

The Moderating Role of Ethical Climate in the Relationship Between Total Quality Management and Knowledge-Sharing Behavior

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Introduction

In the data era, one of the most critical factors that distinguishes companies from each other and highlights some companies from their competitors is how they use and evaluate knowledge and information. Providing the organizational conditions that encourage knowledge sharing within the organization plays a key role in allowing companies to gain a competitive advantage (Liebowitz & Yan, 2004). Given the practical importance of knowledge sharing, the research on factors affecting employees' willingness and motivation to share knowledge and information with colleagues gains importance (Bock et al., 2005).

Management practices such as total quality management (TQM) play an important role in the efficiency and effectiveness of organizations and increase employee motivation as an output of strategic value. Therefore, TQM practices can be expected to affect other employee behaviors aside from their knowledge-sharing behaviors. Studies in the literature are found to contain similar results (Cheah et al., 2009; Ooi et al., 2012; Dabestani et al., 2014). Bavik et al. (2018) noteworthy

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suggested the ethical approach as a new line on this point for exploring the premises of employees' interpersonal knowledge sharing within organizations.

From the perspective of social exchange theory (Blau, 1964) and ethical climate theory (Martin & Cullen, 2006), the aim of this study is to examine the factors affecting knowledge-sharing behavior within the framework of TQM and ethical climate. In this context, the main subject of the research is to examine the moderating role organizational ethical climate has in the relationship between TQM and knowledge sharing behavior.

The role of ethical climate in the relationship between TQM practices and knowledge sharing behavior is observed to have been inadequately studied in the literature. Notably, ethical climate has been examined holistically, but ethical climate types were not considered separately. In consideration of the gap in the literature, this study examines ethical climate under three types (i.e., benevolent, principled, and egoistic) and analyzes the relationships separately for each type. This research is predicted to provide contributions to the theoretical knowledge and to practitioners, especially regarding the concept of knowledge-sharing behavior, and is considered to be unique at the developer level.

Theoretical Background and Hypotheses

Total Quality Management and Knowledge-Sharing Behavior

Total quality management (TQM) is a systematic quality improvement approach in firm-wide management for the purpose of improving performance in terms of quality, productivity, customer satisfaction, and profitability (Sadıkoğlu & Zehir, 2010). Although TQM applications have differed in some studies, the current study is based on eight applications (leadership, training, employee management, information and analysis, supplier management, process management, customer focus, continuous improvement).

Knowledge sharing consists of having implicit and explicit information and the interpersonal sharing of information (Sheng et al., 2015). Therefore, employees should be willing to share the information with one another (Lin, 2011). In this context, information sharing is a set of specific behaviors involving the exchange of data or related information for collaborating with others in developing new ideas and implementing policies (Zhang, 2017).

One of the studies conducted on the relationship between TQM and knowledge-sharing behavior concluded that TQM practices such as customer focus, supplier relationships, and employee training and development to be strongly associated with knowledge sharing (Ooi et al., 2012). Colurcio (2009) stated TQM to be able to generate effective knowledge because it creates policies and tools that encourage information such as employee participation, teamwork, information feedback mechanisms, and communication across the organization, and these factors lead to the spread of information. A strong relationship has also been determined to exist between TQM and knowledge sharing through leadership (MacNeil, 2003). In this direction, the following hypothesis has been developed:

H₁: TQM applications are positively associated with employees' knowledge-sharing behavior.

Ethical Climate Types and Knowledge-Sharing Behavior in Terms of Ethical Climate Theory

Ethical climate refers to a type of organizational work climate that reflects organizational procedure, policies, and practices based on moral consequences (Martin & Cullen, 2006). Studies are available in the literature that have examined the relationship between ethical climate and information sharing behavior from different perspectives (Tseng & Fan, 2011; Bavik et al., 2019; Yeşil et al., 2017). However, these studies have only considered Ethical Climate as a single dimension. With respect to ethical climate theory, which this research follows, ethically proper behavior and employees' acceptable or unacceptable behaviors and expectations should be determined. For this reason, the impact ethical climate has on employees' knowledge-sharing behavior should be studied through the benevolent, principled, and egoistic sub-types of ethical climate, as introduced by Martin and Cullen (2006). Accordingly, the following hypotheses have been developed:

H_{2a}: The perception of a benevolent climate is positively associated with employees' knowledge-sharing behavior.

H_{2b}: The perception of a principled climate is positively associated with employees' knowledge-sharing behavior.

H_{2c}: The perception of an egoistic climate is negatively associated with employees' knowledge-sharing behavior.

Social Exchange Theory Perspective and Ethical Climate as Moderator

Some studies exist in the literature in which ethical climate is considered as a mediator (Demirtaş & Akdoğan, 2015; Mayer et al., 2010; Shin et al., 2015; Elci et al., 2015; Zehir et al., 2014) or as a moderator (Ning & Zhaoyi, 2017; Aydan & Kaya, 2018; Chen et al., 2013). However, while these studies have mostly considered ethical climate under one dimension, the current research takes into account three sub-dimensions.

Nedkovski et al. (2017) emphasized ethical climate types to trigger certain behaviors and organizational actors to make certain decisions and to explain the relationship between ethical climate types and social exchange theory. However, management tools and systems (e.g., TQM) require the employees in an organization to be cared for. Paying attention to employees' ideas and supporting them in all matters will further increase their work performance (Çıkmaz & Yeşil, 2020) Therefore, employees whose opinions are regarded and supported can be expected to have knowledge-sharing behavior. The point to wonder about is how this relationship forms within the framework of organizational climate. In this sense, the following hypotheses have been developed:

H_{3a}: The perception of a benevolent climate has a positive moderating effect on the relationship between TQM practices and employees' knowledge sharing behavior of employees.

H_{3b}: The perception of a principled climate perception has a positive moderating effect on the relationship between TQM practices and employees' knowledge sharing behavior.

H_{3c}: The perception of an egoistic climate has a negative moderating effect on the relationship between TQM practices and employees' knowledge sharing behavior.

Methodology

The research is based on the quantitative method. A cross-sectional field study has been conducted and the data collection technique used involved face-to-face interviews and e-mailed surveys. Exploratory factor analysis and hierarchical regression analysis have been performed using the program SPSS.

Demographic characteristics have been measured using nominal scales. Individual factors such as age, gender, educational background, experience, department,

and title/status have been investigated. The measurement instruments are 5-point Likert-type scales with high reliability. TQM practices have been measured using 43 items adapted from Sadıkoğlu and Zehir's (2010) study, ethical climate has been measured using 12 items adapted from Victor and Cullen's (1988) study, and knowledge-sharing behavior has been measured using three items adapted from Xue, Bradley, and Liang (2011) study.

The research population is composed of manufacturing-sector employees. The research sample in the field study is based on the data obtained from 396 executives and white-collar employees working in companies that have adopted TQM practices in Gebze, Samsun, and Çerkezköy's organized industrial zones in Turkey.

Validity and Reliability Analysis of Measurement Instruments

In order to investigate how well the participants understood the measurement instruments and to examine their validity and reliability, exploratory factor analysis has been carried out using principal component analysis and the promax rotation method. Next, the reliability of the factor analysis results and the internal consistency of the factors were examined using Cronbach alpha values. As a result of the exploratory factor analysis and reliability analysis, the research measurement instruments were observed to be psychometrically appropriate.

Hypothesis Testing

Multiple regression analysis has been performed to directly test the hypotheses. In order to test the moderator effect hypotheses, a moderating analysis based on hierarchical regression was conducted as proposed by Baron & Kenny (1986), Aiken & West (1991), and Dawson (2014).

According to the results from Model 1, TQM practices do not significantly affect knowledge-sharing behavior at a 95% confidence level. This situation shows that no direct relationship to exist between TQM practices and knowledge-sharing behavior, thus not supporting the H_1 hypothesis. When evaluating Model 1, benevolent climate ($\beta = 0.226, p < 0.001$) and principled climate ($\beta = 0.358, p < 0.001$) from the sub-dimensions of ethical climate positively affect individuals' knowledge-sharing behaviors. Egoistic climate does not have a statistically significant effect on individuals' knowledge-sharing behavior at a 95% confidence level ($R^2 = 31\%$). As a result, H_{2a} and H_{2b} are supported while H_{2c} is not.

Model 2 shows the interaction term (TQM X benevolent climate [Ben cli.]) to significantly affect the dependent variable and positively contributed to the vari-

ance in the dependent variable ($\beta = 0.122, p < 0.001; \Delta R^2 = 0.013, p < 0.01$). Accordingly, the perception of a benevolent climate has been determined to have a moderating role in the relationship between TQM practices and individuals' knowledge-sharing behaviors. Similarly, Model 3 shows the interaction term (TQM X principled climate [Prin. cli.]) to significantly affect the dependent variable and positively contribute to the variance in the dependent variable ($\beta = 0.156, p < 0.001; \Delta R^2 = 0.018, p < 0.01$). This indicates the perception of a principled climate to have a moderating role in the relationship between TQM practices and individuals' knowledge-sharing behavior. Model 4, in which egoist climate is the moderator variable, shows the interaction term (TQM X egoist climate [Ego. cli.]) to not significantly affect the dependent variable at a 95% confidence level; therefore, egoistic climate has no moderating role. According to the results of the hierarchical regression analysis, while H_{3a} and H_{3b} have been supported, H_{3c} has not.

Discussion and Conclusion

This study has aimed to examine the factors affecting knowledge-sharing behavior within the framework of TQM and ethical climate. First of all, Hypothesis H_1 , which assumes a positive significant effect between TQM practices and knowledge-sharing behavior, was not supported. The absence of the direct relationship between TQM practices and knowledge-sharing behavior makes investigating the presence of a third moderating variable meaningful (Baron & Kenny, 1986). Baron and Kenny (1986) recommended examining moderating variables when an unexpectedly weak or inconsistent relationship is observed between the independent and dependent variables. The final findings of the research show the moderating role of ethical climate type to revealed a different dimension to the relationship between the other two research variables.

The second point this study has focused on is the relationship between the individual ethical climate types and knowledge-sharing behavior. In this context, a significant positive effect was shown between benevolent (H_{2a}) and principled climate (H_{2b}) types with knowledge sharing behavior. The findings support the studies in the literature (Srivastava et al., 2006; Chih-Chien, 2004; Brickson, 2000). H_{2c} , which assumes a significant negative effect to exist between egoistic climate perception and knowledge sharing behavior, was also tested; however, this hypothesis was not supported. This situation is thought to stem from the nature of the egoistic climate.

Hypotheses H_{3a} , H_{3b} , and H_{3c} were tested to investigate the moderating role of the individual ethical climate types on the relationship between TQM practices and

knowledge-sharing behavior. In this framework, benevolent climate and principled climate types have moderating roles on the relationship between TQM practices and knowledge sharing behavior. However, a moderating role regarding the egoistic climate has not been found due to the possible reasons given above for the egoistic climate, thus H_{3c} is not supported.

Three points are suggested for future research: Researchers are recommended to enrich their research objectives by studying moderating variables such as age, gender and other demographics. Secondly, those who will work on the egoistic climate are recommended to focus on concepts such as employee silence and the behavior of employees avoiding expressing their opinion. Thirdly, because this study has some of the limitations observed in cross-sectional survey studies, conducting longitudinal design studies is recommended.

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