# Can Ethical Leaders Enhance Knowledge Sharing? The Role of Psychological Capital and Anticipated Reciprocal Relationships

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#### ABSTRACT

The aim of the paper is to empirically investigate the influence of ethical leadership and psychological capital on knowledge sharing in business organizations. Furthermore, the paper investigates the mediating role of psychological capital and moderating role of anticipated reciprocal relationships in the relationship of ethical leadership with knowledge sharing. The analysis has been conducted on data gathered from 248 members of information technology (IT) companies by making use of survey questionnaire. Hypotheses are tested by analysing the data using structural equation modelling (SEM) and PROCESS macro. The study found that ethical leadership and psychological capital have positive effect on knowledge sharing. Ethical leadership also impacts psychological capital positively. Further, psychological capital acts as a mediator and anticipated reciprocal relationships act as moderator in the relationship of ethical leadership and knowledge sharing. This study establishes new antecedents of knowledge sharing, emphasizes the importance of ethical aspects of leadership in managing knowledge resources and enrich literature of Knowledge Management (KM), leadership, positive organizational behavior and human resources management. It further gives new perspectives to practitioners by recognizing the significance of ethical leadership, psychological capital and anticipated reciprocal relationships to enhance knowledge sharing. To the best of authors' knowledge, this study is one of few initial studies to examine the linkages between ethical leadership, knowledge sharing and psychological capital as well as the role of anticipated reciprocal relationships therein.

#### **KEYWORDS**

Ethical Leadership, Knowledge Sharing, Psychological Capital, Anticipated Reciprocal Relationships, Knowledge Management

# **INTRODUCTION**

Knowledge is a valuable, critical, rare, unique, and core resource (Kim et al., 2017) that yields sustainable competitive advantage and acts as a driving force for success and economic growth of the contemporary business organizations (Goswami and Agrawal, 2022; Xiao et al., 2017). Knowledge management (KM) is about managing the context and conditions for sharing, creating, and using knowledge to achieve organizational goals (Choo and Neto, 2010). Amongst various KM processes, knowledge sharing is the most significant process for an organization to achieve success (Goswami and Agrawal, 2020; Usman et al., 2021). Knowledge sharing is an important, indispensable, and primary focus of KM (Wu and Lee, 2016a; Zahedi et al., 2016) to succeed and survive in the competitive and dynamic environment (Kim et al., 2017). It is a discretionary behavior (Kim et al., 2017) that refers to "the provision of task information and know-how to help others and to collaborate with others to

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solve problems, develop new ideas, or implement policies and procedures" (Wang and Noe, 2010: p. 117). Acquisition of knowledge is not beneficial to an organization, unless it is shared amongst the units, groups, colleagues, and peers (Qureshi and Evans, 2015). Knowledge sharing contributes toward knowledge applications (Zhang and Jiang, 2015), strengthens organization's innovation capabilities (Lei et al., 2021) and drives the organization towards achieving optimum performance (Qureshi and Evans, 2015). The organization cannot effectively exploit the knowledge residing in human mind unless the individual willingly decides to share it; hence, unravelling the factors affecting the willingness of the individual toward knowledge sharing is necessary and vital (Agarwal and Anantatmula, 2021). Although, researchers are continuously giving attention to KM (Harvey et al., 2021) and managers have worked hard to understand knowledge sharing (Gui et al., 2021), the antecedents of knowledge sharing has not been adequately studied (Lei et al., 2021). Further, Goswami and Agrawal (2022) highlighted that among its various antecedents, researchers have always been keen to examine the influence of various leadership styles on knowledge sharing.

In management literature, the topic of leadership embraces a significant position (Agarwal, 2019). Though leadership is a factor external to an individual, it also significantly influences knowledge sharing within an organization (Wu and Lee, 2016b). It enables sharing of knowledge by imbibing role model and enhancing knowledge sharing culture (Carmeli et al., 2013). Among various leadership styles, the ethical aspect of leadership is gaining momentum due to the recent incidences of many business frauds and scandals (Goswami et al., 2021; Shakeel et al., 2020) in organizations such as Volkswagen, Lehman Brothers, Arthur Andersen, WorldCom, Enron etc. (Dua et al., 2022). Therefore, researchers as well as practitioners have shown eagerness to explore it in the organizational context (Halbusi et al., 2020). Due to the ethical nature of knowledge sharing (Su et al., 2021) and the significance of ethical aspect of leadership in organizations, it may be important and fruitful to investigate the relationship of ethical leadership with knowledge sharing. Ethical leadership involves rewarding for ethical conducts, punishing for unethical conducts (Treviño et al., 2000), providing fair treatment, and demonstrating ethical role modeling and moral behavior (Brown et al., 2005), integrity, honesty (Trevino et al., 2000) and trustworthiness (Brown et al., 2005). These aspects of the ethical leadership may play a significant role in influencing knowledge sharing behavior amongst the members of an organization.

Additionally, the linkage of ethical leadership with knowledge sharing appears to be complex (Goswami and Agrawal, 2022), and the underlying mechanism explaining this linkage is a less explored area of research (Su et al., 2021). Psychological capital, a core construct of positive organizational behavior, may be useful in explaining the underlying mechanism linking ethical leadership and knowledge sharing. It is an important intangible strategic resource and potential force behind competitive advantage (Goswami and Goswami, 2022) and is also gaining significant attention as a hidden personality resource (Agarwal, 2019). It represents human-centric approaches of the present business organizations (Goswami and Goswami, 2022) and is significantly related to positive outcomes at the individual level (Luthans et al., 2008), attitude, desired employee behaviors and performance (Luthans et al., 2007). Psychological capital motivates members of the organization to achieve the set goals and be successful through its integrative dimensions of hope, efficacy, resilience and optimism (Avey et al., 2010). Earlier research has exhibited that knowledge sharing is strengthened by positive organizational factors (Wu and Lee, 2016a) and psychological capital is a positive organizational factor (Luthans, 2002b). Hence, various aspects of the psychological capital may have critical role in impacting knowledge sharing. In addition to individual level factor, knowledge sharing is also influenced by inter-personal characteristics (Wang and Noe, 2010). Anticipated reciprocal relationships are inter-personal phenomenon that has scarce attention in the existing literature. Very few studies have investigated and found positive effect of anticipated reciprocal relationships on knowledge sharing (Liou et al., 2016). Anticipated reciprocal relationships may also explain the underlying linkage

mechanism between ethical leadership and knowledge sharing by acting as moderator between the two.

Studies related to examining the relationships between ethical leadership and knowledge sharing, psychological capital and knowledge sharing, and ethical leadership and psychological capital are limited. Further, there are dearth of studies investigating the role of psychological capital as mediator and role of anticipated reciprocal relationships as moderator in the relationship of ethical leadership with knowledge sharing. Bavik et al. (2018) investigated the relationship between ethical leadership with knowledge sharing whereas Bouckenooghe et al. (2015) examined the influence of ethical leadership on psychological capital. Studies of Nemati (2015), Qiu et al. (2015) and Wu and Lee (2016b) examined the effect of psychological capital on knowledge sharing. Ding et al. (2017) investigated the influences of anticipated reciprocal relationships on knowledge sharing intention and Bock et al. (2005) and Tohidinia and Mosakhani (2010) investigated the relationship of anticipated reciprocal relationships with knowledge sharing attitude. In addition, most studies have taken place in the western context (Haak-Saheem and Darwish, 2014). This study aspires to fill the research gap by aiming to empirically examine the effect of ethical leadership and psychological capital on knowledge sharing in business organizations. Further, this study intends to examine the mediating role of psychological capital and moderating role of anticipated reciprocal relationship between ethical leadership and knowledge creation. It aims to answer the below mentioned research questions:

- 1. Does ethical leadership influence knowledge sharing and psychological capital in business organizations?
- 2. Does psychological capital influence knowledge sharing in business organizations?
- 3. What is the role of psychological capital in the relationship between ethical leadership and knowledge sharing in business organizations?
- 4. What role does anticipated reciprocal relationships play in the relationship between ethical leadership and knowledge sharing in business organizations?

The structure of the paper is as follows. The next section gives the theoretical background and builds the hypotheses. The third section describes the data collection along with sample demographics. The fourth section gives the results and analysis, and the fifth section talks about the findings. Lastly, the conclusion of the study is given.

#### THEORETICAL BACKGROUND AND MODEL DEVELOPMENT

#### **KNOWLEDGE SHARING**

Knowledge is a "multifaceted concept with multi-layered meanings" (Nonaka, 1994: p. 15). It is defined as "fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information" (Davenport and Prusak, 1998: p. 2). Knowledge is classified into tacit and explicit knowledge (Polanyi, 1966) that are complimentary to each other (Nonaka et al., 2000). Explicit knowledge is the codified knowledge, which is transmitted and captured in organization databases (Nonaka, 1994) and shared by employees of organization in the form of manuals, documents, specifications, scientific formulae, etc. (Nonaka et al., 2000). The sharing of tacit knowledge takes place through interpersonal means, whereas explicit knowledge is shared by technology or structured processes (Chang and Chuang, 2011). Knowledge sharing is a significant and widely discussed activity of KM (Ismail Al-Alawi et al., 2007), and it has multifaceted consequences for an organization (Usman et al., 2021). Knowledge sharing is a social process (Lin and Lo, 2015), wherein people "mutually exchange their (implicit and explicit) knowledge

and jointly create new knowledge" (Van Den Hooff and De Ridder, 2004, p. 118). It has two parts: donating knowledge and collecting knowledge (Van Den Hooff and De Ridder, 2004). Knowledge donating is the process where people communicate their knowledge to others, and knowledge collecting is the process where people get knowledge from others. Knowledge is circulated unevenly in the organization, and knowledge sharing mostly relies on the people who may or may not be eager to involve in this process as and when required (Husted and Michailova, 2002). It is very crucial for organizations to educate and train their employees and create conducive environment to share knowledge because they may suffer loss of their knowledge in case employees leave the organization (Yang, 2004). It significantly enhances innovation capabilities of an organization (Lei et al., 2021; Gui et al., 2021).

Wang and Noe (2010) grouped the factors affecting knowledge sharing under five categories, namely, (a) team and inter-personal factors, (b) individual factors, (c) organizational context, (d) motivational factors and (e) national culture. Choo and Neto (2010) provided four conditions to enable sharing of knowledge, which are (a) social/behavioral (empathy, trust etc.), (b) cognitive/epistemic (common knowledge, shared practices etc.), (c) information systems/management, and (d) strategy/structure. Zahedi et al. (2016) categorized knowledge sharing practices and challenges in software development under six main themes, namely, (a) technology, (b) social attributes, (c) team cognition, (d) work processes, (e) team structure, and (f) management. Knowledge sharing is influenced by sharing leadership, authoritative leadership, and transformational leadership (Su et al., 2021). It gets affected by attitude, willingness and motivation of people involved, organizational culture, incentive system, social network patterns and structural diversity in work teams (Bavik et al., 2018).

#### **ETHICAL LEADERSHIP**

Ethical leadership refers to "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through twoway communication, reinforcement, and decision-making" (Brown et al., 2005, p. 120). It involves performance appraisal, standard setting, rewards for ethical conduct, punishments for unethical conduct (Trevino et al., 2000), role model demonstrating ethical and moral conduct and considerate and fair treatment of followers (Brown et al., 2005). Trevino et al. (2000) provided a dual pillar approach of ethical leadership consisting of two dimensions, namely, moral person and moral manager. While moral dimension of ethical leadership as a person includes honesty, integrity (Trevino et al., 2000) and trustworthiness (Brown et al., 2005), moral dimension of ethical leadership as a manager encompasses the creation of strong ethical messages for influencing the followers' thoughts and behaviors (Trevino et al., 2000). Brown et al., (2005) provided various attributes of ethical leaders like being attractive, credible and legitimate ethical role models, having altruistic motivation, making explicit ethics related communication and being fair and caring. Frisch and Huppenbauer (2014) emphasized that ethical leaders to have stakeholder perspective focusing on various stakeholders, i.e., "owners, employees, customers, suppliers, governments, environmentalists, competitors and the media" (p. 25). Ethical leadership has influence on various followers' outcomes (Bedi et al., 2016) like work engagement (Cheng et al., 2014), learning orientation (Goswami and Agrawal, 2019), psychological ownership, affective commitment (Neubert et al., 2009), moral identity, moral awareness (Yidong et al., 2017), and employee well-being (Avey et al., 2012). It significantly influences work motivation, organizational commitment, job satisfaction (Toor and Ofori, 2009), employee performance, trust (Avey et al., 2011), organizational citizenship behavior (Cheng et al., 2014), voice behaviour (Trunk Sirca et al., 2013), knowledge creation (Goswami and Agrawal, 2022) and knowledge

hiding (Su et al., 2021). It promotes morally desirable and positive behavior among followers (Bavik et al., 2018).

#### **PSYCHOLOGICAL CAPITAL**

Positive organizational behavior is "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace" (Luthans, 2002a, p. 59). Psychological capital being a significant part of positive organizational behavior refers to "a higher order latent construct derived from a constellation of motivational and behavioral tendencies associated with four positive psychological resources including efficacy (having confidence to put in the necessary effort to succeed at challenging tasks), hope (persevering toward goals because there are multiple pathways toward achieving them), optimism (making a positive attribution about succeeding now and in the future) and resilience (when facing problems and adversity) sustaining actions toward attaining success" (Luthans et al., 2007: p. 3). Hope is "a cognitive set that is based on a reciprocally derived sense of successful: (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals)" (Snyder et al., 1991: p. 570). Hope is a positive psychological capacity that has duality in terms of willpower (agency) and waypower (pathways) (Luthans, 2002b). It has willingness to thrive with aptitude to pursue and recognize success path (Welter and Scrimpshire, 2021) and boost positive expectations even in unfavorable situations (Pathak and Joshi, 2021). It is amplified by means of setting and revising goals along with planning for contingencies (Pathak and Joshi, 2021). Self-efficacy is "an individual's conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources and courses of action needed to successfully execute a specific task within a given context" (Stajkovic and Luthans, 1998: p. 66). It causes the required cognition and motivation to carry out an identified task (Welter and Scrimpshire, 2021) and develop mental strength of a person to handle and conquer stressful circumstances (Pathak and Joshi, 2021). Resiliency is "the capability of individuals to cope successfully in the face of significant change, adversity or risk" (Luthans, 2002b: p. 702). It is the capability of an individual to overcome failures or setbacks or conflicts (Welter and Scrimpshire, 2021) and handle positive situations, which enable individual in taking enhanced responsibility (Pathak and Joshi, 2021) and dealing with tough circumstances in a better way (Wong et al., 2021). Optimism is a desired positive attitude or mood caused through deciphering social or mental situations (Wong et al., 2021). It makes people to consider positive events as permanent and bad incidents as temporary (Welter and Scrimpshire, 2021). It results into anticipating the best possible outcome from various events and developing constructive thought process (Pathak and Joshi, 2021). These four components of psychological capital have notable overlapping among them (Welter and Scrimpshire, 2021). Psychological capital "goes beyond human ('what you know') and social capital ('who you know'), and is more directly concerned with 'who you are' and more importantly 'who you are becoming' (i.e., developing one's actual self to become the possible self)" (Luthans et al., 2006: p. 388).

# ANTICIPATED RECIPROCAL RELATIONSHIPS

Anticipated reciprocal relationships are individual psychological motivations (Ding et al., 2017) that represent the perception and desire of people about formation, maintenance and improvement of their relationship with others (Bock et al., 2005). Liou et al. (2016) considered anticipated reciprocity relationship under emotional category. Hassandoust et al. (2011) explained that such relationships are established through social exchange where the desire of people for fairness and reciprocity play significant role (Hassandoust et al., 2011). Anticipated reciprocal relationships among people develop capabilities to influence each other (Liou et al., 2016). It strengthens cooperation behavior among

people and results into sharing of their concerns and mutual problems with each other (Tohidinia and Mosakhani, 2010). It has significant relationship with knowledge sharing attitudes (Tohidinia and Mosakhani, 2010) and knowledge sharing intentions (Bock et al., 2005).

#### LINKING ETHICAL LEADERSHIP WITH KNOWLEDGE SHARING

The umbrella theory that explains the relationship among constructs of the study is social exchange theory, which suggests that employees recognize obligation toward their leader to respond in the way expected by the leader, if these employees perceive the leader to be kind and compassionate (Bedi et al., 2016). Ethical leadership displays trustworthiness, fairness, and honesty toward the employees (Brown and Trevino, 2006) and creates positive work settings that facilitate employees to repay with beneficial work behavior. Additionally, in accordance with social learning theory, employees assimilate appropriate behaviors at work by observing others and their experiences (Bandura, 1977). Through credible role modeling (Brown et al., 2005), ethical leader may provide an opportunity to followers for learning through observation. By modeling knowledge sharing behavior, ethical leadership may cause employees to assimilate this behavior and demonstrate this within the organization. One of the components of the theory of planned behavior is perceived behavioral control that affects the desired behavioral outcome of people in the organization (Ajzen, 2002). Ethical leadership, as perceived behavioral control, should influence the desired knowledge sharing behavior.

Leadership significantly affects knowledge sharing (Wu and Lee, 2016b) by imbibing role model and enhancing knowledge sharing culture (Carmeli et al., 2013). Ethical leadership influences organizational citizenship behavior (Mayer et al., 2009), work engagement (Tanner et al., 2010), psychological well-being (Avey et al., 2012), trust of followers in leader, and commitment that can be normative, affective (Den Hartog and De Hoogh, 2009), as well as team and organizational commitment (Kalshoven et al., 2011). Knowledge sharing is enhanced by affective commitment (Van Den Hooff and De Ridder, 2004), organizational citizenship behavior, (Yang and Farn, 2007) and trust among management and co-workers (Finestone and Snyman, 2005). The various characteristics of ethical leadership such as honesty, trustworthy, fairness, principled decision making, behaving in ethical manner, role modeling of ethical behavior, communication of ethics and value messages, and reward system for ethical conduct (Brown and Trevino, 2006) should influence attitude, satisfaction, commitment and motivation of the followers, which in turn should have impact on knowledge sharing behavior. A study conducted in Korean organizations concluded that a climate to be perceived as having fairness, innovativeness and affiliation will positively impact the knowledge sharing intention (Bock et al., 2005). Thus, in an environment where there is honesty, trustworthiness and fairness; the followers of leader will be more open to share their knowledge. Hence, logical arguments and evidences from previous studies indicate a possible relationship between ethical leadership and knowledge sharing. Thus, it can be proposed that:

H1: Ethical leadership is positively related to knowledge sharing.

# LINKING ETHICAL LEADERSHIP WITH PSYCHOLOGICAL CAPITAL

Leadership affects motivation of the followers (Bouckenooghe et al., 2015). The style of leadership has significant effect on potential development and employee mental state (Oldham and Cummings, 1996). The credible role modeling of ethical leaders increases positive psychological state of employees that guide them toward goal directed behavior (Gardner et al., 2005). They envisage developmental needs of subordinates and motivate them to achieve their maximum potential (Zhu et al., 2004). In line with social learning theory, Bouckenooghe et al. (2015) argued that nature of ethical

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leadership such as open information sharing and proactive communication about ethical conduct encourages employees to involve in proper behavior at work. This gives rise to transparency and clarity about expectations for increasing employees' hope, efficacy, resilience, and optimism (Bouckenooghe et al., 2015). In accordance with organizational support theory, employees working with ethical leaders undergo improvement in self-efficacy and confidence (Ahmad et al., 2019), as ethical leadership gives care and respect to employees. Ethical leaders enrich psychological well-being and positive emotional experiences of followers by providing them a supportive work environment (Bedi et al., 2016). This enables employees to unfold novel strategies for conquering challenges and managing stress related to work (Fredrickson, 2002) that should result in increasing their resilience capabilities. Ethical leaders have significant influence on the followers' self-efficacy through ethical standards and credibility (Avey et al., 2012). All four sources of self-efficacy, i.e., observational learning, physiological arousal, enactive mastery, and verbal persuasion (Bandura, 1977) are influenced by ethical leadership (Bedi et al., 2016). Ethical leadership has positive effect on optimism of employees (De Hoogh and Den Hartog, 2008). It also increases employees' hope by providing unbiased working environment (Bouckenooghe et al., 2015). Ethical leadership's dimensions of principled decision making, fairness, trustworthiness, honesty and behaving in ethical manner may have positive influence on psychological capital of employees. Hence, it can be hypothesized that:

**H2:** Ethical leadership is positively related to psychological capital.

# LINKING PSYCHOLOGICAL CAPITAL WITH KNOWLEDGE SHARING

Earlier research exhibits that knowledge sharing is enhanced by positive organizational factors (Wu and Lee, 2016b), and psychological capital is one of the positive organizational factors (Luthans, 2002b). Social exchange theory suggests that people interact with each other based on cost-benefit assessment, and this interaction leads to the trust and bonding of relationship over time because of the generation of interdependent obligations based on actions of others (Blau, 2017). This interaction results into sharing of various resources and is based on various rules such as reciprocity, negotiation, rationality, altruism (very rare), etc. Psychological capital being a positive factor may affect the moral dimension of reciprocity, which may result into greater sharing of knowledge among people in the organization. Psychological capital positively affects numerous areas of business (Newman et al., 2014), and leads to enhanced organizational outcomes such as improves job performance (Avey et al., 2011), quality of work life (Han and Garg, 2018) and creativity (Hsu and Chen, 2017). It has negative effect on inappropriate attitudes of people toward their work and result in job stress, anxiety, and turnover intentions (Avey et al., 2011). It positively influences organizational citizenship behavior (Avey et al., 2010), organizational commitment, job satisfaction (Larson and Luthans, 2006). Knowledge sharing is enhanced and strengthened by trust among management and co-workers (Finestone and Snyman, 2005), organizational citizenship behavior (Yang and Farn, 2007), and affective commitment (Van Den Hooff and De Ridder, 2004).

Low psychological capital lowers the knowledge sharing intention of people in an organization (Wu and Lee, 2016b). Employees having ample psychological capital may share more knowledge being highly optimistic and having good interpersonal skills (Qiu et al., 2015). Hope has significant effect on knowledge sharing (Goswami and Agrawal, 2020). Self-efficacy influences people positively and leads to positive thought patterns, motivational effort, positive choices, perseverance and resistance to stress (Luthans, 2002b). It is possible to enhance confidence or self-efficacy in people for undertaking peculiar tasks in given situations (Luthans, 2002b). The positive thoughts may inculcate more interactive and social attitude among people that might encourage sharing of their knowledge with each other. With respect to optimism, Luthans (2002a: p. 64) highlighted that "optimists are easily

motivated to work harder; are more satisfied and have high morale; have high levels of aspiration and set stretch goals; persevere in the face of obstacles and difficulties; analyze personal failures and setbacks as temporary, not as personal inadequacies, and view them as one-time unique circumstances; and tend to make one feel upbeat and invigorated both physically and mentally". Hope, optimism, efficacy and resiliency dimensions of psychological capital increase commitment, trust among each other, and foster organizational citizenship behavior, which should encourage people to be more social and share their knowledge with each other. Nemati (2015) concluded that there is a meaningful, direct, and positive relationship between psychological capital and knowledge sharing. Qiu et al. (2015) found knowledge sharing to mediate between psychological capital and innovation performance among members of the organization. Hence, it can be hypothesized that:

**H3:** Psychological capital is positively related to knowledge sharing.

#### PSYCHOLOGICAL CAPITAL AS MEDIATOR BETWEEN ETHICAL LEADERSHIP AND KNOWLEDGE SHARING

Positive leadership enhances psychological capital of followers, and followers reciprocate it with positive behavior (Wu and Lee, 2017). It indicates that ethical leadership may enhance knowledge sharing among employees by enhancing their psychological capital. Ethical leaders may affect knowledge sharing by inducing followers' positive state of mind and internal motivation. Role modeling of ethical leader gives direction to followers resulting into improvement of their psychological capital (Bouckenooghe et al., 2015). A positive relationship has been established between psychological capital and knowledge sharing by Nemati (2015). Earlier studies have found psychological capital to be a mediator between ethical leadership and job performance of followers (Bouckenooghe et al., 2015). It mediates between positive leadership and positive organizational behavior such as creativity (Gupta and Singh, 2014), transformational leadership and followers' various outcome, and authentic leadership and followers' outcomes (Bouckenooghe et al., 2015). Hence, based on the theoretical inference of hypotheses H1, H2, and H3 and above logical arguments, it can be proposed that:

H4: Psychological capital mediates between ethical leadership and knowledge sharing.

# ANTICIPATED RECIPROCAL RELATIONSHIPS AS MODERATOR BETWEEN ETHICAL LEADERSHIP AND KNOWLEDGE SHARING

On the premise of social exchange theory (Blau, 2017), anticipated reciprocal relationships lead to creating an exchange relationship among people for mutual benefits. Members of such exchange relationships have the potential to influence each-other (Liou et al., 2016). They spend time together for sharing their mutual concerns (Tohidinia and Mosakhani, 2010) and are likely to be involved in sharing of resources because reciprocity in their relationships will benefit all involved. The cooperative nature of people enhances their tendency to exchange their knowledge and ideas (Tohidinia and Mosakhani, 2010). Knowledge sharing will make people believe that it will strengthen their mutual relationships (Bock et al., 2005) accompanied by social benefits in future (Ding et al., 2017). Ethical leadership provides rewards for ethical conduct and builds trust (Avey et al., 2011), which is conducive for the anticipated reciprocal relationships. Anticipated reciprocal relationships can significantly influence knowledge sharing intention (Ding et al., 2017), knowledge sharing attitude (Bock et al., 2005; Tohidinia and Mosakhani, 2010), and knowledge sharing behavior of people (Liou et al., 2016). Ethical leadership is likely to influence knowledge sharing, and the anticipated reciprocal relationship may further strengthen it. Accordingly, it can be hypothesized that:

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**H5:** Anticipated reciprocal relationships moderate the relationship of ethical leadership with knowledge sharing such that the relationship will be stronger for higher compared to lower anticipated reciprocal relationships.

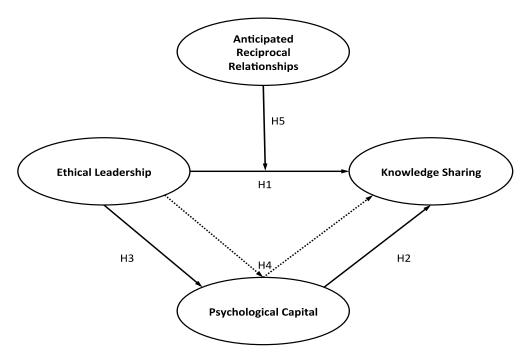


Figure 1. Proposed Model

#### **METHODS**

# DATA COLLECTION AND SAMPLE DEMOGRAPHICS

The formulated hypotheses have been tested using quantitative methodology for with the data is collected through a questionnaire survey. Questionnaire survey is the most accepted practice in the quantitative study because it helps to collect large data needed for accurate analysis in a short period as well as it ensures privacy of employees resulting into support from participating organizations (Ding et al., 2017). It is a powerful method for elucidating and comprehending population dynamics and behavior of individuals (Sturgis and Luff, 2021). It provides flexibility (Keough & Tanabe, 2011), efficiency, and versatility in data collection and helps in generalization of the findings (Avemegah et al., 2021). Indian context being an emerging economy is keenly attracting attentions of research scholars and practitioners (Goswami & Agrawal, 2020). Information technology (IT) industry is amongst the dynamic industries in the world economy (Khaleghi, 2017). According to the data available on website of Ministry of Electronics and Information Technology, Government of India, IT industry contributes to 9.3% of country's GDP and has 7% of global market share (Government of India. (n.d.)). The data is gathered from IT companies operating in India having the size of workforce between fifty thousand to four lakhs. Initially, a pilot study was administered to assess appropriateness of questionnaire items, for which data was received from 35 cases and accordingly minor changes were made in the questionnaire items. Out of total 750 questionnaires distributed, 290 of them were received. Out of 290 cases, 42 cases were omitted as they were incomplete and outliers. Finally, 248 cases (response rate = 33.01%) were used for analyses. Hair et al. (2018) suggested that sample size of

200 gives a solid basis for evaluation using structural equation modeling (SEM). Among the respondents, 40% were female and 60% were male. Table 1 exhibits the detailed demographic data of the respondents.

**Table 1.** Demographic Information of Respondents

Measures	Items	Frequency	%	Cumulative %
	Female	99	39.9	39.9
Gender	Male	149	60.1	100.0
	Total	248	100.0	
	Less than 30 years	164	66.1	66.1
Λαο	30-39 years	63	25.4	91.5
Age	40 years or more	21	8.5	100.0
	Total	248	100.0	
	Below 5 years	138	55.6	55.6
Work Experience	5-9 years	55	22.2	77.8
Work Experience	10 years or more	55	22.2	100.0
	Total	248	100.0	
	Undergraduate	86	34.7	34.7
Qualification	Postgraduate	162	65.3	100.0
	Total	248	100.0	

#### **MEASURES**

# ETHICAL LEADERSHIP

To measure ethical leadership, ten-item scale of Brown et al. (2005) was applied, and the response from respondents were received on five-point Likert scale (1- strongly disagree to 5- strongly agree). The sample items are "My superior conducts his/her personal life in an ethical manner" and "My superior has the best interests of employees in mind."

#### **PSYCHOLOGICAL CAPITAL**

To measure psychological capital, twelve-item scale (Psychological Capital Questionnaire -12) developed by Luthans et al. (2007) was used. The response from respondents were received on sixpoint Likert scale (1- strongly disagree to 6- strongly agree). The sample items are "I feel confident in representing my work area in meetings with management" and "I always look on the bright side of things regarding my job."

#### KNOWLEDGE SHARING

The five- item scale modified by Lin and Lo, (2015) and developed by Bock et al. (2005) was applied to measure knowledge sharing. Three items of this scale were split into six items (each into two items) based on the feedback by respondents and experts, two remaining items were taken as it is; this resulted into a scale of eight items. This measure has two sub-dimensions, i.e., tacit and explicit knowledge sharing. Respondents were enquired about the frequency to share specific types of knowledge with their colleagues using five-point Likert scale (i.e., 1- very rarely to 5- very frequently). The sample items are "I share my work reports and official documents with members of my

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organization" and "I share my experience or know-how from work with other organizational members."

#### ANTICIPATED RECIPROCAL RELATIONSHIPS

For measuring anticipated reciprocal relationships, five-item scale of Bock et al. (2005) was used. Respondents gave their response on five-point Likert scale (1- strongly disagree to 5- strongly agree). A sample item is "My knowledge sharing would strengthen the ties between existing members in the organization and myself."

Thus, the final questionnaire had 35 items to measure four variables, which are (a) ethical leadership, (b) knowledge sharing, (c) psychological capital, and (d) anticipated reciprocal relationships.

#### **CONTROL VARIABLES**

This study used four demographic control variables similar to previous studies, i.e., gender, age, work experience (e.g., Bavik et al., 2018; Bouckenooghe et al, 2015) and qualification (e.g., Cheng et al., 2014).

#### **COMMON METHOD VARIANCE**

This study followed recommendations of Chang et al. (2010) to steer clear of common method variance. During designing of survey questionnaire, the steps taken to avoid common method variance were: random ordering of items in questionnaire, making use of multiple scales for different measures, using reverse coded items and promising to participants regarding confidentiality and anonymity for their response. Harman's single factor test was used post data collection to examine common method variance.

#### **DATA ANALYSIS PROCEDURES**

For data analysis, the two-step process given by Medsker et al., (1994) was applied using structural equation modelling (SEM) and PROCESS macro. In the first step, factor loadings, reliability and construct validity of constructs were examined. In the second step, direct, mediation and moderating hypotheses were examined. This study used two structural models (Model 1 and Model 2). The direct effect of ethical leadership on knowledge sharing was analyzed in Model 1, and the mediation role of psychological capital between ethical leadership and knowledge sharing was analyzed in Model 2. In Model 3, the moderating effect of anticipated reciprocal relationships on the relationship of ethical leadership with knowledge sharing was examined using PROCESS macro.

#### **RESULTS AND ANALYSIS**

Data analysis began with Harman's single factor test, where fixed single factor with all items of the study accounted for 26.30% of total variance; which is much lower than the threshold value (50%). This rejects the likelihood of common method variance in the collected data. For reliability, Cronbach's Alpha is a widely used and accepted measure. The accepted value of Cronbach's Alpha is 0.70 or more and the item total correlations of all items need to be more than 0.30. In this study, one item of psychological capital scale (Item: "I usually take stressful things at work in stride".) was eliminated due to having item total correlation equals to 0.268. Cronbach's Alpha for ethical leadership,

psychological capital, knowledge sharing, and anticipated reciprocal relationships were 0.812, 0.862, 0.837, and 0.842, respectively, thus indicating the reliability of all the scales of the study.

#### CONFIRMATORY FACTOR ANALYSIS (CFA): MEASUREMENT MODEL

CFA was performed on remaining items (34 items) after the reliability analysis to examine validation of the constructs used in the study by using the maximum likelihood estimation method (Byrne, 2013). Two items of ethical leadership were excluded for poor loadings (less than 0.50) (Item 1: "My superior conducts his/her personal life in an ethical manner": 0.416 factor loading; Item 2: "My superior disciplines employees who violate ethical standards": 0.473 factor loading). CFA showed a desirable fit (Chi-square = 772.942, df = 445, CMIN/df = 1.737, SRMR = 0.070, RMR =,0.077, RMSEA = 0.055, CFI = 0.913, TLI = 0.903, IFI = 0.914, GFI = 0.840) where all items had significant factor loadings (0.546 – 0.917) greater than the recommended level (0.50; Hair et al., 2018). The composite reliability of ethical leadership (0.897), psychological capital (0.862), knowledge sharing (0.837), and anticipated reciprocal relationships (0.842) is greater than the cut-off value 0.70. Average variance extracted (AVE) of ethical leadership, psychological capital, knowledge sharing, and anticipated reciprocal relationships is 0.523, 0.490, 0.528, and 0.506, respectively. This suggests that all the constructs of the study have acceptable convergent validity. AVE, Cronbach's Alpha, composite reliability, and range of factor loadings of all items for all constructs have been provided in Table 2. For discriminant validity, different alternative measurement models were compared. In this study, six alternative measurement models were used. The result indicated to have best fit by the hypothesized four factors measurement model (Chi-square = 772.942, df = 445, CMIN/df = 1.737, SRMR = 0.070, RMR = 0.077, RMSEA= 0.055, CFI = 0.913, TLI = 0.903, IFI = 0.914, GFI = 0.840) and having significantly lower Chi-square values than other alternative models. This suggested discriminant validity of all constructs. Table 3 exhibits model fit indices of all alternative measurement models.

**Table 2.** AVE, Cronbach's Alpha, Composite Reliability (CR), Factor Loadings, Mean, Standard Deviation (SD) and Correlations

		Cronbach's		Factor					
Variables	AVE	Alpha	CR	Loadings	Mean	SD	1	2	3
1. Ethical Leadership	0.523	0.812	0.897	o.677- o.807	3.631	0.644	1		
2. Psychological Capital	0.490	0.862	0.902	0.546- 0.917	4.343	0.580	0.489**	1	
3. Knowledge Sharing	0.528	0.837	0.897	o.579- o.883	3.394	0.506	0.249**	0.558**	1
4. Anticipated Reciprocal Relationships	0.506	0.842	0.835	o.596- o.800	3.376	0.475	0.235**	0.583**	0.719**

Notes: \*p<0.05; \*\*p<0.01(2-tailed)

#### STRUCTURAL MODELS: DIRECT AND MEDIATION ANALYSIS

Four hypotheses of the study were tested using two structural models in SEM. Model 1 tested the direct effect of ethical leadership on knowledge sharing. In Model 2, psychological capital was

**Table 3.** Alternate Measurement Models

		Two	Two	Two	Three	
	Single Factor Model	Factors Model (EL & PC), (KS & ARR)	Factors Model (PC, KS & ARR), EL	Factors Model (EL, KS & ARR), PC	Factors Model (KS & ARR), EL, PC	Hypothesized Four Factors Model EL, PC, KS, ARR
Chi-Square	1954.240	1569.974	1381.088	1689.951	1033.053	772.942
df	457	456	456	452	450	445
CMIN/df	4.276	3.443	3.029	3.739	2.296	1.737
SRMR	0.126	0.111	0.095	0.1416	0.077	0.070
RMR	0.127	0.113	0.103	0.142	0.085	0.077
RMSEA	0.115	0.099	0.091	0.105	0.072	0.055
CFI	0.603	0.705	0.755	0.672	0.846	0.913
TLI	0.570	0.679	0.733	0.64	0.830	0.903
IFI	0.607	0.708	0.758	0.676	0.847	0.914
GFI	0.579	0.643	0.713	0.605	0.789	0.840

Notes: EL - Ethical Leadership, PC – Psychological Capital, KS - Knowledge Sharing, ARR – Anticipated Reciprocal Relationships

introduced as mediator between ethical leadership and knowledge sharing. Both the models were controlled for four control variables, namely, qualification, work experience, gender, and age. Bootstrapping is a significant and effective modern approach that is more valid and powerful in the testing of mediation effect (Hayes, 2009). Hence, this study adopted bootstrapping process for mediation analysis where the indirect effect was calculated using 5000 bootstrap samples at 95% biascorrected confidence intervals (Preacher & Hayes, 2008). All the fit indices of both models were in acceptable range reflecting the good fitting of the data (Model 1: Chi-square = 315.095, df = 154, CMIN/df = 2.046, SRMR = 0.072, RMR = 0.066, RMSEA = 0.065, CFI = 0.931, TLI = 0.915, IFI = 0.932, GFI = 0.888; Model 2: Chi-square = 725.084, df = 406, CMIN/df = 1.786, SRMR = 0.072, RMR = 0.073, RMSEA = 0.056, CFI = 0.910, TLI = 0.897, IFI = 0.911, GFI = 0.836, Bootstrapping = 5000). The details are given in Figure 2, Figure 3, and Table 4.

#### **MODERATION ANALYSIS**

Moderation effect of the anticipated reciprocal relationships on the association of ethical leadership with knowledge sharing was examined using PROCESS macro, where model 1 with 5000 bootstrap samples and with 0.05 significant level was used. In order to remove potentially problematic high multicollinearity with the interaction term, mean centre for construction of products was used (Aiken and West, 1991). The model was significant. Table 5 shows models summary and other relevant parameters for interaction effect.

#### HYPOTHESES TESTING

This analysis shows that significant correlation exists between ethical leadership and psychological capital (r = 0.489; p < 0.01), ethical leadership and knowledge sharing (r = 0.249; p < 0.01), ethical leadership and anticipated reciprocal relationships (r = 0.235), psychological capital and knowledge

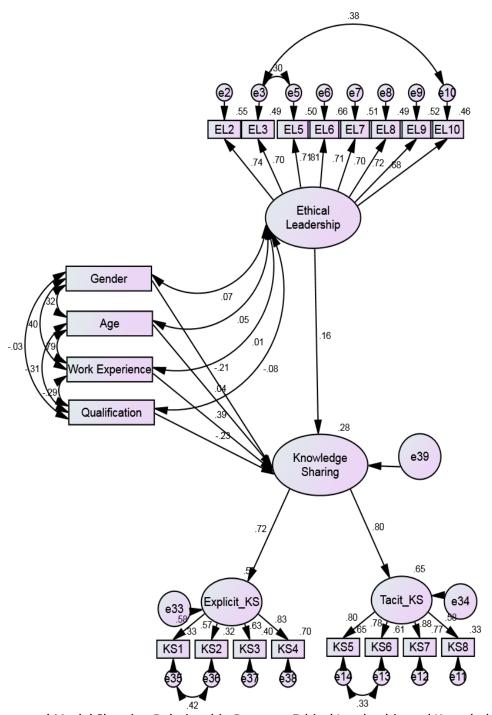
Table 4. Results of Structural Models

Main Relationships	Model 1	Model 2
Overall Fit Indexes		
Chi-Square	315.095	725.084
df	154	406
CMIN/df	2.046	1.786
SRMR	0.072	0.072
RMR	0.066	0.073
RMSEA	0.065	0.056
CFI	0.931	0.910
TLI	0.915	0.897
IFI	0.932	0.911
GFI	0.888	0.836
Path Model		
Ethical Leadership>Knowledge Sharing	0.238**	-0.020
Psychological Capital->Knowledge Sharing		0.471**
Ethical Leadership> Psychological Capital		0.478**
Ethical Leadership> Psychological Capital-> Knowledg Sharing	ge	
Total Effect		0.202*
Direct Effect		-0.020
Indirect Effect		0.225**

Notes: \*p<0.05; \*\*p<0.01

sharing (r = 0.558; p < 0.01), psychological capital and anticipated reciprocal relationships (r = 0.583; p < 0.01) and anticipated reciprocal relationships and knowledge sharing (r = 0.719; p < 0.01). It provides initial indicator for significant relationships among constructs of the study.

HI and H2 affirmed that ethical leadership is positively related with knowledge sharing and psychological capital, respectively. The results imply that ethical leadership significantly influences knowledge sharing ( $\beta$ =0.238, p < 0.01; Model 1) and psychological capital ( $\beta$ =0.478, p < 0.01; Model 2); thereby supporting hypotheses H1 and H2. H3 stated that psychological capital is positively related with knowledge sharing, which is supported by the result ( $\beta$  =0.471, p < 0.01; Model 2); thus, supporting hypothesis H3. H4 stated that psychological capital mediates between ethical leadership and knowledge sharing, and the result indicates the same (Model 2; Total effect: 0.202, p < 0.05; Indirect effect: 0.225, p < 0.01; Direct effect: -0.020, p > 0.05; Bootstrapping =5000). Thus, hypothesis H4 is also supported. The direct effect is not significant, but both the total and indirect effects are significant, thus indicating a full mediation. H5 stated that anticipated reciprocal relationships moderate the relationship of ethical leadership with knowledge sharing such that the relationship will be stronger for higher compared to lower anticipated reciprocal relationships. The result supports the hypothesis owing to significant interaction term ( $\beta$  =0.127, p < 0.05;  $\Delta$ r2 =0.005, F (1, 244) = 4.198, p < 0.05), which shows that ethical leadership is more (vs less) effective in eliciting knowledge sharing when anticipated reciprocal relationships is high (vs low). To conclude, all the hypotheses are supported by the data.



**Figure 2.** Structural Model Showing Relationship Between Ethical Leadership and Knowledge Sharing (Model 1)

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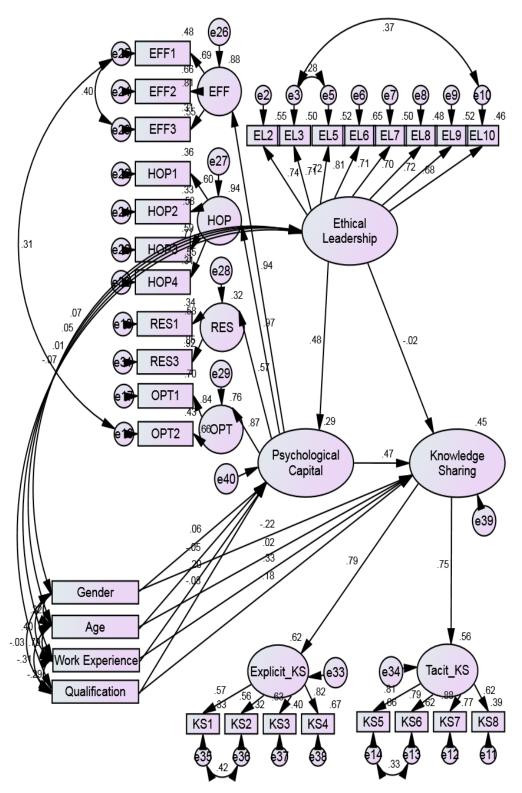


Figure 3. Structural Model Showing Mediation Effect (Model 2)

**Table 5.** Results of Moderating Model

Model Summary						
r-sq	MSE	F	df1	df2	р	
0.710	0.075	199.265	3.000	244.000	0.000	

Interactions						
	Beta	se	t	р		
EL X ARR	0.127	0.062	2.049	0.042		

Unconditional Interaction						
	R2-chng	F	df1	df2	р	
EL X ARR	0.005	4.198	1.000	244.000	0.042	

Conditional effects (95% CI)								
	Effect se LLCI ULCI							
-1 SD ARR	-0.014	0.048	-0.108	0.080				
o SD ARR	0.046	0.030	-0.012	0.104				
+1 SD ARR	0.107	0.035	0.038	0.175				

Notes: EL - Ethical Leadership, ARR - Anticipated Reciprocal Relationships

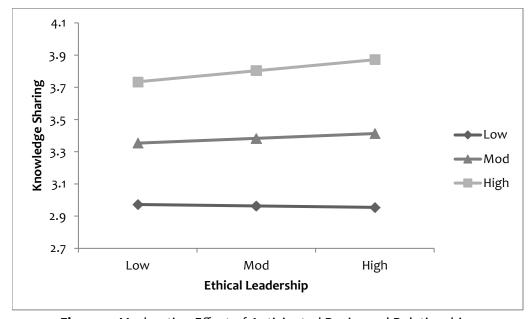


Figure 4. Moderating Effect of Anticipated Reciprocal Relationships

# **DISCUSSION**

The first finding states that ethical leadership positively influences knowledge sharing. This finding validates the findings of Bavik et al. (2018) and Bouckenooghe et al. (2015). Ethical leaders build ethical climate for followers (Le and Lei, 2018), enable them to concentrate on cooperation and communication (Carmeli et al., 2013), and make them believe that the sharing of their minds and ideas will be acknowledged (Ahmad et al., 2019). The business environment with fairness and honesty, as provided by ethical leader, reduces the fear among employees to lose their status upon dispensing

their knowledge. Employees will be given due credit for their knowledge in such conducive environment. Ethical leaders remove various knowledge sharing structural barriers, strengthen fair relationships in the workplace, promote trust, provide fair resource sharing (Bavik et al., 2018), and involve in principled decision-making (Bedi et al., 2016) that encourage followers to encompass knowledge sharing for organizational benefit. The followers of such leaders share official manuals, work reports and documents with others. They also provide their know-how, expertise and experiences to other organizational members. The second finding states that ethical leadership positively influences psychological capital, which is also validated by the finding of Bouckenooghe et al. (2015). Studies have examined similar findings related to the effect of leadership on psychological capital (He et al., 2016; Li et al., 2018). Ethical leaders focus on success in terms of results as well as the way they are acquired. They encourage followers to show similar behavior and hence, followers of these leaders also focus on ways of getting results. Ethical leaders take unbiased decisions and listen to their followers that encourage them to be confident in illustrating their work domain by interactions with management and contributing to deliberations related to the organization's strategy with them. Ethical leaders talk about ethics with followers and punish them for infringing ethical standards. This enables followers to be confident about sharing information with their colleagues due to ethical environment. Ethical leaders encourage followers to apprehend stressful things at workplace in a progressive way to overcome difficult times.

The third finding of the study highlights the significant influence of psychological capital on knowledge sharing. This finding validates the finding of earlier studies that examined the relationship of psychological capital with knowledge sharing (Nemati, 2015; Qiu et al., 2015; Wu and Lee, 2016b). People with greater psychological capital show more willingness for knowledge sharing with others (Wu and Lee, 2017) because they handle work-related issues with enthusiasm, perseverance, and positivity (Walumbwa et al., 2010). High psychological capital makes people share their knowledge, as they are highly optimistic and have good interpersonal skills (Qiu et al., 2015). Employees with high psychological capital are confident in presenting information to their colleagues, discussing about the company's strategy, and representing their work to management. They always see the bright side of their job and are optimistic for their future. These behaviors and characteristics of employees possessing high psychological capital have positive impact on knowledge sharing. The fourth finding provides evidences about the mediating role of psychological capital between ethical leadership and knowledge sharing. Ethical leaders increase psychological capital of employees and employees reciprocate with beneficial and positive behavior such as knowledge sharing at workplace. Ethical leaders by means of role modeling lead employees to boost their positive psychological states, and such employees incline to achieve work related targets by involving in beneficial behavior such as knowledge sharing. Ethical leaders through intrinsic motivation in the form of psychological capital influence employees to involve in knowledge sharing. The fifth finding suggests that anticipated reciprocal relationships will strengthen the relationship of ethical leadership with knowledge sharing in such a way that high anticipated reciprocal relationships will lead to more knowledge sharing. Barely any study has explored the moderating role of anticipated reciprocal relationships on the relationship of ethical leadership with knowledge sharing. Anticipated reciprocal relationships positively influence knowledge sharing. This becomes more prominent in the presence of ethical leadership, as ethical leadership builds trust, and trust is conducive for anticipated reciprocal relationships. As per social exchange theory, trust creates an exchange relationship between followers and ethical leader, and followers reciprocate it by involving in knowledge sharing behavior. Further, anticipated reciprocal relationships motivate people to cooperate and such cooperative behavior is crucial for knowledge sharing.

#### THEORETICAL IMPLICATIONS

The findings have many noteworthy theoretical implications. Previous literature suggests that the articulations of ethical leadership and psychological capital with knowledge sharing, and psychological capital as mediator and anticipated reciprocal relationship as moderator in the relationship of ethical leadership with knowledge sharing have attracted less attention in the KM research area. This study attempts to fill this research gaps and establishes new antecedents of knowledge sharing. It highlights the handling of knowledge from external (ethical leadership), internal (psychological capital), and inter-personal (anticipated reciprocal relationships) perspectives of people. By empirically providing the significant effect of ethical leadership on sharing of knowledge by the people, it emphasizes the crucial role of leaders in handling knowledge resources of the organization to provide competitive advantage in dynamic business environment. This is a significant contribution that adds one more aspect to leadership related to knowledge sharing. This also adds to literature of leadership emphasizing the importance of ethical aspects of leadership in contemporary business scenario. This study highlights that psychological capita has important role in encouraging employees for knowledge sharing, which significantly contributes by helping to understand the internal mechanisms of a person for sharing knowledge. It further adds new insights into the literature of positive organizational behavior. This study provides theoretical understanding of significant mediating role of psychological capital and moderating role of anticipated reciprocal relationships in the relation of ethical leadership with knowledge sharing. This is a very novel because hardly any such study has been conducted. This contribution will further lead to understand and probe the mechanism of influencing followers' behavior by leaders through followers' cognitive mechanisms. It paves the way for a new direction in research on KM from the perspective of ethical leadership and positive organizational behavior. This study validates the role of social exchange theory, social learning theory, and theory of planned behavior in explaining the linkages among constructs of the study. The findings of the study enrich literature of KM, leadership, positive organizational behavior, and human resources management. This study adds to KM literature about the new antecedents of knowledge sharing, namely, ethical leadership and psychological capital; this adds to the KM literature studied in organizations of the Indian context, which is fast changing and growing, but is different from the western world. It contributes to the human resource management literature by enhancing focus on the ethical aspects and psychological capacities of people while their recruitment, performance appraisal, and training in knowledge-based organizations.

# **PRACTICAL IMPLICATIONS**

This study provides numerous take-away and gives new perspectives to practitioners of KM in the organization. The findings from this empirical investigation help them to recognize the significance of ethical leadership, psychological capital, and anticipated reciprocal relationships for enhancing knowledge sharing. For strengthening knowledge sharing, this study stresses the necessity for managers to exhibit honesty, trustworthiness, and integrity through personal actions, involve in legitimate and credible role modeling, make ethical decisions, encourage two-way communications among members, and create a promising environment of honesty and fairness, where the followers get recognition and reward for knowledge sharing. They should also create ethical values at workplace, establish ethical work standards for performance appraisal of followers, intimate ethical expectations and communicate ethical messages to followers, and encourage followers to communicate their viewpoints. Ethical leadership needs to be built at various levels in the organizational hierarchy by means of leadership training and development programs. All the managers should also be assessed on the basis of their ethical conducts during their performance appraisal

conducted time-to-time. This should be inculcated among future generations of managers also who may be selected through succession planning or hiring process. For hiring managers with ethical orientation, the candidates need to be evaluated with regard to the ethical aspects of leadership. Further, an organization should have ethical code of conduct for both managers and employees. Managers should focus and emphasize on providing targeted training relevant organizational interventions to members of the organization for enhancing their psychological capital. A manager can strengthen hope of people by "(a) setting approach-oriented goals for them which are specific, measurable, attainable, relevant and time-based, (b) clearly communicating such goals to them, (c) breaking complex goals into simpler ones, (d) enhancing their beliefs to achieve these goals, and (e) motivating them to achieve these goals" (Ohlin, 2017; Goswami and Agrawal, 2020: p. 189). Efficacy can be developed by positive feedback, vicarious learning, mastery experiences and workplace wellbeing (Bandura, 1977). A manager can improve efficacy of employees by (a) mastery experiences, i.e., making them to look on their past successes and strengthening their experiences, (b) social modeling, i.e., learning from others' experiences, (c) social persuasion, i.e., creating such situations for success, and (d) psychological responses, i.e., reframing their negative experiences (Ohlin, 2017). Resiliency can be developed by strengthening asset factors and reducing risk factors (Masten, 2001). A manager can enhance resilience among employees by (a) making them to face reality, (b) improving their abilities to deal with such situations, and (c) providing credible role modeling by managers themselves (Ohlin, 2017). Optimism among employees can be enhanced by managers (a) to accept their past, (b) to appreciate the moments, and (c) to view the future as a source of opportunity (Ohlin, 2017). An organization should use these psychological capital interventions for leaders as well as followers. The human resources departments get important understandings and insights from the study outcome, which can be utilized by them for effective designing and execution of training programs for managers to strengthen their ethical conduct and for employees to strengthen their psychological capital for managing knowledge assets of the organization in an effective and efficient way.

#### LIMITATIONS AND FUTURE DIRECTIONS

This study has certain limitations. It has been conducted in specific research setting of Indian organizations. Future studies may be conducted in many other research settings within as well as outside India to validate the findings and provide more generalization to the research model of this study. This study has used survey questionnaire strategy for collection of data. However, future studies may supplement this study by using other strategies, namely, action research, case study and ethnography in addition to survey. This study is a cross-sectional one, future researchers may use longitudinal research setting. This study has applied single source data collection approach that uses self-reporting questionnaire. Future studies may use the multi-source data collection approach. This study has used mono method, i.e., only survey questionnaire method to collect data. However, future studies may use the multi-method or mixed-method approaches to further validate the findings of this study. This study is an individual level study. However, future researchers can examine this research model at the team level or multi-level. Further, future studies may examine the role of other variables to describe the underlying linkage between ethical leadership and knowledge sharing. Future studies may also look into examining the role of ethical leadership in influencing other KM processes. In future, researchers may also do comparative studies comparing ethical leadership with other style of leaderships and their influence on various KM processes. Such studies may also be conducted in the cross-cultural contexts to have broader implications.

#### CONCLUSION

In conclusion, this study provides significant insight into an area that is not fully explored. It has attempted to fill the research gap related to the inadequate investigation of relationships among the variables, namely, knowledge sharing, ethical leadership, psychological capital, and anticipated reciprocal relationship. It shows the significant influence of ethical leadership and psychological capital on knowledge sharing and ethical leadership on psychological capital. This study is first of its kind to provide evidence of psychological capital as mediator and anticipated reciprocal relationships as moderator in the relationship of ethical leadership with knowledge sharing. To the best of authors' knowledge, this study is among few initial researches that investigate the linkages between ethical leadership, knowledge sharing, and psychological capital as well as the role of anticipated reciprocal relationships. It provides numerous take-away and gives new perspectives to practitioners for effective KM in the organization. The outcome provides significant implications for managers to practice and researchers to venture into this fertile area. This is an important study that enriches literature of various disciplines such as KM, leadership, organizational behavior, and human resource management. Future researchers should further elevate the in-depth understanding of the proposed model by assimilating other antecedents and processes of knowledge management, and by using different methodologies. Organizations have knowledge as their core resource; hence, the findings of the study will help them to gain competitive advantage by managing knowledge in effective and efficient way through effective understanding of ethical leadership, psychological capital, and anticipated reciprocal relationships of employees in the organization.

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