EFFECTS OF PERCEIVED ORGANIZATIONAL SUPPORT ON EMPLOYEES' SAFETY COMPLIANCE AND SAFETY MOTIVATION: MEDIATION BY COWORKER SUPPORT

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Abstract. This research endeavor aims to investigate effects of perceived organizational support for safety (POSS) on safety motivation and compliance through mediation of coworker support. Data collected through questionnaire from 279 respondents proved the fact that presence of support from organization increases employees' safety motivation and compliance of policies. It is further evident that coworker support partially mediates the aforementioned association. It is also evident that POS is good predictor of safety motivation and compliance, while coworker support is strong predictor of safety compliance than safety motivation. Future directions for researchers and implications of the study are also highlighted.

Keywords: Perceived organizational support; coworker support; safety motivation; safety compliance; mediation

JEL Classification: J28, D23

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I. INTRODUCTION

Occupational Health and Safety (OHS) is one of the most agonizing disquiet for organizations of toady, because organizations face huge costs if such issues raise (Puah, Ong, chong, 2016; Rodrigues et al., 2021). International Labor Organization (ILO) reported that 2 million workers die due to work related accidents and diseases in a single calendar year. Besides this, almost 270 million accidents and 160 million work related diseases are also reported ("Facts on safety at work", 2005). Thus demanding attention, from top level management and decision makers of the organizations (Credo, et al., 2010; Liu, Mou, & Liu, 2021); and employees (Puah et al., 2016). This study aims at investigating the role of these two internal stakeholders in improving safety performance at work, defined in terms of safety motivation and compliance by employees.

While looking at the OHS issues at workplace, it is the management that has to play distinctive role in developing safety culture and reducing costs associated with safety (Hofmann & Morgeson, 1999; Kim, 2021; Puah et al., 2016). Past studies are also evident of the fact that organizational support related to safety (POSS) increased the possibility of compliance of safety standards (Ring, 2010; Zaharatos, Barling, Iverson, 2005), thus improving overall safety outcomes. Organizations can utilize two approaches namely: control-oriented and commitment-oriented approaches to have a rheostat mechanism for safety issues. Control-oriented mechanism is based on the premise that organization should work through rules and regulation and should ensure its compliance (Barling & Hutchinson, 2000; Shi & Zainal, 2021; Walton, 1985). But there has been growing consideration on the utilization of commitment-oriented mechanism along with control strategy (Lawler, 1996; Walton, 1985). It is further commented that commitment based mechanism could be a better explanatory mechanism of safety performance, than control-oriented (Vashishta, 2021; Whitener, 2001).

Valuing commitment-oriented strategy as the explanatory mechanism, this research endeavor values the role of POSS as the organizational mechanism. POSS is defined as employees' belief that organization values takes care for employees' well-being and values their contribution towards safety (Baran, Shanock & Miller, 2012; Tucker et al., 2008; Rhoades & Eisenberger, 2002). Such belief is considered as

important antecedent of employee safety outcomes (Mearns & Reader, 2008). Turner et al., (2010) found that when organizations provide resources (support), the outcomes related to hazardous work events are reduced, and employees raise voice for safety. But literature linking support with safety motivation and safety compliance is scarce (Baran et al., 2012; Puah et al., 2016).

Additionally, how POSS can predict safety motivation and compliance is also an unattended area. This study considers coworkers support as the explanatory mechanism. This could be based on the assumption that when organization provides support, a culture of support is nourished which is often shared by the peers (Baran et al., 2012). Thus POSS may lead to coworker support which may in turn make their peers adhere safety practices (safety compliance) and their willingness to work safely (safety motivation).

II. REVIEW OF LITERATURE

Inflation always has been ranked among the key variables of an economy. Its measurement allows us to examine the real health of an economy by evaluating the growth prospects relative to cost of living. Inflation within the threshold level is not a source of problem but beyond certain limit offers a serious cause of concern for economists and policy makers. The persistent focus of many economists and researchers on topic of inflation and its determinants is owed to the severity of this problem faced by many economies around the world. High levels of inflation are considered as a curse because it erodes the productive capacity of an economy. Various theories about inflation and its determinants have been presented by renowned economists and different school of thoughts historically. About relational aspect, Classical doctrine favors the notion of "Quantity Theory of Money" (QTM), which suggests a proportional relationship between quantity of money and price level. QTM proposes that for a stable value of output and a constant value of velocity of money, a twofold increase in supply of money leads to a corresponding two-fold increase in price level. Monetarists consider money supply as an active determinant of change in price level. According to monetarists changes in price level in an economy are primarily caused by changes in stock of money. However, they do not

believe in an over rigidly defined proposition of one to one correspondence like classical in all time periods. In this relevance the famous dictum posited by Friedman is worth noticing; that is "Inflation is always and everywhere a monetary phenomenon not in the short run but in the long run". Friedman further posits: "Common to all disturbances, is that the price movements reflect changes in the quantity of money".

Organizational Support Theory (henceforth, OST of Eisenberger et al., 1986) deals with the global belief that organization values the contribution of their employees and takes care for their well-being (Rhoades & Eisenberger, 2002). OST became the underlying mechanism for the concept of POS, and explains how organization and its agents (e.g. supervisor) create a reciprocation relation through positive organizational image (Ahmed, Ismail & Amin, 2014). The reciprocation starts with the support and care perceptions of employees, which makes them return the favors positively (Islam, Rehman, Ahmad, Ali & Ahmed, 2014). Similarly, when employees perceive that organization values employees contribution towards safety, provides an environment of safety and takes care for employee safety (POSS), employees reciprocate with safety outcomes (Hofmann & Morgeson, 1999; Michael et al., 2005; Griffin & Neal, 2000; Neal, Griffin & Hart, 2000).

Past studies on safety outcomes have found that provision of support predicts it positively. For instance, Clarke (1998) found that employees raise safety voice when they believe that management provides support for voice and takes actions over it. Voice has been a function of psychological safety felt by the employees, which is often linked with the management consideration for employees (O'Donovan, De Brun & McAuliffe, 2021). Mullen (2005) also asserted that voice behavior is largely dependent upon support provision from organization. Puah et al., (2016) found that POSS increase employees' safety compliance as they reciprocate organizational support positively and work for achievement of organizational safety goals. On the other hand, we proposed here that POSS not only paves the way for safety compliance but also increases their motivation and willingness towards safety goals (Zacharatos et al., 2005).

Both these relations could be explained with reciprocation norm generated due to POSS (basic premise of OST), which assumes that

employees' reciprocate the favors (POSS) by doing those activities which can pay organization favorably (Gillet et al., 2010). It is also worth sharing that organizational support makes employees put self-directed efforts (Pohl et al., 2012); thus making them display willingness and persistence to do tasks or high level of motivation (Darolia et al., 2010; Gillet et al., 2013). Recently, Sherf, Parke and Isaakyan (2021) also observed that safety voice required psychological support from various levels, and organization is the major source of all. It is therefore assumed that POSS will also predict employees' safety motivation.

Considering the discussion made on the relationship of POSS with safety compliance and motivation, following assumption is made:

H1: POSS will positively influence safety compliance (1a) and safety motivation (1b)

Past studies have valued the role of organizational or horizontal level of support, but how peers can influence employees' safety outcomes is an area that has largely been unattended. This study values this gap and assumes that coworker support can influence employees' safety behavior. Laurence (2005) noticed that support from coworker influences peers responses towards job, environment and organization. Similarly, Westaby and Lowe (2005) noticed that coworkers may influence risk taking behavior of employees.

Co-worker support and safety outcomes relation could also be explained by social exchange theory (SET, Blau, 1964). Unequivocally, when employees share information with peers and show safety concern, it is expected that peers will reciprocate it positively with favorable safety behavior (e.g. voice; Tucker et al., 2008). It is thus assumed that coworker support will influence employee safety response, in terms of both compliance and motivation. Past studies have noticed such relation, For instance Andriessen (1978) found that peers workplace responses directly influence employees safety initiatives. Zhou and George (2001) found coworker support as a way to improve safety compliance, as such examples are set by peers and its believed that a culture of compliance exists; similarly, rules and policies as they will have sense to improve work place safety practices (i.e. safety motivation).

The said association could also be explained by Social Impact Theory (SIT; Latane, 1981), which presumes that change in one's behavior is largely dependent upon the real, implied or imagined actions of other individuals. Such change is based on importance, proximity and number of parties involved in the relation. Here it is assumed that persons with authority (e.g. supervisors, peers with expert/referent power) can influence followers based on their importance at workplace. Similarly, peers or supervisors can influence other fellows on the grounds that they are at proximity with the working environment in real. Moreover, as peers are more in number the possibility of influence is also greater (Carroll, 1998). It is therefore assumed that coworkers are in better position to influence employees' safety outcomes, even when management or supervisors are unable to support their employees (Westaby & Lowe, 2005). Based on the theoretical premise and past studies following hypothesis is formulated:

H2: Coworker support will positively influence employees' safety compliance (2a) and safety motivation (2b)

Considering the premise of OST, it is assumed that support from organization makes employees reciprocate to organization. It could also be true for employees response towards working environment, as they my reciprocate employees by considering them part of organization (Ahmed et al., 2014; Islam et al., 2014). Furthermore, it is evident that coworker support also influences employees safety related behavior. It could thus be assumed that POSS will lead to coworker supportive behavior which in turn will foster safety related behavior at work. SIT again could be used to explain this association, which presumes that management and supervisors, being symbol of strength, involve employees to work with their peers thus influencing through coworker support (Tucker et al., 2008). Similarly, being away from frontline employees (proximity), coworkers are the better source to influence employees. Thus management utilizes coworkers to create inspirational appeal and improve safety behavior of employees (Clarke & Ward, 2006; Hofmann, Morgeson and Gerras, 2003). Recent studies have found the role of coworker support in safety responses of peers. For instance, Lambert et al., (2021) signified its outcomes by highlighting the trust that creates when employees support each other. In this ways employees response to safety increases. Haas & Yorio (2021) further highlighted that safety

compliance of employees is influenced by the environment provided at work, which is determined by the collective efforts of management and employee and thus working peers along with an employee determine the safety environment. Thus coworker support increases when the organizational support is high and thus partially mediates the relation of support and safety response, and is hypothesized below:

H3: Coworker support will partially mediate the relationship of POSS and safety compliance (H3a) and safety motivation (H3b).

III. RESEARCH METHODOLOGY

Participants of the study included employees working in engineering firm in Lahore and nearby. Respondents were approached at two points of time (at first instance, respondent for POSS and safety compliance); while at second instance, coworker support and safety motivation). At phase one 296 responses were received, while at phase two only 279 employees responded. Responses for both the samples were matched through t-test and it no significant difference was found, thus responses were unbiased. Average age of respondents was 32.58 years (SD=6.67), while majority of them were male (53.33%). Measures used in data collection were adopted from well-established scales. POSS and coworker support was operationalized with three items (each) scale of Tucker et al., (2008). Safety compliance and motivation were measured with seven items and four items (respectively) scales of Neal et al., (2000). Five points likert scale (1=strongly disagree, and 5=strongly agree) were used to elicit responses. Data analysis was done through structural equation modelling (SEM), following guidelines of Hair et al., (2006). Furthermore, Podsakoff et al., (2003) procedures to overcome biases were used, where at first instance all variables are put in one model called one factor model. At second instance, all the variables are put in independent models to see the model fitness. Both these models showed parsimonious fit, thus helping us conclude that biases were not severe.

IV FINDINGS AND DISCUSSION

DESCRIPTIVE STATISTICS

Descriptive analysis along with correlation and reliability statistics are given in Table 1. It is evident that all the measures have acceptable reliability values (∞>0.70). Correlation analysis affirms that both POSS and coworker support are positively related to safety compliance and safety orientation (r=.261 to .421; p<0.05 to p<0.001), thus helping us mover further with path analysis.

TABLE 1

Descriptive Statistics

N=279	Mean (SD)	∞	1	2	3	4
(1) POSS	4.09 (0.75)	.904	--			
(2) PCSS	3.98 (0.86)	.888	.389**	--		
(3) Safety compliance	3.96 (0.67)	.798	.409*	.377**	--	
(4) Safety motivation	4.00 (0.75)	.835	.421*	.261*	.105**	--
p <0.001*, <0.05**						

PRELIMINARY ANALYSIS

Preliminary analysis included investigation of measures of exogenous and indigenous variables for validity. Confirmatory factor analysis was used for this purpose, which was also useful to check the loading of each item on the construct. Each item loaded on construct with acceptable value (0.53-0.93, p<.001). Moreover the model fitness indices were also acceptable (x2/df=3.94, CFI=0.91, TLI=0.89, IFI=0.870, RMSEA=0.05). All the measures were also found good at discriminant (AVE> square correlation coefficient) and convergent validity (as, AVE>0.50) (Fornell & Larcker, 1981).

PATH ANALYSIS AND HYPOTHESES TESTING

SEM was applied to test hypotheses, it's widely used technique due to its ability to use factor analysis and multiple regression simultaneously (Hair et al., 2006). Fitness indices presented in Table 2 highlights that model had acceptable fitness indices.

TABLE 2

Structural Equation Model

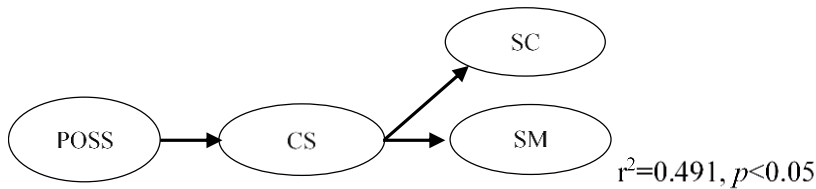|	Direct effect/Standard value
x^2/df	3.54/$\leq$ 3.00
Δx^2	-
GFI	0.901/$\geq$0.90
AGFI	0.814/$\geq$0.80
CFI	0.890/$\geq$0.90
NFI	0.876/$\geq$0.90
NNFI	0.887/$\geq$0.90
RMSEA	0.07/$\leq$ 0.08

Figure 1

Path Analysis

r^2=0.491, p<0.05

Figure1 and Table 3 represent the results of path analysis, it is evident that model is making significant contribution in predicting safety compliance and safety motivation (r2=0.504, p<0.05).

Table 3 reveals that POSS is a strong predictor of safety compliance (ß=0.393, p<0.05) and safety motivation (ß=0.420, p<0.001). Thus results support both H1a and H1b, which assumes that organizational support predicts employees' safety compliance and motivation. These results are consistent with findings of Pauh *et al*., (2016) who found that

organizational support for safety increases employees compliance behavior. Lambert et al., (2021) also noticed that safety compliance is an outcome of support initiatives at work. Zacharatos et al., (2005) also asserted that organizational support predicts employees' response towards safety. These results also support the assumptions made on the basis of OST and SIT.

It is also evident that coworker support also predict both compliance and motivation (H2a & H2b). These findings are also consistent with assumptions of SIT (Latane, 1981), where it is inferred that actions of one person are largely dependent upon the actions of other individuals and strength of influence is the source of inspiration and influence. Findings of current study prove that coworkers (being person with expert power) have direct influence on followers through power to influence and proximity to the field, and due to proximity they can exert more influence than the organizational influence. Table 3 shows the results, where it is noticeable that coworker support predicts safety compliance (ß=0.341, p<0.001) and motivation (ß=0.149, p<0.005). Results of the study also show that coworker support is better predictor of compliance than motivation. This could be explained by SIT, where proximity could be a source to learn true implications of safety by peers. Motivation on the other hand is considered one's internal state which is most often intrinsic and needs organizational level favor and responses. Past studies also found consistent results, for instance, Zhou and George (2001) found that coworkers support increased employees' willingness to improve safety conditions. Recent studies have witnessed that coworkers help in creating an environment of safety where compliance and motivation for such practices are nurtured, thus safety environment is outcome of safety support from coworkers (Haas & Yorio, 2021). Sherf et al., (2021) and O'Donovan et al., (2021) also found that safety responses of employees are nurtured when they feel psychological safety at work; which is function of safety movement and support at work (Vashishta, 2021). Shi & Zainal (2021) further observed that safety motivation and compliance of employee requires attention from management as provision of support at work predicts one's responses towards safety. Based on such presumptions, Kim (2021) further commented that there should an organizational level system of support that may ensure best implementation of safety practices. The changing dynamism (e.g.

pandemic) has increased the need of employees' responses towards safety, while further created need for study of factors that contribute in improving employees' safety outcomes (Rodrigues et al., 2021).

TABLE 3

Results of Hypotheses Testing

Hypotheses	Effects	Standardized Regression weights	C.R.	*P*	*Result*
H1a	POSS—SC	0.393	3.128	**	Supported
H1b	POSS—SM	0.420	4.219	*	Supported
H2a	CS—SC	0.341	3.247	*	Supported
H2b	CS—SM	0.149	2.516	**	Supported
***p<0.05, *p<0.001*					

Table 4 contains results of mediation analysis, where both direct and indirect effects are presented. Findings of the study reveal that both POSS and CS predict outcomes variables (compliance and motivation), thus helped us infer that CS partially mediates the relationship of POSS and outcomes variables, thus H3 (H3a & H3b) are supported.

TABLE 4

Mediation Analysis

	Safety compliance		Safety motivation	
	Direct	Indirect	Direct	Indirect
POSS	0.393	0.134	0.420	0.063
CS	0.341	--	0.149	--

V. IMPLICATIONS OF THE STUDY

Safety is one of areas of most concern for today's organizations, and employees' involvement in safety is most important consideration. Findings of current study revealed that fact that safety behavior of employees is dependent upon the organization and peers. This study offers valuable theoretically contributions, the foremost is the consideration of organizational factors (both organizational support and

coworker support) in predicting one's safety behavior. It is therefore worth sharing, from findings of the study, that employees' can show better safety behavior when organization and coworkers support them. Furthermore if motivation is needed to be increased than role of organizational support have stronger influence than the coworker support. Compliance on the other hand needs both organizational and coworker attention.

VI. LIMITATIONS AND FUTURE DIRECTIONS

Though this study adds value in existing literature, it is still prone to some limitation. The foremost is small sample of the study, which could be better overcome by changing the study design (e.g. experimental design). Furthermore, group dynamics (Tucker et al., 2008) and individual factors (e.g. personality; Kelloway,2006) could also be part of investigation for future studies, as along with organizational factors these factors are also considered important in determining one's safety behavior. Furthermore, other organizational factor, (e.g. leadership, job characteristics) could be used as antecedents of individual behavior (Barling et al., 2002; Pohl et al., 2012). Future researchers could work on other aspects of safety (e.g. voice, behavior) or leadership that may influence the safety environment (Shi & Zainal, 2021). Future studies, could also consider the perceptions of support in the presence of safe conscious leadership (Lambert et al., 2021; Shi & Zainal, 2021). Yet another consideration could be perceptions of justice in wake of safety considerations, as a virtuous organization is supposed to reward employees for their safety considerations. Thus it is expected that the justice would be an outcome of such environmental focus efforts (Haas & Yorio, 2021).

VII. CONCLUSION

This study unveils the ways of predicting safety behavior (safety compliance and motivation) through organizational support and intervention of coworker support. Findings of the study unveils that organizational support for safety is an important predictor of outcome variables, while coworker support bridges this link. Findings also reveal that organizational factors offer more outcomes than peers support, thus organization should focus on employees to get best behavioral outcomes.

Additionally, coworkers support increases propensity to comply with standards because of example provided on the shop floor.

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