

# AN EXPLORATORY FACTOR ANALYSIS FOR DEVELOPING A SCALE OF ETHICS A KNOWLEDGE MANAGEMENT PERSPECTIVE

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**PURPOSE**  
*ETHICS has been broadly analyzed and explored from work-place perspective. However, research on ethics from knowledge management (KM) perspective is weak; very few empirical studies have been done in this regard. The paper aims to create scale for ethics to fill the gap. The scale which has been developed by the author(s) is aimed to be used for testing the relationship between ethics and KM in future.*

**Design/Methodology/Approach:** *In this study, the existing literature was examined and it was then administered and investigated to 278 employees in different organizations. Exploratory Factor Analysis (EFA) was employed to determine the scale and further reliability of factors.*

**Findings:** *Five factors of ethics have been identified. These factors are: F1: Organizational Values and Ethical Climate; F2: Commitment, Responsibility, and Team Working Morale; F3: Intellectual Capital and Trusteeship; F4: Ethical Issues, and F5: Obstacles to Ethical Behavior.*

**Research Limitations/Implications:** *The scale is perceptual to assess and evaluate ethical dimensions, which may or may not be authentic indicator of ethical dimensions existing in the organization.*

**Practical Implications:** *The scale can be used as an instrument for investigating the effectiveness in KM process, KM ownership, and KM practices.*

**Originality/Value:** *The scale is a valid and reliable measure of ethical constructs. It is a credible tool to investigate ethical behavior and framework that the employees feel, think, and believe exists within their organization.*

**Key Words:** *Knowledge Management (KM), Ethics.*

## Introduction

Ethics, in simple words, is all about right and wrong. As a field of study, there are two schools of thoughts that have emerged, teleological and deontological. Teleological perspective (Hume, 1750; Smith, 2002) refers to the consequence of an action as indicator of good or bad and deontology perspective (Kant, 1991) refers to the action as an ethical indicator. The other perspective to ethics is individual's behavior as ethical (Crisp, 2011).

In this era of knowledge based competition, organizations use unique, creative, and innovative techniques

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to improve their structure and enhance their performance (Michael, Mckeen, & Singh, 2009). In this endeavor to become successful, these organizations overlook the ethical issues. It has been noted that knowledge of ethics is derived more from employees' experience as compared to academic knowledge (Lee, 2010). With globalization and rapid technological changes, there is a need to address ethical issues, as the world is experiencing compromise on ethics like knowledge hoarding, manipulation, and misappropriation. Personal ethics, interpersonal behavior in moral ecology, and articulation and dissemination of ethical standards plays pivot role in addressing ethical concerns. There are various socio economical, technological, and legalistic issues which are obstacles for sustaining ethical culture in an organization. The ethics provide the organization with guiding principles for KM and facilitate effective implementation and execution of KM practices resulting in a win-win situation for all the stakeholders. The ethics is the independent variable which impacts the dependent variable KM. The available literature is limited for ethics impacting KM. The current study focuses on developing and testing research questionnaire for ethics from KM perspective.

## **Literature Review**

### **Ethics**

Ethics are behavioral codes which are recognized as right and good at individual level as well as societal level. Ethics provide a guideline for individual practice as well as collective practice in community (Tseng & Fan, 2011). The understanding of ethics in a community is dependent on value system of that particular community (Macintyre, 1985). Individuals being a member of organization as well as community are guided to respect ethical norms of organization and society to which they belong (Tseng & Fan, 2011). The ethics can be referred to as ideals embedded in a group or community of people and are reflected through their culture (Akhavan, Ramezan, & Moghaddam, 2013). Collective ethics of society or nation are referred to as ethos. Ethics are referred to good and bad attributes, conducts, intentions or moral duties, and commitments towards organization or society. Akhavan et al. (2013) has listed four dimensions of ethical principles: organizational value and justice; team working morale; intellectual ownership and trusteeship; and commitment and responsibility. Organizational values and justice is the most vital aspect of ethical principles constituting collective trust and organizational trust; fair, honest, and humble behavior of employees; criticism taking, and perseverance in works. Team working morale refers to ethical conduct while working in a team which involves cooperation, empathy, self-awareness, self-control, affability, and council with others. Intellectual ownership and trusteeship refers to obeying intellectual property rights, maintaining confidentiality, and trusteeship. Other ethical dimension includes responsibility, commitment, and loyalty towards organization. It also includes working conscience and being foresighted at work.

PRIMES model is explained by Huff (2010) as "a model comprising of several ethical parameters from individual and surrounding perspective. It constitutes personality, integration of morality, moral ecology, and skills" (p. 19). "Personality depicts work that people prefer and the path they choose to accomplish it" (John & Srivastava, 1999, p. 102). Integration of morality refers to moral commitment of individuals and gives direction to individual action in diverse situations. Moral ecology is the surrounding environment of an individual which influences and dominates individual action in diverse situation. Moral skills and knowledge is awareness that individual possess about different moral actions and content.

Obstacles to ethical behavior depict that behavior which individual persists to restrain share of knowledge and also includes manipulation of knowledge for individual interest or personal gain. Different obstacles to ethical behavior are knowledge hoarding, plagiarism, manipulation, misappropriation, and property and privacy right conflict. Sharing of tacit knowledge, that is, personal knowledge in form of ideas and experiences is dependent on owner's willingness to share as it serves as economic means to the employee. When employee hesitates in knowledge sharing

with organization, it leads to knowledge hoarding. The knowledge is sometimes modified, altered, suppressed, amplified, and omitted for some personal interests or individual gain leading to manipulation and misappropriation of knowledge. There is also conflict among employee and organization over knowledge ownership. The former consider knowledge as a phenomenon carried in the mind of individuals whereas, the latter view knowledge as an asset created by providing the employees resources both financial & technological, infrastructure, and reward. Ethical issues comprise of technical issue, socio economic issue, and legalistic issue. Technical team responsible for designing and implementing of KM system come across a number of unethical aspects. In these situations, technical staff can act as a whistleblower to make management aware about the unethical aspects. Also, there is a hidden agenda for implementation of KM in an organization that accounts for socio economic issue in ethical practices. The underlying motivation to implement KM system is to capture employee's knowledge to reduce human resource cost by carrying out retrenchment in the organization (Bryant, 2006). Legalistic aspect in KM based organization is concerned with conflict over knowledge ownership right between employees and organization (Baskerville & Dullipovici, 2006) (as shown in table no. 1).

### **Linking Ethics and KM**

It is necessary to have ethical framework or collaborative ethical tool for KM system constituting several ethical parameters and constructs, as KM system might adopt unethical path to accomplish objectives and goals for profit and wealth maximization (Glisby & Holden, 2003). "Ethical approach to KM is built on trust, fairness, and justice as they stimulate individuals to participate in KM process. Trust prevents employees from knowledge hoarding" (DeLong & Fahey, 2000, p. 113). "Trust facilitates sharing and creation of knowledge" (Burchell & Cook, 2008, p. 36). Trustworthiness among individuals in a group impacts the extent to which knowledge is shared. Where there is trust in an organization, individual can depend on organization to care for them. Trust enables colleagues and managers to freely share knowledge instead of hiding or protecting that knowledge. Patel & Ragsdell (2011) highlighted the need for a fair and ethical behavior.

Tseng & Fan (2011) highlighted the significance of an ethical organizational climate for facilitating knowledge processes. "The ethical approach to KM supports an organization to engage individuals in knowledge process and also to build database acquiring and retaining individual knowledge and experience" (Liebowitz, 1999, p. 37). Fair KM practices rewards individuals for their knowledge contributions (Baskerville & Dullipovici, 2006). According to Sen (1993), the organizations are rewarded for treating its employees in fair and equitable manner. "Organizations rewarding individuals with incentives for knowledge contribution encourages fairness" (Bock & Kim, 2002, p. 16). As suggested by Wang & Noe (2010), "knowledge processing behavior can prove to be motivational when it provides the benefits of recognition, promotion, and salary hike to the employees and also contributes in expanding their expertise and knowledge base" (p. 115). Also, "KM practices need to be fair and unbiased. The knowledge which individual possesses is an intellectual capital of the individual and organizations may refrain from controlling it" (Chen & Choi, 2005, p. 107; Gorman, 2004). According to Da Costa, Prior, & Rogerson, (2010), "atmosphere of fairness and equality can be seen where individuals feel driven to share, create, and process knowledge" (p. 580). On the basis of above discussion, it is proposed to link ethics and KM.

There are various Indian research studies on knowledge (Tomblin & Maheshwari, 2004), Leadership (Singh & Kumar, 2013), Organizational Culture (Kumar, 2012), Technology (Kumar, 2012), knowledge management (Singh, 2001; Grover & Banerjee, 2005; Sharma, 2005; Sharma, 2008; Singh & Sharma, 2008a; Singh & Sharma, 2008b; Singh & Sharma, 2008c; Singh & Sharma, 2008d; Kumar, 2014) per se and the factors affecting knowledge management, for example, technology (Kumar, 2012), Organizational Culture (Sharma, 2005; Singh & Sharma, 2011a; Singh & Sharma, 2011b; Kumar, 2014), leadership (Kumar, 2013), knowledge manager (Dutt, 2006), and how knowledge management results into higher employees satisfaction (Singh & Sharma, 2011b).

**Table No. 1: Ethics Dimensions and Respective Indicators**

S. No.	Dimensions	Indicators/Areas	Sources
1.	Organizational Value and Justice	Collective trust	Suhonen, Stolt, Katajisto, Charalambous, & Olson (2015), Akhavan et al. (2013), Azmi (2010a), Khenifer & Moghimi (2009), Ali (2008), Raps (2005), Inkpen & Tsang (2005), Hutchings & Michailova (2004), Galford & Drapeau (2003)
		Organizational trust	
		Honesty	
		Fair behaviour	
		Humility	
		Criticism taking	
2.	Commitment and Responsibility	Responsibility	Suhonen et al. (2015), Akhavan et al. (2013), Bove & Jhonson (2012), Calof & Smith (2012), Michie & Johnston (2012), Jordan & Troth (2011), Azmi (2010b), Huysmans & Wit (2004), Chua (2002), Nahapiet & Ghosal (1998)
		Working conscience	
		Commitment	
		Loyalty	
		Foresight	
3.	Intellectual Ownership and Trusteeship	Secrecy	Sayce (2012), Azmi (2010b), Khenifer & Moghimi (2009), Akhavan et al. (2013)
		Intellectual property right	
		Trusteeship	
		Care in authenticity	
		Council with others	
4.	Team Working Morale	Helping and empathy with others	Akhavan, et al. (2013), Azmi (2010b), Meng-Hsiang & Fang-Yang (2003), Ferris (2008), Huysmans & Wit (2004), Chua (2002)
		Affability	
		Self-control	
		Self-control	
5.	PRIMES (Ethical Action Model)	Personality	Huff (2010)
		Integration of morality	
		Moral ecology	
		Skills & knowledge	
6.	Ethical Issues	Socio economic issue	Suhonen et al. (2015), Bryant (2006)
		Technical issue	
		Legalistic issue	
7.	Obstacles to Ethical Behaviour	Knowledge hoarding	Zyngier & Nagpal (2015)
		Manipulation	
		Misappropriation	
		Plagiarism	
		Property & privacy right conflict	
		Autonomy in knowledge sharing	

### Conceptual Model

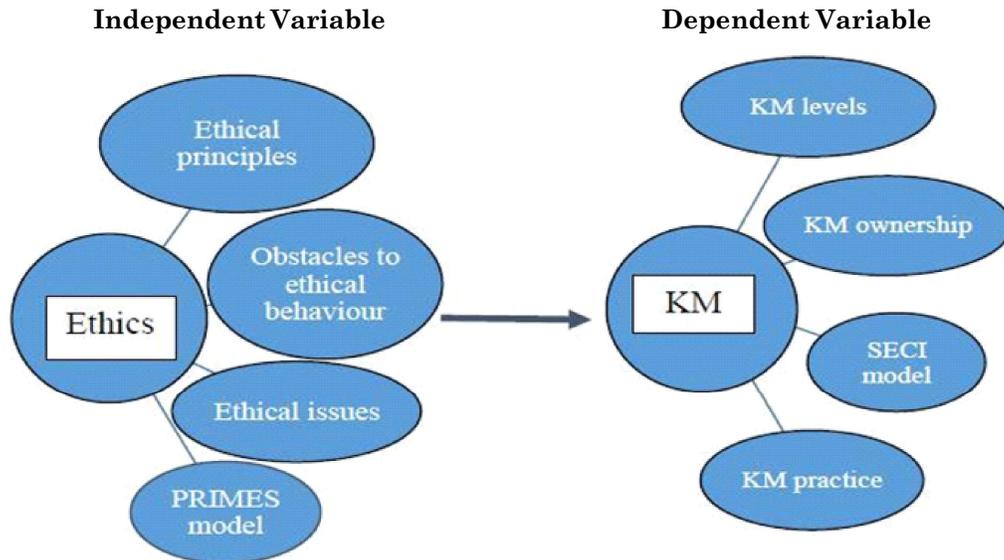


Figure No.1: Ethics impacting KM System

Source: Compiled by authors

## Research Methodology

### Study Design

An exploratory factor analysis was carried out with the primary objective of reducing the number of items and investigating that the factors/constructs stated in the literature are appropriate according to the present scenario. Also, grouping provided by the literature needed to be reviewed or regrouped. Initially, the process of Factor Analysis was considered to be used for identifying the ethical dimensions outlined in the literature. Subsequently, Exploratory Factor Analysis was used because of the possibility of identification of other meaningful factors involving combination of items. The factors resulted from the EFA were then tested for the reliability.

### Research Instrument

The preliminary section of questionnaire demanded respondents to fill demographic details like age, gender, qualification, and work experience. The research instrument with 36 questions was created covering variables grouped under the constructs discussed in literature which includes organizational values and justice, commitment and responsibility, intellectual ownership and trusteeship, team working morale, ethical issues, obstacles to ethical behavior, individual ethics, and moral ecology. The variables so derived at the end were used after approval from various experts in the field of ethics, human resource, and compliance.

### Participants

A convenience method of sampling was employed. The questionnaire was sent to 300 participants. There were 278 respondents to the questionnaire. All participants were assured of anonymity and confidentiality.

### Analysis

The demographic details of the respondents are shown in table no. 2.

**Table No. 2: Demographic Details**

<b>Sample Characteristics</b>	<b>Frequency (n=278)</b>	<b>Percentage</b>
<b>Gender</b>		
Male	186	67%
Female	92	33%
<b>Age</b>		
18-25	85	30%
26-35	119	43%
35-59	69	25%
60 and above	5	2%
<b>Education</b>		
Graduate	129	46%
Post Graduate	133	48%
Doctorate	16	6%
<b>Experience</b>		
Freshers	18	6%
1-5 years	120	43%
6-10 years	50	18%
10-20 years	72	26%
Above 20 years	18	7%

The Exploratory Factor Analysis (Principle Component Analysis) employed a rotated component matrix to identify and reduce the number of factors and to make interpretation of analysis easier. Minimum factor loadings were set at 0.40 (Nunnally, 1978).

Principal-Axis Factor Analysis was employed using SPSS 22 to examine the dimensions of the constructs. The rotation method used in the paper is varimax rotation. The goal of varimax rotation is to simplify and clarify the data structure. The main goal of EFA is to extract the smallest number of interpretable factors contributing to the correlation among of variables. The items that are grouped together after applying EFA are said to measure the same underlying construct (Kerlinger, 1986). EFA is helpful when the researchers are trying to understand the dimensions of a construct. It also helps in identifying the variables which do not have any contribution in the construct.

EFA is the first step to identify and extract important variables which could be further tested using Confirmatory Factor Analysis. The 33 scale items loaded on to 5 factors accounts for 60.61% of the explained variance (as shown in table no. 3).

### **Extraction Method: Principal Component Analysis**

The Kaiser-Meyer Olkin measure (Cerny & Kaiser, 1977; Kaiser, 1970) of sampling adequacy was 0.910 as shown in table no. 4. The 'p' value is less than 0.01, so it could be construed that EFA is an appropriate strategy. Further, the Bartlett's Test of Sphericity (Bartlett, 1950, 1951) yielded a Chi-Square value of 4851.993, with 528 df.

**Table No. 3: Total Variance Explained**

Component	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total Variance	% of Variance	Cumulative %	Total Variance	% of Variance	Cumulative %	Total Variance	% of Variance	Cumulative %
1.	10.72	32.47	32.47	10.72	32.47	32.47	8.05	24.40	24.40
2.	4.38	13.28	45.76	4.38	13.28	45.76	4.75	14.40	38.80
3.	2.07	6.27	52.03	2.07	6.27	52.03	3.03	9.18	47.98
4.	1.66	5.02	57.04	1.66	5.02	57.04	2.51	7.61	55.59
5.	1.18	3.57	60.61	1.18	3.57	60.61	1.66	5.02	60.61
6.	0.97	2.94	63.55						
7.	0.89	2.70	66.25						
8.	0.83	2.53	68.78						
9.	0.77	2.33	71.11						
10.	0.75	2.27	73.38						
11.	0.67	2.03	75.41						
12.	0.62	1.88	77.29						
13.	0.60	1.81	79.10						
14.	0.58	1.75	80.85						
15.	0.56	1.71	82.56						
16.	0.55	1.66	84.22						
17.	0.47	1.41	85.63						
18.	0.46	1.38	87.01						
19.	0.41	1.25	88.26						
20.	0.41	1.24	89.51						
21.	0.38	1.15	90.65						
22.	0.37	1.14	91.79						
23.	0.36	1.11	92.89						
24.	0.33	1.01	93.90						
25.	0.30	0.92	94.82						
26.	0.28	0.83	95.65						
27.	0.26	0.80	96.45						
28.	0.25	0.76	97.21						
29.	0.22	0.66	97.88						
30.	0.20	0.61	98.48						
31.	0.19	0.58	99.06						
32.	0.18	0.54	99.60						
33.	0.13	0.40	100.00						

**Table No. 4: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.910
Bartlett's Test of Sphericity	Approx. Chi-Square	4851.993
	Df	528
	Sig.	0.000

Factors were extracted with the Eigen Values more than 1. Items were removed when communalities were less than 0.40 as shown in table no. 5. This resulted in the deletion of 3 items, reducing the total number of items to 33. Communalities displays variance that variable has been accounted for extracted factors. In the communalities 31 variables out of 33 variables displayed more than 0.5 variance.

**Table No. 5: Communalities**

S. No.	Items/Variables	Initial	Extraction
1.	Employees take social responsibility of their actions.	1.00	0.59
2.	My colleagues are available for counseling at the time of confusion.	1.00	0.60
3.	Employees do not modify or change the information for their personal gain.	1.00	0.59
4.	It is important for employees to have fair and impartial behavior with each other.	1.00	0.66
5.	Employees behave honestly with each other.	1.00	0.71
6.	Consultation with others in tasks and decisions is important for employees.	1.00	0.40
7.	Care in Authenticity (assessing the accuracy of a subject) is important.	1.00	0.62
8.	The behavior of employees in my organization is fair and friendly.	1.00	0.49
9.	Employees have high work consciousness.	1.00	0.68
10.	Employees are responsible and accountable for their tasks.	1.00	0.64
11.	Employees moral actions are influenced by surrounding people in organization	1.00	0.66
12.	Employee's personal characteristics & skills guide their moral actions.	1.00	0.62
13.	Having good manners and openness is admired.	1.00	0.56
14.	Information confidentiality of employees and organization is very important and emphasized.	1.00	0.53
15.	Self-control is important for employees and its emphasized by the organization.	1.00	0.46
16.	Employees do not keep their personal knowledge with themselves rather they share it.	1.00	0.54
17.	Too much autonomy in knowledge sharing is a barrier.	1.00	0.59
18.	Employees trust each other and deal with each other in good faith.	1.00	0.56
19.	Manipulation and misappropriation hinders knowledge sharing.	1.00	0.60

S. No.	Items/Variables	Initial	Extraction
20.	Sharing knowledge and legal issues are inter-related.	1.00	0.57
21.	The boundaries of my knowledge and organizational knowledge are sometimes confusing.	1.00	0.66
22.	Employees feel committed towards organization's goals & mission and their responsibilities.	1.00	0.63
23.	Employees are sympathetic to each other and are willing to help each other.	1.00	0.73
24.	Trusteeship is important and considerable for all members.	1.00	0.76
25.	Employee designing & implementing KMS can act as Whistle-blower.	1.00	0.65
26.	Considers Intellectual Property Right as important and it is emphasized.	1.00	0.63
27.	Employees are loyal to organization and to each other.	1.00	0.71
28.	Employees trust that organizational policies will be done according to given promises.	1.00	0.61
29.	Employees have foresight in their actions and decisions, according to organization's vision.	1.00	0.50
30.	Employees and managers trust each other and deal with each other in good faith.	1.00	0.59
31.	Tolerance and perseverance of people in tasks is valuable.	1.00	0.72
32.	Modesty and courtesy is value and virtue.	1.00	0.65
33.	Capturing employees' knowledge into information system leads to downsizing or retrenchment.	1.00	0.50

Table no. 6 has the five factors with the variables and their respective factor loadings. The final 33 items that comprised the independent variable, 'Ethics' are also presented in the same table. The five factors identified are: F1: Organizational Values and Ethical Climate; F2: Commitment, Responsibility, and Team Working Morale; F3: Intellectual Capital and Trusteeship; F4: Ethical Issues, and F5: Obstacles to Ethical Behavior. A factor with fewer than three items is generally weak and unstable; the factors identified have at-least three variables.

In order to estimate reliability, the value of Cronbach Alpha was calculated for each construct (factor) identified through Factor Analysis. As per Nunnally (1978), factors having alpha below 0.70 should be deleted. However, various scholars have also pointed that in exploratory studies alpha less than 0.70 can also be considered, i.e., between 0.50 and 0.70 (Frazier & Rody, 1991; Katabe, 1990; Kohli, 1989; Noordewier, John, & Nevin, 1990). The threshold 0.50 is used in this research (F1-F5). The Cronbach Alpha for all 33 variables is 0.910, that is, above minimum threshold of 0.7 as suggested by Nunnally (1978). There are five constructs and four constructs have been above the minimum threshold of 0.7. The reliability statistics is given in table no. 7.

## Discussion and Conclusions

The main objective of the study is to examine that constructs derived from the literature are valid as per the current sample statistics or they need to be reframed by regrouping of the variables according to the obtained statistics. According to the literature, there were seven constructs formed from the

**Table No. 6: Factor Loadings**

Factor No.	Item No.	Variables/Items	Component				
			1	2	3	4	5
F1	S16	Employees do not keep their personal knowledge with themselves rather they share it.	0.696				
F1	S3	Employees do not modify or change the information for their personal gain.	0.726				
F1	S18	Employees trust each other and deal with each other in good faith.	0.671				
F1	S28	Employees trust that organizational policies will be done according to given promises.	0.758				
F1	S5	Employees behave honestly with each other.	0.712				
F1	S4	It is important for employees to have fair and impartial behaviour with each other.	0.704				
F1	S32	Modesty and courtesy is value and virtue.	0.665				
F1	S31	Tolerance and perseverance of people in tasks is valuable.	0.842				
F1	S8	The behavior of employees in my organization is fair and friendly.	0.840				
F1	S1	Employees take social responsibility of their actions.	0.736				
F1	S30	Employees and managers trust each other and deal with each other in good faith.	0.762				
F1	S13	Having good manners and openness is admired.	0.815				
F1	S12	Employee's personal characteristics & skills guide their moral actions.	0.713				
F1	S11	Employees moral action are influenced by surrounding people in organization	0.572				
F2	S10	Employees are responsible and accountable for their tasks.		0.582			
F2	S9	Employees have high work consciousness.		0.581			
F2	S22	Employees feel committed towards organization's goals and mission and their responsibilities.		0.813			
F2	S27	Employees are loyal to organization and to each other.		0.783			
F2	S29	Employees have foresight in their actions and decisions, according to organization's vision.		0.793			
F2	S6	Consultation with others in tasks and decisions is important for employees.		0.770			
F2	S23	Employees are sympathetic to each other and are willing to help each other.		0.562			

Factor No.	Item No.	Variables/Items	Component				
			1	2	3	4	5
F2	S15	Self-control is important for employees and its emphasized by the organization.		0.685			
F2	S2	My colleagues are available for counselling at the time of confusion.		0.553			
F3	S26	Considers Intellectual Property Right as important and it is emphasized.			0.709		
F3	S24	Trusteeship is important and considerable for all members.			0.771		
F3	S7	Care in Authenticity (assessing the accuracy of a subject) is important.			0.732		
F3	S14	Information confidentiality of employees and organization is very important and emphasized.			0.592		
F4	S25	Employee designing & implementing KMS can act as Whistle-blower.				0.748	
F4	S33	Capturing employee's knowledge into information system leads to downsizing or retrenchment.				0.818	
F4	S20	Sharing knowledge and legal issues are inter-related.				0.727	
F5	S19	Manipulation and misappropriation hinders knowledge sharing.					0.662
F5	S21	The boundaries of my knowledge and organisational knowledge are sometimes confusing.					0.633
F5	S17	Too much autonomy in knowledge sharing is a barrier.					0.575

**Table No. 7: Reliability Statistics**

Factor No.	Factors/Dimensions	No. of Items	No. of Cases	Cronbach's Alpha
	<b>Overall Reliability</b>	33	278	0.91
F1	Organizational values and ethical climate	14	278	0.95
F2	Commitment, responsibility and team working morale	9	278	0.89
F3	Intellectual capital and trusteeship	4	278	0.81
F4	Ethical issues	3	278	0.75
F5	Obstacles to ethical behavior	3	278	0.53

grouping of different variables. The EFA in the current study resulted in five constructs (factors) comprising of 33 variables. The five factors resulted from EFA are named as, F1: Organizational Values and Ethical Climate; F2: Commitment, Responsibility, and Team Working Morale; F3: Intellectual Capital and Trusteeship; F4: Ethical Issues, and F5: Obstacles to Ethical Behavior.

The study deliberates on ethical constructs specifically from KM perspective. There is deliberation on various obstacles to ethical behavior in KM. These obstacles comprises of knowledge hoarding, manipulation, misappropriation, and privacy rights. The various ethical issues from KM perspective which includes socio economic, legal, and technical issues have also been discussed. The knowledge management in ethical context can be effective in an organization if individual's personality, his environment, commitment towards morality, and moral skills and knowledge are studied in depth. When all these parameters of ethics discussed in the paper would be embedded in the culture of an organization, it will support KM processes, KM practices, and all KM initiatives.

### **Limitations of the Study**

This study does not cover any specific population or profession, neither any specific industry. Thus, this is a generalized research for all professions or industries. The sample of the study constituted 278 respondents from different professions and industries. The sample size could have been larger as larger sample size would have given more appropriate findings. This study has focused on quantitative methodology of data collection and thus, it is restrictive. Moreover, the scale facilitates employees to assess and evaluate ethical dimensions, which may or may not be authentic indicator of ethical dimensions existing in the organization. As it is according to what employee feel, think, and believe about a particular ethical framework that exists within their organization which may or may not be authentic.

### **Future Research**

Research could be conducted to establish the relationship between ethics and KM. The link between ethics and KM may be established for ethical conceptualization of KM. Ethical framework supporting KM initiatives and KM process should be developed and implemented. Further, the impact of ethics on KM processes and activities can be accessed and measured. The scale can be used as an ethical instrument for investigating effectiveness in KM process, KM ownership, and KM practices. For practical implications, managers should understand that adoption of KM processes will not guarantee success until supported by the ethical framework. KM systems can be implemented and executed more successfully in those organizations where there is more emphasis on ethics by the organizations.

The research instrument developed through this study, that is, ethical constructs created using EFA will help to link ethics and KM in future studies. The current research will also add to the literature and knowledge domain in the area of ethics and KM.

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