




The influence of relationship and task conflict on the knowledge-sharing intention in knowledge-intensive organisations

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Purpose: It is well known that knowledge sharing amongst employees contributes positively to an organisation's competitive advantage, but that individuals are sometimes, for various reasons, reluctant to share knowledge. Although various types of conflict may influence employees' knowledge-sharing intention, there is a dearth of empirical research in this regard. The purpose of this study was to investigate the influence of relationship and task conflict on the knowledge-sharing intention of individual employees and to establish whether extrinsic or intrinsic motivation moderates the negative effect that relationship conflict, if any, may have on knowledge-sharing intention.

Design/methodology/approach: Data were collected from 597 respondents employed at knowledge-intensive organisations. The hypothesised relationships in this study were assessed by means of general linear modelling.

Findings/results: The results of the study reveal that 'relationship conflict' is significantly and negatively related to the dependent variable 'knowledge-sharing intention' and that this negative relationship is moderated by employees' 'intrinsic motivation'.

Practical implications: The results imply that by intrinsically motivating employees, the negative effect of relationship conflict on knowledge sharing can be alleviated.

Originality/value: Given the importance of managing conflict in the workplace in general and its potential negative influence on knowledge sharing, as well as the dearth of recent empirical research on the relationship between conflict and employees' knowledge-sharing intention, this study addresses this gap in knowledge-sharing research. In addition, this makes a practical contribution by providing recommendations on how to manage conflict in the workplace. Understanding and managing different types of conflict in the workplace could increase knowledge sharing amongst employees and subsequently enhance organisational and employee performance.

Keywords: extrinsic motivation; intrinsic motivation; knowledge-sharing intention; relationship conflict; task conflict.

Introduction

The importance of knowledge sharing amongst employees is well documented. Not only is knowledge sharing associated with improved organisational performance, but it also has a positive influence on collaboration amongst employees, their decision-making efficiency, creativity and innovation (Lee, 2018). These are all important elements contributing to an organisation's edge, particularly in today's competitive business environment (Lee, 2018; Obrenovic et al., 2020). Successfully motivating employees to share knowledge can assist an organisation to increase and maintain its competitive advantage (Cai, Song, Xiao, & Shi, 2020).

Given the value of knowledge in knowledge-intensive organisations, knowledge sharing amongst employees in such organisations is of particular importance (Torres, 2015). In such organisations, most work is of an intellectual nature, and professionals work together to solve complex problems by creating unique solutions (Torres, 2015), thereby highlighting the significance of knowledge sharing amongst employees in such organisations. Knowledge-intensive organisations can be defined as those organisations that rely significantly on professional knowledge to deliver services and perform its operations (Mazorodze & Buckley, 2019). Unfortunately, it is widely acknowledged that individuals are sometimes reluctant to share knowledge (He, Baruch, & Lin, 2014; Kaur, 2016). In fact, it is a natural tendency of individuals to hoard knowledge that they consider valuable.

Many individuals consider knowledge as a source of power within an organisation that can render them some degree of superiority and protection against redundancy. Also, annoyance with the company may be another reason for the reluctance to share knowledge, whilst some individuals may take exception to not being sufficiently rewarded for sharing knowledge (Bilginoglu, 2019).

Whilst previous studies have identified various factors (e.g. value of knowledge, trust, rewards, self-efficacy) that may impact on knowledge-sharing behaviour of individuals, there have been limited studies that examine how conflict amongst individuals influences knowledge sharing (Wang, Wang, & Chang, 2019). A review of knowledge-sharing literature reveals a dearth of recent empirical research on the relationship between conflict and employees' knowledge-sharing intention. Historical research on this topic is also scant, thus further highlighting the importance of empirical research on conflict and employees' knowledge-sharing intention and subsequently addressing the gap in current knowledge-sharing literature (Chen, 2011; Shadabi, 2011; Shih, Farn, & Ho, 2008; Wang et al., 2019). It is important to understand conflict, which is a common occurrence in the workplace, as different types of conflict could have different outcomes in terms of individuals' willingness to share knowledge (Kakar, 2018). This notion is in line with organisational conflict theory that suggests that several types of conflicts can occur in the workplace (Bassey, 2019; Mohamed, 2017). In this respect, reputable theorists in the field of organisational conflict (e.g. Brown, 1983; Jehn, 1995; Pondy, 1967; Tjosvold, 1991; Van de Vliert & De Dreu, 1994) have argued that conflict can either be detrimental or be beneficial to organisational functioning. Understanding and managing different types of conflict in the workplace could therefore increase knowledge sharing amongst employees (Lim, 2017; Wang et al., 2019) and subsequently enhance organisational and employee performance (Lee, 2018).

In this study, a distinction is made between relationship and task conflict. Generally, conflict research uses the group level of analysis (e.g. Hansen, 2015; Humphrey, Aime, Cushenbery, Hill, & Fairchild, 2017; Keller, 2009; O'Neill, McLarnon, Hoffart, Woodley, & Allen, 2018), and it is not clear how task and relationship conflict influence workplace outcomes (for instance, knowledge sharing) at the individual level (Lu, Zhou, & Leung, 2011; Wang et al., 2019). It is important to understand conflict at an individual level as conflict is experienced by individuals, and thoughts and emotions emanate from individuals and advance to a group-level experience (Anestaki, 2016). As such, individuals within a team may experience conflict differently, which could result in different attitudes and behaviours (Todorova, Bear, & Weingart, 2014). The present study consequently acknowledges another gap in knowledge-sharing literature by focusing on an individual level of analysis.

Besides the lack of current empirical research on the relationship between different types of conflict and employees' knowledge-sharing intention, the literature review on knowledge sharing further revealed a lack of research on factors that could moderate possible negative relationships between conflict and employees' knowledge-sharing intention. Against this backdrop, the primary objective of this study was to investigate the influence of relationship and task conflict on the knowledge-sharing intention of individual employees in knowledge-intensive organisations and to establish whether extrinsic or intrinsic motivation moderates the negative effect that relationship conflict may have on knowledge-sharing intention.

Literature review

Knowledge-sharing intention

In this study, the dependent variable is the knowledge-sharing intention of employees in knowledge-intensive organisations. It should be noted that although the concept of knowledge hiding is closely linked to knowledge sharing, these are in fact different concepts. In this respect, 'knowledge hiding is not simply the absence of sharing' as individuals might not share because of a lack of awareness of the knowledge needs of other individuals (Gagne et al., 2019, p. 2). As such, deliberately hiding knowledge is an 'active and motivated form of not sharing' as it particularly relates to situations where a person is approached for his or her knowledge by colleagues. Individuals' motivations to share or hide knowledge might not be the same (Gagne et al., 2019, p. 2). In contrast, knowledge-sharing intention refers to employees' willingness and intention to share tacit knowledge, which includes personal insights, know-how, experience and expertise. The theory of reasoned action underpins the decisions to focus on the knowledge-sharing intention of employees, as opposed to their attitude or actual knowledge-sharing behaviour. In this instance, the theory of reasoned action explains actual behaviour as a function of attitude and intention towards a specific behaviour (Razak, Pangil, Zin, Yunus, & Asnawi, 2016). In a knowledge-sharing context, this implies that the more favourable the attitude of an employee towards knowledge sharing, the stronger the employee's intention would be to share knowledge. In turn, the stronger the intention to share knowledge, the more likely the employee will be to actually share knowledge with co-workers. Lyu, Yang, Zhang, Teo and Mu (2020) in fact assert that a lack of knowledge-sharing intention may negatively influence actual knowledge-sharing behaviour. It is therefore important to explore the factors that influence knowledge-sharing intention so as to reap the benefits of actual knowledge sharing.

Relationship conflict

Relationship conflict refers to how often individuals experience arguments, tension, friction, emotional conflict and personality conflict at work. The effects of relationship conflict are noteworthy for managers to promote knowledge sharing (Chen, 2011; Wang et al., 2019). Relationship conflict influences knowledge sharing as it is relationship orientated,

and interpersonal relationships influence employees to share knowledge with each other (Chen, 2011). Prior empirical research (Jehn, 1995; Lee, Kwon, Shin, Kim, & Park, 2018; Medina, Munduate, Dorado, Martinez, & Guerra, 2005; Shameem, Chandra, Kumar, & Khan, 2018) revealed that relationship conflict has negative effects on various outcomes such as interpersonal liking, intent to stay in the organisation, employees' satisfaction, team commitment, team effectiveness and task performance. Moreover, relationship conflict generates negative moods that ultimately weaken collaboration amongst individuals. Also, individuals who experience relationship conflict tend to be reluctant to accept ideas from each other, as well as to share knowledge (Chen, 2011).

Chen, Zhang and Vogel (2011) empirically explored the underlying processes between conflict and knowledge sharing amongst employees in software development companies in China. These authors confirmed that relationship conflict has a negative and indirect effect on knowledge sharing. In another empirical study, results revealed that relationship conflict has a significant and negative effect on knowledge sharing (Hewitt, 2008). Kakar (2018) investigated knowledge sharing within a team context and found that moderate levels of relationship conflict are conducive for knowledge sharing, whilst high and low levels of relationship conflict do not have a positive influence on knowledge sharing. Overall, empirical results on the influence of relationship conflict on knowledge sharing point towards a negative relationship (Chen, 2011; Gu & Wang, 2013; Lu et al., 2011; Shih et al., 2008).

Based on the evidence presented above, the following relationship is hypothesised:

H1: There is a negative relationship between relationship conflict and knowledge-sharing intention.

Chen's (2011) empirical research further indicates that rewards and reputation (extrinsic motivation) decrease the negative effect of relationship conflict on knowledge sharing and consequently have a moderating effect on this relationship. Chen (2011) argues that because employees in relationship conflict feel anger, annoyance and distrust of their co-workers, they are unwilling to engage in knowledge sharing. However, when rewards (such as increased pay or bonuses) for sharing knowledge are high, the economic benefits of sharing knowledge prevail over negative moods or distrust caused by relationship conflict. Posthuma (2011) concurs and points out that different reward systems may be required to neutralise the negative effects of relationship conflict. In contrast, Chen (2011) asserts that when rewards for knowledge sharing are low, employees in relationship conflict who hold negative feelings towards co-workers will have even less drive to share knowledge. In addition, when reputation for sharing knowledge is high, employees perceive that knowledge sharing could afford them an enhanced image or prestige (Chen, 2011). The social benefit of sharing knowledge in this instance outweighs the negative moods or responses brought about by relationship conflict.

In contrast, when reputation for sharing knowledge is low, employees who experience relationship conflict will be less likely to engage in knowledge sharing with colleagues whom they resent (Chen, 2011).

Apart from the moderating effect of 'extrinsic motivation' (rewards and reputation) on the relationship between knowledge sharing and relationship conflict, Chen (2011) proposes that future research should focus on conflict by testing whether 'intrinsic motivation' (self-efficacy and taking pleasure in helping others) moderates the relationship between conflict and knowledge sharing. Although no previous empirical research could be found in this regard, the researcher's view is in congruence with that of Chen (2011). Previous empirical research (Lin, 2007; Obrenovic et al., 2020; Rahab, Sulistyandari, & Sudjono, 2011) found that intrinsic motivation can benefit knowledge sharing. As such, the researcher believes that it is worth investigating whether the negative effect of relationship conflict on knowledge sharing can be decreased by intrinsic motivation, as is the case with extrinsic motivation.

Given the evidence presented above, the following hypotheses are formulated:

H2: Extrinsic motivation moderates the relationship between relationship conflict and knowledge-sharing intention.

H3: Intrinsic motivation moderates the relationship between relationship conflict and knowledge-sharing intention.

Task conflict

Task conflict refers to how often individuals experience discrepant views, ideas or opinions amongst colleagues concerning the content of a task being performed (Wang et al., 2019). According to Hansen (2015), task-related conflicts have been found to have both positive and negative effects on work outcomes. The potential benefit of task conflict is easily disregarded. In a business setting where conflicting views are openly discussed, task conflict can offer a positive contribution to decision-making (Shih et al., 2008). According to Huttermann and Boerner (2011), task conflict promotes the exchange of different knowledge and ideas, which in turn contributes to innovation within a business. More specifically, task conflict promotes a better understanding of task issues and an exchange of information that facilitates problem solving and decision making as well as the generation of ideas.

Lu et al. (2011) report that their empirical results support their hypothesis that task conflict is positively related to both innovative and knowledge-sharing behaviours. In an empirical study investigating the influence of conflict on team innovation, De Dreu (2006) found that moderate task conflict is associated with increased knowledge sharing. Similarly, Van Woerkom and Sanders (2010) concluded that only when there were neither too many nor too few differing views, individuals would be open to new ideas and begin questioning assumptions and generating new insights.

Chen and Leung (2010) also found that task conflict had positive effects on knowledge sharing.

In contrast, other researchers found no significant relationship between task conflict and knowledge sharing (Gu & Wang, 2013; Hewitt, 2008; Hsu, Chou, Hwang, & Chou, 2008; Lin, Lin, & Ye, 2015; Lin, Ye, & Bi, 2014; Saes, 2008; Wang et al., 2019). A possible explanation for the insignificant findings between task conflict and knowledge sharing is that conflict levels in a specific sample may be too low to significantly predict knowledge sharing (Lin et al., 2015). Although no direct relationship exists between task conflict and knowledge sharing in the above-mentioned studies, there might well be an indirect relationship between these variables, thus highlighting the effect of mediating variables such as trust and psychological empowerment (Wang et al., 2019).

Whilst conflicting results on the relationship between task conflict and knowledge sharing exist, there is strong evidence to believe that moderate levels of task conflict may have a positive influence on knowledge-sharing intention. The following relationship is consequently hypothesised:

H4: Knowledge-sharing intention is positively associated with moderate levels of task conflict.

Figure 1 depicts the relationships to be empirically tested as explained in the preceding sections.

Research methodology

In light of the study's research objective, a positivistic paradigm was deemed most appropriate to measure the perceptions of respondents concerning relationship and task conflict in the workplace. A positivistic approach is associated with quantitative research, which examines questions about relationships between variables, as in the case of the present study (Saunders, Lewis, & Thornhill, 2016).

Sampling

The population in this study can be defined as all employees in knowledge-intensive organisations who are based in South Africa. Even though these organisations are widely distributed across the country, a complete database of knowledge-intensive organisations is not available in South Africa. As such, convenience sampling was used in the present study.

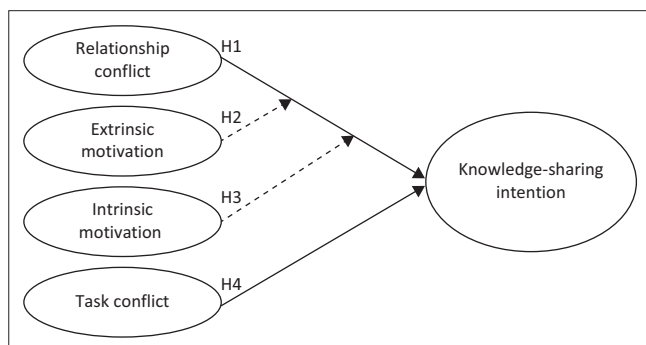


FIGURE 1: Theoretical model.

Convenience sampling allowed for the collection of data from members of the population who were conveniently available to participate in the study. Also, it is considered one of the best methods to obtain information quickly and efficiently (Sekaran & Bougie, 2016). More specifically, a comprehensive alumni list with details of professionals working in knowledge-intensive organisations in South Africa was obtained from a leading higher education institution. The approximate distribution percentage of these individuals per industry is indicated in brackets as follows: finance and business services (35%), information and communication technology (ICT) (15%) and government services (50%). The choice of using this list to contact potential respondents was deemed ideal for this study, as it included details of professionals working in several knowledge-intensive organisations in South Africa. As noted, a complete database of knowledge-intensive organisations is not available in South Africa and therefore the sample size required for this study was determined on the basis of guidelines from structural equation modelling theory. In this instance, Wolf, Harrington, Clark and Miller (2013), in their empirical study on sample size requirements for structural equation modelling, revealed a range of sample size requirements (from 30 to 460 cases) and underlined the limitations of generally cited rules of thumb. Generally, models with fewer indicators require a larger sample relative to models with more indicators, whilst models with stronger factor loadings also need dramatically smaller samples compared to models with weaker factor loadings (Wolf et al., 2013). Consistent with the views of these researchers (Wolf et al., 2013), other researchers (Hair, Black, Babin, & Anderson, 2014; Kline, 2011) also noted the broad variability in sample size requirements (e.g. 200–500) for latent variable models and revealed how the sample size estimates could vary significantly from model to model. A survey was conducted in the present study and copies of the questionnaire were emailed to 4820 respondents, of which 445 were returned as invalid. Respondents were assured of their anonymity and the confidentiality of the information they provided. They were also given clear instructions on how to respond to the statements in the questionnaire. In total, 597 usable questionnaires were received from respondents, resulting in a 13.65% response rate.

Measuring instrument

Based on the previous empirical studies that reported reliability coefficients over 0.7 and 0.8, respectively (Chatzoglou & Vraimaki, 2009; Gu & Wang, 2013), a six-item, seven-point Likert-type scale (1 = strongly disagree and 7 = strongly agree) was developed to measure knowledge-sharing intention (the dependent variable). To make the items more appropriate for this study, the wording of certain items of previous scales was adjusted.

To measure the independent variables of relationship and task conflict, scales with six and four items, respectively, were developed. Five response choices were given, ranging from 0 = never to 4 = always. Concerning the moderating variables, two five-item Likert-type scales (1 = strongly

TABLE 1: Operationalisation of the dependent, independent and moderating variables.

Dependent, independent and moderating variables	Operationalisation of variable	Sample items	Sources	Number of items
Knowledge-sharing intention	Refers to individuals' willingness/intentions to share tacit knowledge, which includes personal insights, know-how, experience and expertise	I would willingly share work experiences with my co-workers I would share work know-how with my co-workers	Chatzoglou & Vraimaki, 2009; Gu & Wang, 2013	6
Relationship conflict	Refers to how often individuals experience arguments, tension, friction, emotional conflict and personality conflict at work	How often do you experience personality conflict at work? How often do you experience tension with other co-workers at work?	Jehn, 1995; Spector & Jex, 1998	6
Task conflict	Refers to how often individuals experience discrepant views, ideas or opinions amongst colleagues with regard to the content of a task being performed	How often do you have a different opinion from your colleagues on how to complete a task/job in your work unit? How often do you have a different opinion from your colleagues concerning the content of a task/job being performed?	Jehn, 1995	4
Extrinsic motivation	Refers to the extrinsic benefits such as promotion, organisational rewards, acknowledgement, job security and reciprocity that employees consider as motivation to share knowledge	I would share my expertise with co-workers if I knew I would be promoted I would share my expertise with co-workers if I knew it would improve my job security	Kankanhalli, Tan, & Wei, 2005; Lin, 2007; Olatokun & Nwafor, 2012	5
Intrinsic motivation	Refers to the intrinsic benefits such as enjoyment in helping others, satisfaction and self-efficacy that employees consider as motivation to share knowledge	It would give me pleasure to share my experience with co-workers It would feel good to help co-workers by sharing my expertise	Kankanhalli et al., 2005; Lin, 2007; Olatokun & Nwafor, 2012	5

Note: Please see the full reference list of the article, Van Greunen, C., Venter, E., & Sharp, G., 2021, The influence of relationship and task conflict on the knowledge-sharing intention in knowledge-intensive organisations. *South African Journal of Economic and Management Sciences*, 52(1), a2166. <https://doi.org/10.4102/sajems.v52i1.2166>, for more information.

disagree and 7 = strongly agree) were developed to measure extrinsic and intrinsic motivation. The scales measuring the independent and moderating variables were based on previous scales (see Table 1) that reported sufficient reliability. Minor adjustments were made to the wording in previous scales to make the items more suitable for the present study. More detail on each of the variables investigated in this study is presented in Table 1.

Demographic profile of respondents

The majority of respondents in this study were between 31 and 40 years of age, whilst the gender of the respondents was more or less evenly spread between males and females. The majority of the respondents were English speaking and held a bachelor's or honours degree. These results are typical of a knowledge-intensive sample where most of the respondents are well-educated, qualified employees.

With respect to ethnic background, the majority of the respondents were white individuals. In addition, most respondents had worked in their organisations and current positions for between 3 and 5 years. This could be expected in a South African knowledge-intensive business, especially given the skills shortages in South Africa. In this respect, well-educated, qualified employees could easily be drawn to competitive firms with lucrative career offers, therefore remaining with a particular firm for only a short time until they receive a better offer elsewhere. This further highlights the significance of tacit knowledge sharing amongst employees, as employees who leave a business take their valuable knowledge and experience with them. In fact, the demographic results of the study show that only 6.5% of respondents had worked in their current positions for more than 10 years.

Data analysis

To identify the unique factors in the data set, an exploratory factor analysis (EFA) was performed, whilst Cronbach's

alpha coefficients were used to evaluate the reliability of the measuring instrument. In this respect, the software program Statistica (Dell Statistica Version 13) was used. To test the hypothesised relationships in this study, a subset of structural equation modelling, namely general linear modelling, was used. The software program, SPSS (Version 23), was used for the general linear modelling analyses.

Empirical results

Validity and reliability

The convergent validity of the measuring instrument was confirmed using an EFA. The varimax orthogonal rotation method, which is a commonly used method to extract factors on the basis of variance separation, was employed in the present study (Hair, Black, Babin, Anderson, & Tatham, 2006). In this study, only items with a factor loading of 0.6 or higher, which loaded onto one factor, were considered significant and included for further assessment. Also, Kaiser's rule was applied to determine the number of factors to be extracted (Eigenvalues greater than one) (Ledesma & Valero-Mora, 2007), and no limit was specified in this instance.

As anticipated, all six items that measured knowledge-sharing intention loaded onto one factor. The factor loadings varied between 0.71 and 0.89, providing satisfactory evidence of validity for this scale. Also, the items that measured the constructs relationship conflict (0.63–0.80), extrinsic motivation (0.80–0.88) and intrinsic motivation (0.67–0.92) all loaded as expected with factor loading exceeding 0.6 as shown. Satisfactory evidence of convergent validity is therefore available for these constructs. Concerning the construct task conflict, only two of the four items included in the final questionnaire to measure task conflict loaded as expected. As a result, the construct task conflict was excluded for further analysis (refer to factor structures in Tables 2 and 3).

Although an EFA may also provide useful information concerning discriminant validity issues (Farrell, 2010), in this

study the Fornell–Larcker criterion was primarily used to assess the discriminant validity of the measuring instrument, which involves comparing the average variance (AVE) between any two constructs against the squared correlations of the two constructs (Hair et al., 2006). Except for the comparison between relationship conflict and task conflict that produced an AVE value that was marginally below the squared correlations of the constructs ($0.37 < 0.42$), the constructs relationship conflict and knowledge-sharing intention ($0.50 > 0.02$), as well as task conflict and knowledge-sharing intention ($0.38 > 0.01$), produced AVE values that were much greater than the squared correlations of the constructs as indicated. It can therefore be concluded that the measuring instrument in this study has satisfactory discriminant validity. In addition to the AVE analysis, the EFA, as explained earlier, further supports the discriminant validity of the measuring instrument used in the present study as the results revealed no real issues concerning cross-loadings (Farrell, 2010).

In this study, the commonly used Cronbach's alpha coefficient was used as a measure of reliability. The dependent, independent and moderating variables returned acceptable coefficients (refer to Tables 2 and 3) (Nunnally, 1978).

TABLE 2: Factor structure of the dependent variable.

Item	Factor: Dependent variable (KI)
KI1	-0.789
KI2	-0.862
KI3	-0.854
KI4	-0.838
KI5	-0.893
KI6	-0.708
Cronbach's alpha	0.90

KI, knowledge-sharing intention.

TABLE 3: Factor structure of the independent and moderating variables.

Item	Factor: Independent variables			
	RC	TC	EM	IM
RC1	0.747	0.120	-0.012	-0.043
RC2	0.630	0.300	-0.024	0.047
RC3	0.730	0.151	0.000	0.055
RC4	0.693	0.238	0.058	0.044
RC5	0.759	0.022	0.017	0.123
RC6	0.795	0.127	0.023	0.138
TC1	0.587	0.393	0.094	0.022
TC2	0.178	0.863	0.013	0.025
TC3	0.279	0.776	-0.074	-0.034
TC4	0.532	0.428	0.056	0.104
EM1	-0.021	0.050	0.855	0.115
EM2	0.009	0.044	0.884	0.130
EM3	0.026	0.035	0.804	-0.042
EM4	0.007	-0.060	0.862	0.070
EM5	0.074	-0.116	0.802	-0.029
IM1	-0.005	0.168	-0.065	-0.672
IM2	-0.068	-0.035	-0.059	-0.904
IM3	-0.054	-0.026	-0.070	-0.920
IM4	-0.062	-0.075	-0.049	-0.850
IM5	-0.071	0.092	-0.051	-0.691
Cronbach's alpha	0.85	0.74	0.90	0.87

RC, relationship conflict; TC, task conflict; IM, intrinsic motivation; EM, extrinsic motivation.

General linear modelling analysis

The relationships amongst the dependent (knowledge-sharing intention), independent (relationship conflict) and moderating variables (intrinsic motivation and extrinsic motivation) were assessed using general linear modelling, a subset of structural equation modelling.

Table 4 illustrates the parameter estimates, standard errors, *t*-values and *p*-values of the various relationships in the proposed model.

The findings show that the independent variable, relationship conflict, was significantly and negatively related to the dependent variable of knowledge-sharing intention (parameter estimate = -2.981; $t = -23.820$; $p \leq 0.001$). This finding is consistent with the descriptive statistics, which revealed a high mean score (6.16) for knowledge-sharing intention and a low mean score (1.28) for relationship conflict. Based on the descriptive statistics, it is reasonable to expect a negative relationship between these constructs. Concerning the moderating relationships, the findings indicate that intrinsic motivation (parameter estimate = 0.479; $t = 27.064$; $p \leq 0.001$) has a positive and significant moderating influence on the relationship between knowledge-sharing intention and relationship conflict, whilst extrinsic motivation (parameter estimate = 0.003; $t = 0.292$; $p = 0.770$) did not exert any significant moderating influence as hypothesised.

Based on the findings, respondents who were experiencing relationship conflict at work were less likely to share their insights, know-how, experience and expertise with co-workers. This finding, therefore, supports hypothesis H1. Hypothesis H3 was also supported in light of the significant moderating influence of intrinsic motivation on the relationship between knowledge-sharing intention and relationship conflict. Given that task conflict was excluded from further statistical analysis, hypothesis H4 was not supported. In addition, hypothesis H2 was not supported because of the insignificant findings pertaining to the moderating influence of extrinsic motivation on the relationship between knowledge-sharing intention and relationship conflict.

Discussion of findings

The primary objective of this study was to investigate the influence of relationship and task conflict on the knowledge-sharing intention of individual employees in knowledge-intensive organisations and to establish whether extrinsic or intrinsic motivation moderates the negative effect that relationship conflict may have on knowledge-sharing intention.

TABLE 4: Model parameter estimates and *p*-values.

Variable	Parameter estimate	SE	<i>t</i> -statistic	<i>p</i>
KI ← RC	-2.981	0.125	-23.820	0.000*
RC*KI ← EM	0.003	0.010	0.292	0.770
RC*KI ← IM	0.479	0.018	27.064	0.000*

KI, knowledge-sharing intention; RC, relationship conflict; IM, intrinsic motivation; EM, extrinsic motivation; SE, standard error.

*, $p < 0.001$.

Construct validity and reliability were established for the scales measuring the dependent variable (knowledge-sharing intention), independent variables (relationship conflict and task conflict) and moderating variables (extrinsic motivation and intrinsic motivation).

The results from the general linear modelling analysis indicated that relationship conflict was significantly and negatively related to the dependent variable knowledge-sharing intention. This finding is consistent with existing empirical research on the relationship between knowledge-sharing intention and relationship conflict. For example, the findings of Chen (2011), Gu and Wang (2013), Kakar (2018), Lu et al. (2011) and Shih et al. (2008) point towards a negative relationship between these constructs. Also, sufficient statistical evidence was found for the expected moderating influence of intrinsic motivation, but not extrinsic motivation, on the relationship between knowledge-sharing intention and relationship conflict. This finding indicates that by motivating employees, the negative effect of relationship conflict on knowledge sharing can be alleviated. This result, in particular, adds considerable value to the body of knowledge-sharing literature given the lack of empirical research in this regard.

Implications of findings

The findings in the present study imply that individuals who experience arguments, tension, friction, emotional conflict and personality conflict at work are less likely to share knowledge with co-workers. Also, the findings suggest that when individuals experience internal motivation such as enjoyment in helping others, satisfaction and self-efficacy, the negative intention to share knowledge with co-workers, as a result of relationship conflict, is likely to be reduced.

Based on these findings, management should encourage an organisational environment that supports healthy work relationships between employees. In this respect, management should take a serious stance against interpersonal conflict by addressing and resolving such cases immediately, given the negative effect of relationship conflict on the willingness of employees to share knowledge.

Management should not use only extrinsic rewards such as promotion, bonuses, salary increases and job security as primary mechanisms to motivate employees to share their tacit knowledge. Instead, intrinsic motivators could be used by management to increase employees' willingness to share knowledge. Particularly, the findings of this study suggest that management should pay specific attention to increasing employees' confidence that the knowledge they share is useful and valuable to others in the business. In this regard, management should provide positive feedback on employees' knowledge-sharing efforts. Moreover, management can make it enjoyable and pleasurable for employees to share their knowledge. Employees should feel positive when they share knowledge. Management could, for example, encourage knowledge fairs where information on a specific

theme is presented by a variety of means such as kiosks, presentations, showcases, panels, scale models and demonstrations. Knowledge fairs are flexible, and individuals can see what others are doing whilst interacting with each other (Denning, 2000; Pienaar, 2007), therefore making it more enjoyable for employees to share knowledge. As such, the negative effect of relationship conflict on knowledge sharing can possibly be mitigated by these intrinsic benefits.

Besides the practical implications of this study, from a theoretical perspective, this study advanced knowledge about conflict in the workplace and individuals' knowledge-sharing intentions. In particular, this study focuses on the relationship between conflict and knowledge-sharing intention of individual employees. It, therefore, adopts an individual unit of analysis and addresses the gap in conflict research, where inadequate attention has been paid to conflict at an individual level instead of concentrating on the relationship between conflict and work outcomes at a group level. Furthermore, from an empirical perspective, both direct and moderating relationships were tested as proposed in the theoretical model, which makes a valuable contribution to the body of knowledge-sharing literature as more insight was provided on how the negative relationship between knowledge-sharing intention and relationship conflict can be moderated. This finding is a valuable contribution to knowledge-sharing literature, given that previous research focused on extrinsic motivation and no previous empirical research could be found on the moderating effect of intrinsic motivation on the relationship between knowledge-sharing intention and relationship conflict.

Limitations and recommendations for future research

This study makes a valuable contribution to the body of knowledge-sharing literature by providing more insight into the relationship between knowledge-sharing intention, relationship conflict and intrinsic motivation. However, as with all empirical studies, certain limitations should be acknowledged when interpreting and generalising the findings of the study. The degree to which the non-probability sample in this study represents the population can be questioned. Nonetheless, the data analysis was based on relatively large sample size (597 respondents), making it probable that the findings in this study can be generalised to some extent.

Furthermore, only four items were included in the final questionnaire to measure the construct task conflict. This construct was excluded from further analysis following the results of the factor analysis. Future studies could include more items to measure this construct and to possibly obtain a better factor structure that can be subjected to empirical analysis.

It is also advised that future researchers identify and empirically test alternative factors besides intrinsic and extrinsic motivation that could moderate the negative

relationship between knowledge-sharing intention and relationship conflict. Also, researchers could identify whether other types of conflict exist and establish whether these relate to employees' knowledge-sharing intention. The present study focused on the two types of conflict that are commonly identified in knowledge-sharing literature, namely task and relationship conflict. Researchers can also explore the concept of knowledge hiding instead of knowledge sharing, especially given that the reasons why individuals hide knowledge may differ from the reasons why they share knowledge. Furthermore, the focus of this study was on knowledge-sharing intention, with a specific focus on tacit knowledge. Future researchers could focus on both explicit and tacit knowledge. In this respect, it would be worth investigating whether the intention to share different types of knowledge is influenced by different factors.

As this research followed a quantitative approach, future research can centre around triangulation techniques to minimise bias results and improve the validity of research findings. Moreover, comparative studies between the results of this study and those obtained from other emerging economies could be considered. This could lead to other thought-provoking insights that were not captured in the present study. For example, it would be worth investigating whether cultural differences play a role in the relationship between knowledge-sharing intention, relationship conflict and intrinsic motivation. Finally, it is worth investigating the implementation of the recommendations presented in this study.

Conclusion

The present study attempts to contribute to the body of knowledge management literature in general and to knowledge sharing and conflict literature in particular. The study investigated the influence of relationship and task conflict on the knowledge-sharing intention of individual employees and established whether extrinsic or intrinsic motivation moderates the negative effect that relationship conflict, if any, may have on knowledge-sharing intention. From the findings, it is evident that relationship conflict has a detrimental influence on individuals' willingness to share tacit knowledge. By intrinsically motivating employees who experience relationship conflict, management could alleviate the negative impact of such conflict on their intention to share knowledge. Subsequently, the organisation could reap the benefits of increased knowledge sharing, which include improved organisational performance, collaboration amongst employees, decision-making efficiency, creativity and innovation.

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Competing interests

The authors have declared that no competing interests exist.

Authors' contributions

All three authors contributed equally to the development of the manuscript. C.v.G. conducted the initial research as part of his PhD thesis under the supervision of E.V. and G.S.

Ethical considerations

Ethical approval for this study was approved by the Faculty RTI Committee from the Nelson Mandela University, with ethical clearance number: H-15-BES-BMa-008.

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Data availability

The data that support the findings of this study are available from the corresponding author, C.v.G., upon reasonable request.

Disclaimer

The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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