

The Role of Organizational Culture and Mediating Effect of Knowledge Sharing to Promote Positive Psychological Capital among the Scientists

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Abstract

The study strengthens the literature of organizational culture in the perspective of knowledge sharing and positive psychological capital. The concept of organizational culture includes several dimensions viz. Autonomy, Interdepartmental Cooperation and other orientations. They play a vital role in promotion of positive psychological capital and enhance the knowledge sharing process in organizations. These attributes could produce the plausible competency to organizations' success in today's market with variant and challenging environment. The study has been conducted to understand this association with the help of survey method through well-developed questionnaire among the scientists of ICAR. The paper provides the positive result in support of the above proposition. Based on the results practical implication and directions for future research are also discussed.

Keywords: Knowledge Sharing, Organizational Culture, Positive Psychological Capital.

Introduction

The present globalized economic world has bought high competitive market, greater innovation, and rapid technological changes. Every organization is learning continuously to overcome and to adapt to the changes posed by the globalization. The focus of organizations shifted from tangible asserts to intangible assets, which are imbibed in the people and process. Knowledge is treated as the most valuable assert and Nonaka and Takeuchi (1995), Nahapiet and Ghoshal (1998) described knowledge as organization's most important valuable resource. Organizations are trying to find different ways to transfer the skills, experience and expertise of an individual into organizational knowledge. The knowledge transfer in organizations is leveraged effectively by its employees, who create, share and make use of the knowledge. Since it is linked with behavioral aspects of individuals finds very difficult to convert that individual's knowledge into organizational knowledge. Organizations need to create a system where people can articulate and exaggerate that knowledge. To facilitate the diffusion and amplification processes organizations will require a specific behaviour as facilitator. It is important to know that organisational culture drives knowledge conversion for the organisational development and will play a significant role in the organizational change. When organizations install new process, technologies, they expect knowledge to flow. Organizational culture is the key to success for any activity within and outside the organization and also for individuals working in the organization.

Johnson (1993) has seen organizational culture as a macro medium for interaction and also as an interpretive framework in which communication is feasible. Barney (1986), argued that organizational culture has developed over a period with complex form of norms and values which affects the organizational behaviors and processes. As we are talking about behavior of the individuals it is very important to control the behavior in a positive way. (Luthans 2002) developed the concept positive psychological capital. Which enables the people in the organization to act positively and he identified four positive dimensions like hope, resilience, efficacy and optimism. The above mentioned two variables are intrinsically linked with the people and depend on the individual's behavior; organization culture has its impact to promote these two aspects and overall growth of the organization. In this piece of work we are going to study the relation among organizational culture, positive psychological capital and knowledge sharing.

Review of Literature:

The literature provides an in depth views of behavioural scientists about the knowledge and its importance in the organisations. Nonaka and Takeuchi (1995), Nahapiet and Ghoshal (1999) recognised knowledge as an important intangible resource for organisations. Zack (1999), described knowledge as “organized accumulation of information through experience, communication, or inference”. The definition given by Davenport and Prusak (1998) suites to our current study, they mentioned knowledge as a “fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information”. The information, experience, expertise and values that individual possess should mix with the organisational knowledge. The organisational knowledge generally imbibed in its products and process, the integration of these two knowledge helps in creating new products and services, or to improve the existing business performance. Gold et al.(2001) and Zack (1999) also mentioned that the organizational knowledge and expertise must be shared to remain competitive in the marketplace. Many other researchers were also investigated the impact of culture on knowledge sharing and positive psychological capital. Later part in this section deals with literature on these three variables.

The concept of organizational culture is very broad, complex, comprehensive and inclusive in scope. Furnham and Gunter (1993), defined the organizational culture as “common beliefs, viewpoints and values existing in an organization. In simple words the culture means the quality of our performing. Pettigrew (1990) considered organizational culture as key element in organizational change and development. Quinn & Cameron (1999)

described organizational culture comprises of complex, comprehensive and interrelated set of ambiguous factors. Barney (1986) is also explained similarly that as a complex system of values and norms accumulated over a period of time and influence the individual behavior and organizational process. The organization success is wholly depends on how effectively it can share its functions, goals and values to its employees and to its customers. Johnson (1993), has seen organizational culture as an interpretive framework in which communication is possible and act as medium of interaction.

The importance of knowledge sharing was stressed by many studies, starts with Davenport and Prusak (1998) who defined knowledge sharing as processes that involve exchanging knowledge between individuals and groups. Since knowledge sharing is behavioural aspect of individuals, it will be governed by work environment, ethics and values of the organisation. Ardichvili et al (2006) mentioned that this knowledge sharing behaviour changes from organization to organization as we find different cultures within them. Davenport and Prusak (1998) mentioned that common terms, language and goals are important in sharing knowledge in organisations. Ulrich (1998) points that culture brings challenging work for people and motivates to work. Bartol and Srivastava (2002) have emphasized the roles of managerial and organizational culture on encouraging knowledge sharing.

The behavioural aspects of employees can be predicted by studying their psychology or can be controlled by inducing positivity in employees. The positive dimension is further stressed by Luthans and colleagues. They developed the concept of Psychological Capital (PsyCap) (Luthans et al.2007). They define PsyCap as “individual's positive psychological state of development” and that is characterized by four elements starts with efficacy, optimism, hope and resilience. Innovative research ambience is necessary for the firms to take a new move towards to HR management in regard to withstand and to construct the tolerable progress and advancement (Luthans et al, 2008).

Inculcating psychological capital in work place leads to positive business ambience which in turn induce positive workforce in the organization. Research has shown that when an individual has a positive consideration towards the work climate, he or she will be more likely to help the co-workers and the organization by expending the effort and adjusting the input (Organ & Near, 1985). Positive employees will build the co-worker relationship by sharing their knowledge and ideas among colleges. The behavior of sharing knowledge is the product of complex interactions between employee behavior and organization (Wang, Gweru, Shanker and Trout, 2009). In recent years, we have studied the relationship between knowledge sharing

behavior and psychological variables of individual, group and organizational level.

Luthans and Jensen (2002) proposed that hope can serve as an important underlying connector and inclusive processes of change in organizational culture. An organizational culture with high levels of hope and which is characterized by being flexible, resilient and provide an environment of trust, hopeful employees have a real chance to win a key competitive advantage for the organization and successfully confront threats care and opportunities (Luthans and Jensen, 2002). In this context, no doubt, a competitive advantage is the fact of exhibiting high rates of behavior to share knowledge among employees. With regard to the relationship between self-efficacy and knowledge sharing behavior, the literature provides further investigations report (Cabrera and Cabrera, 2002, Cabrera, William and Salgado, 2006; Lu, Leung and Koch, 2006;; Chen, Chen and Kinshuk, 2009) to agree that self-efficacy has a positive influence on the behavior of knowledge sharing. These results are broadly consistent with those found in the present investigation.

We can say that so far has not been studied the relationship between psychological capital and knowledge sharing, as well as the influence of either optimism, hope and resilience, separately on the behavior of knowledge sharing; however, on the relationship between self-efficacy and knowledge sharing behavior, have themselves been found and few recent studies. Cabrera, William and Salgado (2006), an investigation found that self-efficacy was a variable that facilitated the exchange of knowledge. Lu, Leung and Koch (2006) found that while greed decreased knowledge sharing behavior, the self-efficacy increased. Similarly, it was found that self-efficacy in the management of the web and the creation of knowledge is important antecedents that lead to

knowledge sharing behavior (Chen, Chen and Kinshuk, 2009). The variables analyzed in this project, only recent studies on the influence of one of them, self-efficacy, on the knowledge sharing behavior was found and few. There is evidence to conclude that there is some connection between the two that is worth investigating. Furthermore, considering that self-efficacy is a component of psychological capital and it has been identified as a nuclear factor (core factor) second order (Avey, Patera and West, 2006), it is reasonable to think that there may be link between psychological capital and knowledge sharing behavior.

Objective of the study:

The study objective is to find the role of organizational culture in promoting positive psychological capital and knowledge sharing.

Hypotheses & Proposed Model:

H1: Organizational culture (viz. Autonomy (OA), External Orientation (EO), Interdepartmental Cooperation (IC), Human Resource Orientation (HRO), Improvement Orientation (IO)) has a positive and significant relationship with positive psychological capital (PsyCap)

H2: Organizational culture (viz. Autonomy (OA), External Orientation (EO), Interdepartmental Cooperation (IC), Human Resource Orientation (HRO), Improvement Orientation (IO)) has a positive and significant relationship with Knowledge Sharing (KS).

H3: Positive Psychological Capital has a positive and significant relationship with knowledge sharing (KS).

H4: There is a mediating effect of Knowledge Sharing (KS) between Organizational Culture (OC) and Positive Psychological Capital (Psy Cap).

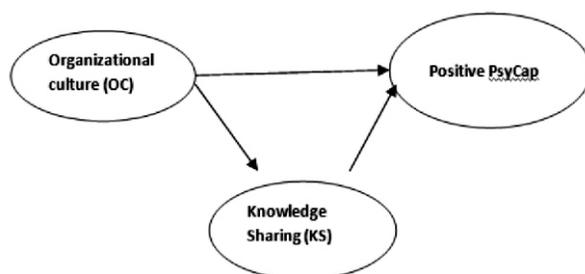


Fig. 1: Structural Equation Modeling path coefficients and hypothesized model

Methodology:

Sampling:

The study has been conducted on Scientists working in different research institutions of ICAR in India. The ICAR scientists are well known in the world and are playing a significant role in the agricultural development in the country. The growing population and scarcity of natural

resource forces the nation to bring innovation, the role of ICAR has increased to bring the high yield varieties and drought resistant varieties in the nation. The research institutions are facilitating in solving the arising problems in the agriculture fields. The organizations are much more stressing on the other variables which are influencing the innovation. The paper attempts to find the Organizational Culture (and its dimensions) impact in Promoting Positive

Psychological Capital and Knowledge Sharing. The simple random sampling method has been used to collect the data from ICAR scientists through well structured questionnaire.

Measures:

Organizational Culture (OC) is measured with the scale developed by Widerom and Vandernberg (2004) having 21 items with 5 dimensions (viz. Autonomy, OA, $\alpha=0.86$, External Orientation, EO, $\alpha=0.88$, Interdepartmental Cooperation, IC, $\alpha=0.90$, Human Resource Orientation, HRO, $\alpha=0.875$, Improvement Orientation, IO, $\alpha=0.878$), overall Cronbach's alpha, $\alpha=0.88$. The sample includes items e.g. "In my Organization there is freedom for employees to depart from rules", "In my Organization employees closely monitor their own way of working" etc. The Positive Psychological Capital (PsyCap) is measured with the scale developed by Luthans, Avolio, et al. (2007) having 24 items, $\alpha=0.868$, with questions like "I feel confident analyzing a long term problem to find a solution". Knowledge Sharing (KS) is measured with 10 items developed by the van den Hooff et al. (2003), $\alpha=0.785$. The

measures include question like "I share the information I have with colleagues with in my organization". Five point Likert scale ranging from "strongly disagree=1" to "strongly agree=5" was used in measuring.

Results:

The Table.1 represents the descriptive analysis among OC (Dimensions – OA, EO, IC, HRO and IO), PsyCap and KS with the correlation values.

That is, OA-PsyCap ($R^2=0.426$; Sign. 2-tailed=0.01; $t=0.00$), EO-PsyCap ($R^2=0.429$; Sign. 2-tailed=0.01; $t=0.00$), IC-PsyCap ($R^2=0.450$; Sign. 2-tailed=0.01; $t=0.00$), HRO-PsyCap ($R^2=0.387$; Sign. 2-tailed=0.01; $t=0.00$), IO-PsyCap ($R^2=0.46$; Sign. 2-tailed=0.01; $t=0.00$) and OA-KS ($R^2=0.295$; Sign. 2-tailed=0.01; $t=0.00$), EO-KS ($R^2=0.333$; Sign. 2-tailed=0.01; $t=0.00$), IC-KS ($R^2=0.444$; Sign. 2-tailed=0.01; $t=0.00$), HRO-KS ($R^2=0.295$; Sign. 2-tailed=0.01; $t=0.00$), IO-KS ($R^2=0.410$; Sign. 2-tailed=0.01; $t=0.00$). Also, PsyCap-KS ($R^2=0.532$; Sign. 2-tailed=0.01; $t=0.00$).

Table.1: Mean, SD and Correlation

	Mean	SD	OA	EO	IC	HRO	IO	PSYCAP
OA	3.42	.790						
EO	Pearson Correlation	3.68	.770	.601**				
	Sig. (2-tailed)			.000				
IC	Pearson Correlation	3.79	.748	.563**	.622**			
	Sig. (2-tailed)			.000	.000			
HRO	Pearson Correlation	3.68	.872	.684**	.641**	.567**		
	Sig. (2-tailed)			.000	.000	.000		
IO	Pearson Correlation	3.62	.806	.538**	.593**	.577**	.563**	
	Sig. (2-tailed)			.000	.000	.000	.000	
PSYCAP	Pearson Correlation	3.60	.462	.426**	.429**	.450**	.387**	.468**
	Sig. (2-tailed)			.000	.000	.000	.000	.000
KS	Pearson Correlation	3.93	.468	.295**	.333**	.444**	.295**	.410**
	Sig. (2-tailed)			.001	.000	.000	.002	.000

** Correlation is significant at the 0.01 level (2-tailed).

(OA- Autonomy, EO- External Orientation, IC - Interdepartmental Cooperation, HRO -Human Resource Orientation, IO-Improvement Orientation)

The data found to be normally distributed and correlation analysis proved the acceptance of hypothesis H1 as Organizational Culture (and its dimensions Autonomy (OA), External Orientation (EO), Interdepartmental Cooperation (IC), Human Resource Orientation (HRO), Improvement Orientation (IO)) is positively and significantly related to Positive Psychological Capital, PsyCap.

The hypothesis H2 also supported as Organizational Culture (and its dimensions Autonomy (OA), External Orientation (EO), Interdepartmental Cooperation (IC), Human Resource Orientation (HRO), Improvement Orientation (IO)) is positively and significantly related to Knowledge Sharing (KS). Again, the significant positive relationship between Positive Psychological Capital and Knowledge Sharing, KS ($R^2=0.532$; Sign. 2-tailed=0.01; $t=0.00$) provide evidence in support of hypothesis, H3. The findings give supports for acceptance of hypotheses i.e. H1, H2 and H3. It validates that Organization Culture impact both Knowledge Sharing and positive psychological capital.

Further, Structural equation modeling (SEM) was performed to know the best fit relationship among the

variables. Also the mediating effect (i.e. H4) is evaluated on comparison between two alternate partial mediating models.

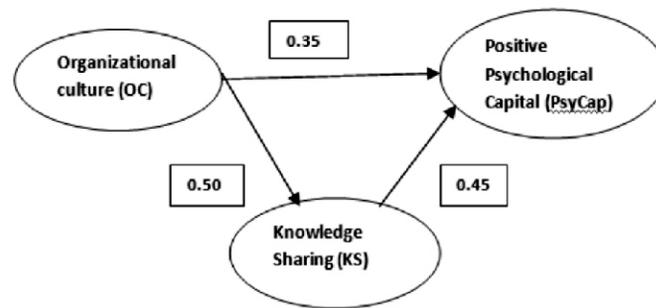


Fig. 2: Structural Equation Modeling path coefficients and hypothesized model

The fit indices of postulated model (OC-KS-PSYCAP) have the values, $\chi^2 (1485) = 12695.82$, Non-norm fit index (NNFI) = 1.13, Standardized root mean square residual (SRMR) = 0.09, Comparative Fit Index (CFI) = 0.99. It confirms that all assumption correct for this model.

Another alternative model (OC-PSYCAP-KS) has been tried for verification. This model showed almost near results but a non-significant path having $\chi^2 (1485) = 12695.82$; NNFI = 1.13, SRMR = 0.09 and CFI = 0.99. Based on the argument proposed by Bollen, (1989), gives the acceptance to postulated model over another model. Therefore hypothesis H4 (i.e. KS is positively and significantly mediate to Organizational Culture (OC) and Positive Psychological capital (PsyCap) is corroborated.

Discussion:

The study tries to know the relations for Organizational Culture (OC), Positive Psychological Capital (PsyCap) and Knowledge Sharing (KS). The positive and significant correlations between OC-PsyCap demonstrate that the organizational culture plays an imperative role for enhancement of positive psychological capital. The relationship of positive psychology capital with the dimensions of organizational culture has the following trend: Improvement Orientation, IO > External Orientation, EO > Interdepartmental Cooperation, IC > Autonomy OA > Human Resource Orientation, HRO. The trend in relationship clearly supports for more importance on improvement orientation for individual or group of employees. It will transform them as a positive psychological capital for organization along the side of other OC dimensions.

Similarly, the positive and significant correlations between OC-KS highlight the need for supporting organizational cultures as prerequisites for knowledge sharing. Therefore, the knowledge sharing follows given relationship order with the dimensions of organizational culture i.e. Interdepartmental Cooperation, IC > Improvement

Orientation IO > External Orientation, EO > Autonomy OA, Human Resource Orientation HRO. This trend verifies the general understanding as well as literature support for interdepartmental cooperation is the first and foremost request for knowledge sharing process along with other dimensions of organizational culture. Again the positive and significant relation between KS-PsyCap strengthens the above argument that knowledge sharing promotes the positive psychological capital.

Limitations, Scope and Theoretical Implication:

The study helps to enrich the literature about Organizational Culture (OC), Positive Psychological Capital (PsyCap) and Knowledge Sharing (KS). The verification of hypotheses put further awareness that the OC provides the indirect assistance to knowledge sharing (KS) for being positive contributors. The findings have managerial implications to make organizational culture more effective for increased knowledge sharing process and makeover of human resource as a positive psychological capital. Also, the study advocates development of value based liberal organization. The human resource should consider as psychological capital and treat them accordingly.

The limitation of this study contains 430 responses from north-Indian ICAR institutions. The findings are derived from one time data, so, enduring a directional model for other studies are less acceptable. The study is limited to scientists only. It may be carried to other industrial sectors.

Conclusion:

The culture of any organization plays very significant role toward the association of its stakeholders. Employees are the most important part of any organization. Basically they are the faces of organization therefore a positive and supportive organizational culture should be there to made them a positive psychological capital. It helps to grow both organization and individual. The study furthermore unlocks the lucid ability of investigators.

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