.

Research Design

The current study applies a descriptive form of conclusive research design to study the relationship between independent and dependent variables with mediating role of another variable. This study was conducted as a non-experimental field survey and as a cross-sectional research where the data was collected from different subjects at a single span. In addition, a self-reported questionnaire was administered for collecting data from the respondents.

Sample and Data Collection Procedure

Data were collected from 178 respondents working as regular employees from the manufacturing and service sectors of Indian organizations with approximately 100 crores turnover in Indian currency. A convenience sampling technique was employed in this study, which is a non-random non-probability sampling method. This sampling method is applied when the data gathered from an unknown population is dispersed in a large geographical area (Verma et al., 2018). The questionnaire was distributed as a google form, and the link to the form was sent through e-mail. The respondents were notified about the mechanics of the survey and were requested to fill the questionnaire. The respondents were requested to select the response which best manifests their opinion about the item on the scale. All the respondents who received the questionnaire via google form submitted the wholly filled questionnaire, and there was no issue of missing responses since all the items were made compulsory.

Complete data of 178 respondents were received. The sample size of 178 obtained is sufficient for the study as per the guidelines provided by Hair Jr et al. (2010) that the sample size, at any rate, should be five times to appropriately ten times the number of observations into the study. Out of the responses, 73.6 per cent out of the sample were males, and the remaining were females. The respondents' average age was 32 years, and the average work experience was six years.

Measurement Scales

The Co-worker support as a 5-item subscale from the 20-item Organisational Socialization Inventory (Taormina, 2004) was used to measure co-worker support. The sample items included "My co-workers are usually willing to offer their assistance or advice", while the coefficient $\alpha = 0.96$ The personal interaction (PINT) modified 7-item sub-scale from the 28-items scale from (Yi 2009) was used to measure the organization's employees' personal interaction. The sample item included "Share experiences that may help others avoid risk and trouble through personal conversation". The Cronbach alpha was 0.86. Finally, to measure Communities of Practice (COP), a modified sub-scale (Yi, 2009) with 7-items was utilized. The sample item to measure COP included "Meet with community members to create innovative solutions for problems that occur at work", with an α coefficient of 0.92. A 7-point Likert scale ranging from 1= never/strongly disagree to 7 =always/ strongly agree used to measure the survey responses.

Analytical Approach

The confirmatory factor analysis, structural equation modelling, check for validity and reliability of the study was applied. Furthermore, the hypothesis was tested through structure, equation modelling with the Soble test for mediation analysis. In addition, the Satora-Bentler chi-square test for non-normality with 1000 bootstrapping random resamples at a 95 per cent confidence interval was conducted to analyze the mediation effect of personal interaction on co-worker support and COP. The current study used SPSS 16.0 and R and R-studio 1.3.1093.exe software for statistical analysis.

DATA ANALYSIS AND RESULTS

A Confirmatory Factor Analysis (CFA) was carried out to analyze the data for developing the measurement model. The latent factors were measured and analyzed for the model fit, and a dimension level CFA was carried out. The three factors co-worker support, personal interaction and COP model fitted the data well with values (χ^2 [132] = 139, p-value > 0.05, CFI (Comparative Fit Index) = 0.99, GFI (Goodness of Fit Index) = 0.99, RMSEA (Root Mean Square Error of Approximation) = 0.018, SRMR (Standardized Root Mean Square Residual) = 0.051) according to (Hooper et al., 2008).

Common Method Bias

After applying CFA for testing the measurement model, the researchers further validated the measurement model by following the recommendation of Podsakoff et al. (2003). The spurious effect of common method bias/variance (CMV) from the self-reported questionnaire was accounted for by taking specific steps. A cover letter was added to the questionnaire during the survey process, assuring the participants' anonymity and confidentiality. Moreover, the respondents were requested to answer each question honestly to avoid evaluation apprehension. Also, the factor loadings of all the study items were significant at $p<0.001$. Further, to avoid the threat of CMV, Harman's single-factor analysis was conducted. The first single factor accounted for 35.991 per cent out of the total variance, which is far less than 50 per cent, providing additional support that common method bias was not an issue in this study.

Descriptive Statistics

Table 1 represents the descriptive statistics such as means, standard deviation, correlation of the demographics, and the study variables. Personal interaction was positively correlated with education ($r = 0.158$, $p < 0.01$), while COP was positively correlated with age ($r = 0.173$ and $p < 0.05$) and education ($r = 0.197$ and $p < 0.01$) respectively. The average variance extracted (AVE) for all the study variables was more than 0.5, and the composite reliabilities were above the threshold of 0.7, ranging between 0.88 and 0.97, thus showing adequate convergent validity of the constructs (Anderson &

Table 1. Mean, standard deviation and correlation of study variables

		α	CR	M	SD	1		2		3		4		5		6		7	8	9		10		11
1	**Gender**	-	-	0.264	0.442	-		-		-		-		-		-		-	-	-		-		-
2	**Age**	-	-	0.320	0.513	-0.300	**	-		-		-		-		-		-	-	-		-		-
3	**Marital status**	-	-	0.297	0.458	0.223	**	-0.407	**	-		-		-		-		-	-	-		-		-
4	**Job position**	-	-	1.067	0.606	-0.130		0.293	**	-0.296	**	-		-		-		-	-	-		-		-
5	**Education**	-	-	1.63	0.653	0.224	**	-0.015		-0.025		-0.065		-		-		-	-	-		-		-
6	**Salary**	-	-	1.084	0.794	-0.257	**	0.266	**	-0.364	**	0.316	**	0.028		-		-	-	-		-		-
7	**Organization status**	-	-	0.36	0.481	-0.104		0.171	*	-0.078		-0.180	*	-0.131		0.009		-	-	-		-		-
8	**Total work experience**	-	-	0.60	0.658	-0.335	**	0.680	**	-0.484	**	0.407	**	-0.096		0.378	**	0.099	-	-		-		-
9	**Co-worker support**	0.96	0.928	6.01	0.867	0.021		0.079		-0.069		0.000		-0.019		0.029		0.080	0.040	**0.721**		0.098		0.054
10	**Personal interaction**	0.86	0.889	5.37	1.052	-0.063		0.030		-0.020		0.124		0.158	*	0.045		-0.082	0.040	0.314	**	**0.534**		0.405
11	**Communities of practice**	0.92	0.964	4.508	1.589	-0.052		0.173	*	0.097		0.085		0.197	**	-0.113		-0.023	0.004	0.234	**	0.637	**	**0.819**

α= Cronbach alpha reliability; CR = Composite reliability of the measurement model; M=Mean; S=Standard Deviation. N=178. The average variance extracted (AVE) for each construct (Nos. 9, 10 & 11) is provided in **bold** along the diagonal. Values below the diagonal are inner construct correlations; values above the diagonal (i.e., AVE) are square of correlations. * p< 0.05 (2-tailed). ** p< 0.01 (2-tailed)

Source: The authors

Gerbing, 1988; Fornell & Larcker, 1981). The square of the inter-construct correlation was smaller than the AVE of the constructs, proving that the factors under study have internal variance greater than the variances shared among them, thus showing the constructs' discriminant validity (Fornell & Larcker, 1981). Table 1 shows the values of AVE, Composite Reliability (CR), Inter-factor correlations, and a square of inter-factor correlations, confirming the discriminant and convergent validities of the constructs under study. Table 2 displays the item-wise description and their respective loadings.

Hypothesis Testing

Hypothesis testing was done by conducting Structure Equation Modelling (SEM) with the Sobel test to see the mediating effect of personal interaction on the relationship between co-worker support and COP. The model fit measures were found to be fitting the data well with values (χ^2 [132] = 159, p-value < 0.05, CFI (Comparative Fit Index) = 0.99, GFI (Goodness of Fit Index) = 0.99, RMSEA (Root Mean Square Error of Approximation) = 0.034, SRMR (Standardized Root Mean Square Residual) = 0.051). Table 3 represents the path coefficients, standard error, and the values of the Z-statistics.

The SEM results in Figure 1 showed that co-worker support was positively related to personal interaction ($\beta = 0.425$, $p < 0.001$), thus supporting Hypothesis 1. Personal interaction was also positively related to COP ($\beta = 0.643$, $p < 0.001$), supporting Hypothesis 2. The relationship between co-worker support and COP did not show a significant result ($\beta = 0.041$, $p < 0.10$), thus

Table 2. Internal reliability, item description and factor loadings

Items	Description	Loadings
Co-worker support		**α = 0.96**
Co-Worker Support 1	Co-Worker help	0.756
Co-Worker Support 2	Co-Worker advice and assistance	0.882
Co-Worker Support 3	Acceptance as a member of the company	0.865
Co-Worker Support 4	Co-Worker help in adjusting in the organization	0.908
Co-Worker Support 5	Good interpersonal relations	0.827
Personal Interaction		**α = 0.86**
Personal Interaction 1	Support less experienced co-worker	0.608
Personal Interaction 2	Coaching to subordinate	0.675
Personal Interaction 3	Personal conversation regarding work related problems	0.746
Personal Interaction 4	Updating others with organizational information	0.788
Personal Interaction 5	Sharing passion and excitement through personal conversation	0.812
Personal Interaction 6	Share experiences to avoid risk and trouble	0.735
Personal Interaction 7	Online chats to help with work-related problems	0.734
Communities of Practice		**α = 0.92**
Communities of Practice 1	To create innovative solutions	0.913
Communities of Practice 2	To share experience and practice on topics	0.930
Communities of Practice 3	To share success and failure stories	0.944
Communities of Practice 4	To work for encouraging excellence	0.950
Communities of Practice 5	To support personal development	0.881
Communities of Practice 6	To send related information through e-mail	0.804

Source: The authors

Hypothesis 3 was not supported. The particular relation's standardized path coefficients were multiplied to calculate the indirect effect of personal interaction on the relationship between co-worker support and COP. The indirect effect of personal interaction on the relationship between co-worker support and COP was 0.2750 ($p < 0.001$), which supported Hypothesis 4 of the study (Baron & Kenny, 1986). As shown in Table 3, the direct effect of co-worker support on COP was significant in the model when personal interaction was not included as a mediator ($\beta = 0.315$, $p < 0.001$). However, the effect of co-worker support on COP became non-significant when personal interaction was added as a mediator ($\beta = 0.041$, z-stat = 0.597), indicating mediation by personal interaction. Thus, Hypothesis 4 was supported. A Satora-Bentler Chi-square test for non-normality with 1000 random bootstrap samples was executed to report the mediation, which showed significant values ($\beta = 0.221$, $p < 0.05$) for the indirect path, thus confirming the support to Hypothesis 4 (Satorra & Bentler, 2001). At 95% confidence level, the confidence interval (ci lower = 0.048 and ci upper = 0.721) was significant as no zero was seen, proving significant mediation (MacKinnon et al., 2004). The structural model is provided in Figure 1. It shows the standardized path coefficients and the indirect effect of personal interaction on co-worker support and COP relationship.

Figure 1. Structural equation model with standardized path coefficients

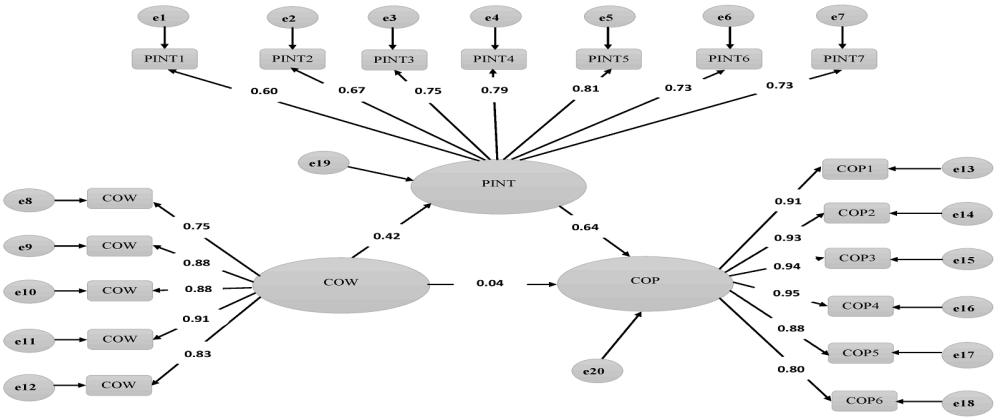

Figure 1. Structural equation model with standardized path coefficients
Note: COW=Co-Worker Support, PINT = Personal Interaction, COP = Communities of Practice N = 178, **p<0.001.

Table 3. Results of Mediation Sobel Test

Regression among Variables	Paths	Estimate	Std. Err	z-value		Std. all
COP-PINT	(b)	0.965	0.107	9.054	***	0.643
COP-COW	(c)	0.05	0.084	0.597		0.041
PINT-COW	(a)	0.342	0.059	5.837	***	0.425
Direct Effect Without Mediator		0.265	0.057	4.645	***	0.315
Indirect Effect	(ab)	0.33	0.059	5.624	***	0.274

COP- Communities of Practice, PINT – Personal Interaction, COW – Co-Worker support.
* p< 0.05, ** p< 0.01, *** p< 0.001
Source: The authors

Results of the Hypothesis Testing Summary

The results of the tested hypotheses are summarised in Table 4. In addition, the direct and indirect effects are also mentioned.

DISCUSSION

This study sought to investigate the relationship between its constructs co-worker support, personal interaction, and COP. The current study is undertaken on the respondents from Indian organizations, where the responses were self-reported. The demographic data and respondents' characteristics added value to the results, which agree with the study by Tomarken & Serlin (1986), mentioning achievement of significant occupational heterogeneity and better statistical power to the study. The study's rationale was to strengthen the theoretical literature base and augment the research on COP by understanding the effects of adequate organizational dimensions about employees and their interactions in organizational settings. This study extends the research area for the variables under study by proposing the relationship, developing a hypothesis, and explaining the mediator variable's role in the relation between the two significant independent and dependent variables.

Table 1 displays the mean, standard deviations, and correlation of the constructs and the demographic variables. The convergent and discriminant validities of the constructs were also demonstrated and found to be valid. The internal consistency and the loadings of the items onto their respective constructs are displayed in Table 2. The items showed significant loadings explaining that all the items are the manifestation variables of their factors, and the description of each item is also provided in Table 2.

The social support aspects in the organizations emphasize the supportive characteristic of supervisors, co-workers, and the organization. This supportive climate is incomplete without the most effective support, that is, from the co-workers. As mentioned in the study, co-worker support enhances employee affective involvement, enhancing growth and better job performance at the workplace. The hypotheses developed in this study aimed to understand the effectiveness of the relationships among the constructs. Confirmatory factor analysis and structural equation modelling with the Sobel test were applied to analyze the hypotheses. After the significant results arrived from the tests mentioned, a Satorra-Bentler test with a 1000 random bootstrap sample was applied, demonstrating significant results of the indirect path from co-worker support to COP through personal interaction as a mediator. The results of the tests supported the hypothesis stating the positive and significant relationship between co-worker support and personal interaction, which is similar to previous studies. The relation between co-worker support and personal interaction was positive and significant ($\beta = 0.425$, $p < 0.001$), thus confirming with the Social exchange theory, also explained in a recent study

Table 4. Hypotheses results summary

Hypotheses	Relationship among constructs	Structural equation modelling	
		Indirect Effect	Direct Effect
H1	COW → PINT	Supported	
H2	PINT → COP	Supported	
H3	COW → COP	Not Supported	Supported
H4	COW → PINT → COP	Supported	

COW = Co-worker support, PINT = Personal interaction, COP = Communities of practice.
Source: The authors

by Tsarenko et al. (2018). Co-worker support was posited as an antecedent to personal interaction because no effective interpersonal interaction could occur without the supportive culture. Hence, the fulfilment of the study's first objective arrives out of the discussion above. The study's second objective stated to understand the relationship between personal interaction and COP. The data analysis results extended the contribution to the second objective, where the relationship between personal interaction and COP was positive and significant ($\beta = 0.643$, $p < 0.001$). As mentioned in the literature review section, personal networks are the most crucial basis for forming COP in the organizations, consistent with the previous study's arguments (Pohjola & Puusa, 2016). Thus, the second objective of the study was also accomplished. The data analysis did not support the third hypothesis, which stated the significant relation between co-worker Support and COP after introducing the mediator variable as mentioned in Table 3.

The direct effect of co-worker support on COP was significant, as mentioned in Table 3. Nevertheless, no significant result was shown ($\beta = 0.041$, $p<0.10$) when personal interaction as a mediator was added, thus hypothesis 3 was not supported. This is in line with the recommendation by Baron & Kenny (1986), specifying a full mediation by personal interaction on the relationship between co-worker support and COP, whereby a significant relationship between independent and dependent variable becomes insignificant after the mediator variable is added. Finally, the mediation of personal interaction on the relationship between co-worker support and COP is seen. A Soble test for mediation analysis was applied, which gave a significant indirect effect ($\beta = 0.275$, $p < 0.001$), thus fulfilling the study's fourth objective. There was no zero-value between the confidence interval of the lower limit and the upper limit after the bootstrapping was applied at a 95% confidence level. Thus, there was a significant indirect effect. The mediation between co-worker support and COP was consistent with SET Theory (Blau, 1964), showing that personal exchanges between the employees at the workplace may also foster knowledge sharing and learning through COPs. Figure 1 shows the structural model of the relationship among the variables and the standardized path coefficients. The summary of hypotheses testing is mentioned in Table 4. Thus, this study provides a relation among the constructs that significantly impact the workplaces, having the equal importance of each; co-worker support, personal interaction, and COP.

CONCLUSION

The current study is a meaningful attempt, as it presents an in-depth development of theory with rigorous hypothesis testing. The effect of co-worker support on COP through personal interaction was significant, thus contributing to theoretical and practical perspectives as well. The study's findings indicate that for the creation and proper functioning of COP, co-worker support and interpersonal interaction among the employees is of primary importance. The processed framework developed in the study was tested and found to be significant, thus contributing to the theoretical aspects of the constructs under study. The mediation of personal interaction also showed a significant path, confirming the indirect effect. Thus, this study attempted to understand the relation and effects of co-worker support and personal interaction on the organizational COP, with the mediating role of personal interaction in the Indian organizational scenario. The significant findings of the study demonstrated the unique features of the sample. They thus concluded that in Indian organizations, there exists a supportive climate and cordial personal interactions, ultimately resulting in the formal or informal COP for the employees who attempt to share their knowledge, skills and task-related interdependencies among themselves through these practices. Hence, it can be concluded that the present study confirmed the mediator role of personal interaction on the relation between co-worker support and COP. Thus, this study contributes to the literature in the concerned area.

IMPLICATION

The results of this study hold significant practical and theoretical implications for the researchers and professionals, contributing to the literature on co-worker support and COP. The antecedents and consequences of personal interactions are also identified in the study. The findings of this study add to the increasing body of research on COP, resolving the unaddressed relationship between co-worker support and COP. This study emphasizes fostering COP at the organizational level for effective knowledge transfer leading to the employee and organizational growth and capturing the market share. The aspects of SET are focused on analyzing the effect of co-worker support on COP (Siemsen et al., 2007). This study model the organizational factor (COP) and individual factors (co-worker support and personal interaction) in a single frame (Choi et al., 2020; li et al., 2007), turning out to be the first study to consider personal interaction as a mediator variable between co-worker support and COP to the best of our knowledge.

The interpersonal interaction theory postulates that two individuals show productive and satisfactory interactions with compatible attributes (Carson, 1969; Graham et al., 2018). Thus, when individuals obtain co-worker support, they display congruence in their activities and share common areas of interest with rising personal interaction, acknowledging the conditions of interpersonal interaction theory. This research adds to the body of research emphasizing several theories that should be well-thought-out as a framework for exploring employees' motivation to share knowledge through COP supported by co-workers. To gain from organizational COP, managers and employees should inculcate a supportive climate and raise formal and informal interpersonal interactions at the workplace. As per Lave & Wenger (1991), the situated social learning system emphasizes the social relationship setting for learning within COP. Our study supports the postulates by proposing co-worker support and personal interaction for promoting relational aspects for learning. Social support may also lead to increased formal and informal interpersonal interactions among the employees, paving the way for developing COP (Bartol & Srivastava, 2002).

By applying the current empirical analysis as a foundation, organizations can understand that to increase the knowledge base; a high performing COP should be developed to discuss the concepts of their shared interest as a resource for knowledge dissemination and competitive advantage. Creating COP for knowledge management could help the organization set strategies for creating and transferring knowledge. If there is an increase in cooperation and support from co-workers, the development and sustenance of such organizational COP will arise. HR practitioners should invest in the efforts to pave the way for employees to cooperate and interact so that their day-to-day work-related problems could get resolved, a higher level of team involvement, and overall job performance could upsurge through the sharing of knowledge via COP.

LIMITATION AND FUTURE RESEARCH

The current study focuses on three latent constructs that underpin the development and maintenance of organization-based COP to fulfil basic requirements of co-worker support and personal interactions among the working professionals in the organizational setting. The sample under study were the respondents from Indian manufacturing and service organizations. Thus, the study results revolve around the circumstances of Indian Organizations. Companies find knowledge management practice as a temporary step in gaining competitiveness. Thus, such empirical analysis helps create confidence in the management to consider the practical aspects of COP and provide the resources for its effective development. Future research can be done by combining the same constructs but from a different cultural perspective to improve the generalisability of the current study by testing the proposed concept and model into different cultures. As mentioned, the current work is done by undertaking the sample from Indian Industries; consequently, future researchers can be focused on an industry-specific study. As India has a collectivist culture (Hofstede, 2001), the scope of study in an individualistic culture

can be explored further. Future empirical enquiry can also be conducted through a longitudinal survey as a study design with the same model and more extensive data size.

Moreover, another methodological limitation is that this study consists of a self-reported questionnaire with a cross-sectional research design; therefore, the causality inferences are limited. Thus, an experimental research method and data collection can be implemented for further research at more than one time. Although the authors have taken the statistical and procedural remedies for overcoming the erroneous effect of common method bias, the chances of error due to such effects cannot be altogether neglected. Future research scope can also be obtained by including other social support perspectives like organizational and supervisory support as different constructs and co-worker support on developing COP in an organizational scenario.

FUNDING AGENCY

Publisher has waived the Open Access publishing fee.

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