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# Can incivility impair team's creative performance through paralyzing employee's knowledge sharing? A multi-level approach

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## Abstract

**Purpose** – The purpose of this paper is to examine how a supervisor's incivility in teams impact team's creative performance through the mediating factor of knowledge sharing intention among team members. Moreover, the moderating role of collaborative climate was investigated as protector against leaders' incivility.

**Design/methodology/approach** – The proposed multi-level model was tested by surveying 312 health care providers nested within 42 work units at eight large hospitals in Iran. Multi-level regression analysis was used to analyze the data.

**Findings** – The findings revealed that those team members experiencing incivility from their supervisors are more likely to show reluctance to share knowledge with team members and as a consequence this response further decreases team's creative performance. However, the climate of collaboration inside hospitals can buffer the negative impact of incivility on their readiness to share knowledge.

**Practical implications** – In team-based organizations, a supervisor's incivility can stifle the creative performance of his/her team through blocking the knowledge sharing of members. First, human resource department should have some plans to curtail incivility of supervisors. Second, establishing a climate of collaboration and trust among team members can mitigate the insidious effects of supervisors' incivility.

**Originality/value** – In prior research studies, the role of incivility on individual outcomes has been highlighted. This paper, according to the best knowledge of the author, is the first considering the negative impact of incivility on team's performance. Moreover, collaborative climate is a novel moderator considered in this study.

**Keywords** Creative performance, Knowledge sharing intention, Teams, Incivility

**Paper type** Research paper

## 1. Introduction

Due to rapidly changing economy and continuing globalization of business, employee creativity, referring to the development of novel and useful ideas about products, practices, services or procedures, has become increasingly crucial for the survival and competitiveness of organizations today (Shalley *et al.*, 2009; Hirst *et al.*, 2009). Research has revealed that teams contribute to organizational innovation, productivity and performance (Bantel and Jackson, 1989; Appelbaum and Blatt, 1994; Banker *et al.*, 1996; West and Anderson, 1996), and shape the basis of competitive advantage (Shalley and Gilson, 2004).

Considering the importance of creativity, empirical research has unearthed several facilitators and inhibitors of creativity, such as supervisor's behavior and support, developmental feedback, and creative self-efficacy (Amabile *et al.*, 2004; Tierney and Farmer, 2002; Zhou, 2003; Shalley and Gilson, 2004; Zhang and Bartol, 2010). Among



these facilitators and inhibitors, the role of leaders is significant. As a representative of the organizations and a major social and economic exchange partner in the workplace, a supervisor can play a key role in facilitating employees' creativity (Shalley and Gilson, 2004). For example, Amabile and his colleagues (2004) demonstrated that supervisor's support positively correlated with peer-rated creativity of subordinate working on creative projects in seven different companies.

Recently, organizational research has been increasingly focussed on the "dark side of leadership" (e.g. Aryee *et al.*, 2007; Griffin and Lopez, 2005). The major reason behind the current zeal is an increase in the frequency of destructive supervisor behaviors in the workplace (Griffin and Lopez, 2005; Hershcovis, 2011), and their considerable impact on organizational and individual outcomes (Aryee *et al.*, 2007; Tepper, 2007).

The ubiquity of incivility is worrisome. For example, Porath and Pearson (2013) reported that over 14 years, thousands of employees were polled and 98 percent had experienced uncivil behavior. Einarsen and Raknes (1997) found that 75 percent of Norwegian engineering employees had endured generalized, non-specific harassment at least once during the previous six months. Cortina *et al.* (2001) reported that 71 percent of 1,180 public sector employees in the USA had experienced some form of workplace incivility in the previous five years. Moreover, incivility imposes a great deal of cost on organizations. For example, in a health care study, Hutton and Gates (2008) found that supervisor's incivility directed toward direct care staff cost US\$1,235 per nursing assistant and US\$ 1,484 per registered in lost productivity. In an exemplary workplace, the cost of incivility was estimated about \$ 12 million a year (Porath and Pearson, 2013).

In particular, supervisor's incivility, which refers to "low intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect" (p. 457), has been considered an important factor that may negatively impact employee's job satisfaction (Reio and Ghosh, 2009), organizational commitment (Lim and Teo, 2009), employee engagement (Reio and Saunders-Reio, 2011), job performance (Porath and Pearson, 2010) and employee physical health (Lim *et al.*, 2008). Nevertheless, only a small number of studies have focussed directly on the associations between supervisor's incivility and subordinate performance outcomes (for exceptions, see Porath and Erez, 2007, 2009), and very little research has been conducted on the impact of leader's incivility and creative work involvement. This is an unfortunate oversight both practically and theoretically. Practically, individual creativity contributes substantively to team's creativity and organizational effectiveness (Pirola-Merlo and Mann, 2004; Shalley *et al.*, 2004), and leader behaviors have also been argued to play a significant role in the growth or prohibition of creativity (Hennessey *et al.*, 2010). Theoretically, in the view of extant incivility at work and creativity research, we expect uncivil leadership decreases team's creativity, which is a function of member's creativity (Pirola-Merlo and Mann, 2004).

The objectives of this study are threefold. First of all, this study tries to explore the impact of leader's incivility on team's creative performance. Very few empirical studies have explored the impact of supervisor's incivility on unit-level creative work. Investigating the role of individuals' intention to share knowledge as a mediating factor is the second goal of this paper. Researchers have argued that contextual factors in organizations substantially influence the degree to which employees perform creatively (Amabile, 1988, 1996; Oldham and Cummings, 1996; Woodman *et al.*, 1993). Therefore, the third objective of this paper is finding out how much collaborative climate can mitigate the insidious effects of incivility in the relationship between leader's incivility and intention to share knowledge.

## 2. Theoretical background

### 2.1 *Leader's incivility and team's creative performance*

As a distinct form of interpersonal mistreatment, incivility was conceptualized as a member of counterproductive behavior group which has the potential to impinge upon organizations and organizational members. Incivility is categorized under the label of political deviance (Robinson and Bennett, 1995). According to the definition given by Andersson and Pearson (1999), incivility has three distinct features of low intensity, ambiguous intention and violation of workplace norms for mutual respect. Incivility is typically described as "treatment that is discourteous, rude, impatient, or otherwise showing a lack of respect or consideration for another's dignity" (Kane and Montgomery, 1998, p. 266). Therefore, incivility varies from other forms of mistreatment in organization, such as aggression, violence and sexual harassment, as incivility has the three unique features of ambiguity in intent to harm, low intensity and overlooking mutual respect which is not sexual in nature.

There is empirical evidence showing the negative impact of leader's incivility on subordinate's effort, helpfulness and task performance (Porath and Erez, 2007). However, to the best of our knowledge, the effects of leaders' incivility on employee's creativity and team's creative performance has not been addressed in research yet. Based on componential theory (Amabile, 1988, 1997), by looking at the dark side of environment, the present study argues that leader's behavior can stifle creativity through showing lack of support, decreasing intrinsic motivation and engendering negative emotions.

Componential theory of creativity features the work environment most prominently. This theory contends that the perceptions of leader's support mediates the relationship between positive leader behavior and subordinate's creativity. According to this theory, the support provided by immediate supervisors (IS) exerts an influence on subordinates' creativity through direct help with the project, the development of subordinate expertise, and the enhancement of subordinate intrinsic motivation. The componential theory proposes that positive behaviors of supervisors include serving as a good work model, planning and setting goals appropriately, supporting the work group within the organization, communicating and interacting well with the work group, valuing individual contributions to the project, providing constructive feedback, showing confidence in the work group and being open to new ideas (Amabile, 1997).

At the individual level, there is some evidence showing a connection between subordinates' general perceptions of their leader and the individual creativity of those subordinates (Tierney *et al.*, 1999). A few studies of individual creativity have investigated particular areas of leader support, such as supportive, non-controlling supervision (Oldham and Cummings, 1996). Taken together, these studies suggest that subordinates will be more creative when they perceive their IS as being supportive of them and their work. But the main question is what would happen if the leader is perceived as a person showing incivility?

In Pearson and her colleagues' research, a manager quoted, "Incivility reinforces isolation and blocks responses and choices. It shuts people down. They go into a shell and do not come out. You lose the benefit of others' ideas, creativity and participation." Incivility triggers a variety of negative emotions (Pearson and Porath, 2005), and these emotions reinforce isolation and reduces responses and choice, especially when power distance is high. Pearson *et al.* (2001) in their qualitative research mentioned that nearly every study participant who had been the target of workplace incivility reported experiencing a negative affective state after the experience. They described being

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“‘depressed’, ‘down’, ‘disappointed’, ‘moody’, ‘in a funk’, ‘dissed’, ‘irritated’, ‘in a black cloud’ and ‘hurt’, among other states” (p. 1404). Employees may feel that their expectations about interpersonal interaction, as well as their assumptions about the responsibilities of the organization in maintaining those expectations, have been violated. As a result, there may be increasing levels of negative affect and distrust (MacKinnon, 1994).

Based on affective event theory, Weiss and Cropanzano (1996) postulate that events on the job, mainly, influence work behaviors through affective reactions. Of these events, however, negative events should be especially influential. Indeed, Miner *et al.* (2005) found that the relationship between negative events and mood was about five times stronger than that between positive events and mood. According to Weiss and Cropanzano (1996), negative emotions impact performance because they serve as signals that something in the environment is problematic. As a result, people invest extensive cognitive resources appraising their situation, a process that is disruptive to creative performance.

There are cogent reasons to believe that the negative affect adversely impact creativity. Indeed, there is clear evidence suggesting that negative affect can harm some significant aspects of cognitive processing that may be especially important in complex and creative tasks (e.g. Easterbrook, 1959; Eysenck, 1982; Mandler, 1975). For example, Ellis and his colleagues revealed that in comparison with those experiencing neutral affect, individuals injected with negative affect showed more selective processing (Varner and Ellis, 1998), did not learn and recall (Ellis *et al.*, 1997), and were impaired in their abilities to comprehend and use prior knowledge (Ellis *et al.*, 1995). They also found that participants exhibited a reduction in cognitive effort (Ellis *et al.*, 1984). Thus, in complex tasks where cognitive effort is especially crucial, negative affect may reduce individual creativity and, as a consequence, inhibit team's creative performance.

Negative affect may be especially detrimental to creativity because it requires elaboration (Porath and Erez, 2007). Elaboration is the process during which to-be-remembered information is linked to other information even if the additional information is not needed to-be-remembered (Ellis *et al.*, 1984). In creative tasks, novel ideas are generated within an extensive search through a conceptual space (Boden, 1994). When seeking for ideas, people apply different conceptual maps that characterize standard routes in this space. According to Boden, creativity is linked to either the exploration of new parts of this conceptual space or it emerges when the fundamental rules and routes of the space are modified. In both cases, though, creativity requires an extensive elaboration that relates the new ideas to “old” information. However, Ellis *et al.* (1984) found that negative affect reduces the ability of participants' encoding information that is pertinent to a target's to-be-remembered information. Thus, if negative affect causes a deficiency in encoding elaboration, it should negatively affect creative performance of individuals and teams.

Exposure to incivility may negatively impact individuals' positive affect levels, which has been shown to be an important predictor of subsequent motivation (Ilies and Judge, 2005). The intrinsic motivation perspective has been used widely in contemporary creativity research (e.g. Amabile, 1996; Koestner *et al.*, 1984; Oldham and Cummings, 1996; Shalley and Perry-Smith, 2001). It posits that intrinsic motivation – the motivational state in which one is eager to work on a task mainly for its own sake instead of solely for the purpose of obtaining an external reward or avoiding punishment – is a key ingredient for creativity. This is because an intrinsically motivated person tends to be curious and learning oriented, to be cognitively flexible, to be willing to take risks, and to be persistent

when faced with obstacles and challenges (Boggiano *et al.*, 1982; Deci and Ryan, 1980, 1985; McGraw and Fiala, 1982; Utman, 1997), all of which should increase the chance of coming up with creative ideas. Pirola-Merlo and Mann (2004) argue that team creativity could be defined as the (weighted) average of individual creativity, describing individual creativity as a raw substance that shifts to a group-level construct when team processes occur. Therefore, according to this perspective, supervisors' behavior affects teams' creativity via their influences on individual's creativity. According to the aforementioned points, it is hypothesized that:

*H1.* The teams in which employees experience more incivility from their leaders are more likely to show less creative performance.

### *2.2 The mediating role of intention to share knowledge*

In this section, first, based on social exchange theory, the negative relationship between incivility and intention to transfer knowledge is discussed. Then the positive impact of transferring knowledge on creativity is explained. Finally the mediating role of intention to share knowledge is explored.

According to social exchange theory, a good social relationship between the sender and recipient can be created when the recipient receives an initial offer of knowledge. If the sender perceives that the recipient reciprocates properly, then trustworthiness between them is confirmed, and exchange relations can be established (Gouldner, 1960; Blau, 1964). Since knowledge can be viewed as a type of asset that cannot be changed by pricing (Davenport and Prusak, 1998), social exchange theory explains that knowledge sharing can take place only when expected reciprocal benefits between the knowledge sender and recipient meet each other's expectations (Blau, 1964).

Regarding social exchange theory, trust is an important factor affecting knowledge sharing, in that individuals engage in interactions under the expectation of reciprocity in the future (Gouldner, 1960). Whereas trust makes an individual engage more in knowledge sharing, distrust harms the knowledge sharing process and creativity (Klimoski and Karol, 1976). Increasing workplace incivility is expected to decrease the level of trust in an organization, which in turn, disturbs knowledge sharing in an organization. MacKinnon (1994) points out that when uncivil behavior occur routinely, it eventually increases the levels of distrust:

*H2.* Employee's intention to share knowledge is adversely impacted by the incivility shown by the leader.

In a cohesive social structure in which most people have direct ties to each other in the network ways, closed social structures engender greater trust among individuals (Uzzi, 1997; Reagans and McEvily, 2003; Uzzi and Spiro, 2005). This trust encourages the sharing of information and resources. Second, cohesion leads to better information flow because of ties within closed networks (Hansen, 1999; Reagans and McEvily, 2003). In turn, this better information flow accelerates the sharing of ideas and feedback, which enhances creativity (Milliken *et al.*, 2003).

Knowledge is defined as "a fluid mix of framed experience, values, contextual information, and expert insights that provides a framework for evaluating and incorporating new experiences and information" (Davenport and Prusak, 1998, p. 5), and it represents the foundation of knowledge sharing. Knowledge may be viewed as a valuable resource that is allocated by individuals and becomes team's property when shared. We consider knowledge sharing to be an interactive communication process between team members who rely on each other to accomplish common goals. It has

been suggested that knowledge sharing within teams provides an opportunity for mutual learning, facilitating the creation of new knowledge and enhancing team's ability to generate novel ideas (Kogut and Zander, 1992; Nonaka, 1994; Tsai and Ghoshal, 1998). More specifically, knowledge sharing can be interpreted as a basic element of team learning process (Wilson *et al.*, 2007; van Woerkom and Sanders, 2010).

A core product of creative performance is new knowledge, and new knowledge can only be created when existing bases of knowledge are shared through interaction (Csikszentmihalyi and Sawyer, 2014; Nahapiet and Ghoshal, 1998). Although it has been argued that weak ties potentially lead to greater creativity (Granovetter, 1973) because new participants bring fresh knowledge to the team, individuals often feel more comfortable sharing knowledge that requires risk, and honesty in groups with stronger ties (Perry-Smith and Shalley, 2003; Levin and Cross, 2004). An environment in which disrespect and rudeness are witnessed might adversely impact behavioral measures of creativity (Porath and Erez, 2009). Moreover, the theory of team adaptation (Burke *et al.*, 2006) suggests that pushing team members to speak up and contribute their ideas during plan development, fostering communication, and promoting team learning by urging team members to discuss errors, seek information, and mutually reflect on alternative viewpoints can elevate creativity (see also Edmondson, 1999). This interactive processes can be encompassed under the relatively generic definition of knowledge sharing.

Through the successful exchange of knowledge, teams may develop their knowledge base and combine this knowledge to develop new solutions (Cohen and Levinthal, 1990). There is already strong evidence in the literature indicating a positive association between organizational knowledge transfer and innovativeness (e.g. Powell *et al.*, 1996; MacCurtain *et al.*, 2010). However, less attention has been focussed on the different types of knowledge that are shared and how they impact creative outcomes. Polanyi (1966) established the two-dimensional concept of explicit and tacit knowledge. Explicit knowledge contents are easily codified, whereas tacit knowledge remains implicit and is difficult to express in propositional form. Tacit knowledge includes operational skills and know-how and has roots in actions, procedures or routines (Nonaka and von Krogh, 2009). Due to the recent reshaping of the organizational knowledge creation theory, explicit and tacit knowledge can now be conceptually distinguished along a continuum (Nonaka and von Krogh, 2009). Tacit knowledge is thus accessible if it is converted to the explicit side. The creation of new knowledge involves the interaction between both modes of knowledge and, thus, the creative performance of a team is critically dependent on both mobilizing tacit knowledge and fostering interaction with explicit knowledge. Within a team, a large amount of cognitive resources are available and would remain unutilized if either type of knowledge remained unshared (Argote, 1999). Therefore, we argue that the sharing of information and know-how within a team by individuals is essential for knowledge creation and is thus the foundation of team's creative performance. Moreover, we propose that knowledge sharing plays a mediating role in the interaction between leader's incivility and team's creative performance. In light of the above, we propose:

- H3. Intention to share knowledge partially mediates the relationship between the leader's incivility and team's creative performance.
- H4. Employee's intention to share information is positively related to team's creative performance.

### 2.3 *The moderating role of collaborative climate*

Within an organizational context, organizational creativity can be defined as an organization's ability to connect and reorganize information and knowledge needed to improve or create new products and services in achieving organizational goals and objectives (Robinson *et al.*, 1997). Pirola-Merlo and Mann (2004) contends that individual creativity is developed and evolved into group or organizational creativity by individual members' interactions during problem-solving processes. Organizational creativity is regarded as a collective wisdom to resolve process-level organizational problems involving the organizational mental model (Mohammed and Dumville, 2001; Senge, 1990), diversity-driven collaborative energy and supportive organizational culture (OS) (Joo, 2007) and leadership (Pelz, 1963; Phelan and Young, 2003).

To carry out a more profound investigation of the effects workplace incivility has on knowledge sharing, a situational variable is included in this study. On the basis of previous research, this study emphasizes the collaborative climate. Along with the trust climate (Goh, 2002; Sveiby and Simons, 2002) and supervisory support (Dixon, 2002), the collaborative climate (Goh, 2002; Sveiby and Simons, 2002) has been emphasized as one of the most important elements in the study of knowledge sharing. Collaborative climate refers to the mutually shared elements of an organization's culture that influence the behaviors and willingness to share knowledge (Sveiby and Simons, 2002). According to Sveiby and Simons, the success of knowledge management practices depends on how collaboration and trust are incorporated into the OS. Based on a literature review and empirical research, they confirmed that in the collaborative climate of a business unit, an immediate superior and coworkers in a work group play the most important roles in knowledge sharing. They argue that knowledge sharing is maximized when four clusters used to measure the collaborative climate positively influence an individual's intention to share knowledge. These set of factors include respondent's own attitude, employee attitude (EA), knowledge sharing behavior of the nearest colleagues, work group support (WGS), the behaviors of the IS and finally one of leadership factors outside the individual's nearest working environment, which is called OS. More specifically, collaboration will increase when knowledge sharing is appreciated in action, an IS encourages individuals, individuals have positive attitudes toward sharing knowledge, and work groups contribute to build trusting and promote a collaborative climate. When collaboration is established and flourished in organizations, trust grows among individuals, and they tend to focus more on problem-solving and try to find out more effective and efficient communication methods (Ohlinger *et al.*, 2003). Therefore:

- H5.* Unit-level climate of collaboration moderates the relationship between leader's incivility and employee's intention to share knowledge; the negative relationship is weakened when climate of collaboration is higher, and is strengthened when climate of collaboration is lower.

In summary, based on componential theory of creativity, negative affect theory and social exchange theory and prior evidence, we predict that leader's incivility results in reduced intention to share knowledge. Furthermore, we postulate that team's creative performance is a function of the extent incivility is shown by the leader, and this is partially due to members' lack of intention to share knowledge. Also, the moderating effect of collaborative climate on the relationship between leader's incivility and team's creative performance is hypothesized (see Figure 1).



### 3. Method

#### 3.1 Participants and procedure

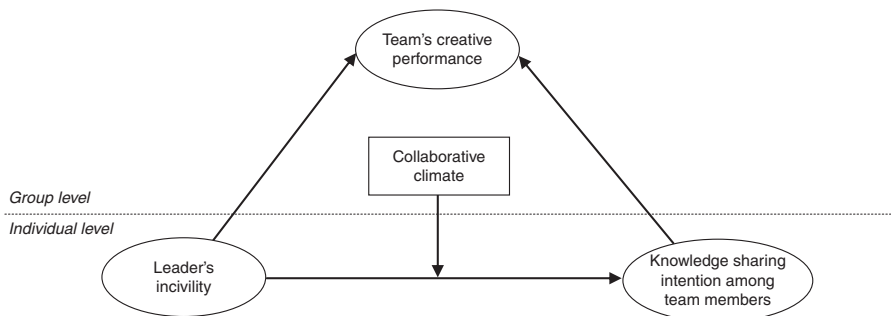
Health care providers with patient contact at hospitals in eight hospitals of three major cities in Iran were invited to participate in the study. Out of approximately 642 questionnaires, 374 returned completed surveys (overall response rate of 58.2 percent). Given our interest in unit-level contexts, we limited our analyses to respondents who: first, spent at least 50 percent of their time working within a primary work unit, and second, worked in units from which we received at least five survey responses. This reduced our total sample to 312. These employees were in 42 teams supervised by 42 supervisors. This final sample was 53 percent female, with a mean age of 31.71 years (standard deviation (SD) = 8.18) and average job tenure of 6.44 years (SD = 6.82). Out of the 312 participants, 67.2 percent were nurses, 32.8 percent medical professionals (e.g. surgeons, and physicians).

We distributed the survey in paper-and-pencil format during unit meetings. Completed paper-and-pencil surveys were returned to the researchers in person. Time was allocated for staff to complete the surveys during work hours. Although some hospital employees were part of multiple teams within the hospital, respondents in our survey were instructed to respond to the team-based questions considering only their primary teams (i.e. the team a respondent spends the most time with). There were 42 different teams represented by 312 participants and an average of 6.7 respondents per unit, ranging from 5 to 11 respondents, who averaged 5.41 years (SD = 6.11) with their team. The average response rate per team was 71 percent with the lowest of 32 percent and the highest of 92 percent. It caused units to demonstrate internal  $r_{wg}$  values (an index that conveys mean inter-rater agreement within the groups) that exceeded desirable levels (0.70). Overall, the sample was representative of the hospitals' care providers and work units.

#### 3.2 Measures

The survey items were originally in English and translated to Persian through an iterate process by three bilingual scholars of Persian and English. A back translation was conducted, with the items translated back English by another bilingual scholar of Persian and English, to make sure both the English and Persian version of items were comparable with a high degree of accuracy (Brislin, 1970).

**3.2.1 Leader's incivility.** Leader's incivility was assessed with an adapted seven-item scale developed by Cortina *et al.* (2001). The adaptations was suggested by Blau and Andersson (2005). Participants indicated how often they had experienced uncivil



**Figure 1.**  
Multi-level proposed  
model of this study

behaviors from their department supervisors such as “interrupted you while you were talking” at work within the preceding 30 days. Responses were measured on a five-point scale ranging from 1 (never) to 5 (very often). The Cronbach’s  $\alpha$  coefficient for this study was 0.91.

*3.2.2 Team’s creative performance.* Measuring creative performance at the team level is complex, and there is no generally accepted method in the literature. In this study, we focussed on creativity because it is a performance variable that can be evaluated externally without suffering from constraints produced by self-reported measures (Locke *et al.*, 1988). Creative performance was measured by asking the supervisors about the level of different team’s creativity, utilizing a three-item scale developed by Zhou and George (2001). The coefficient  $\alpha$  was 0.85. A sample item is “My healthcare team comes up with new and practical ideas to improve their performance.”

*3.2.3 Intentions to share knowledge.* Since knowledge sharing has been studied for a long time in the academic field, there are various instruments developed to measure knowledge sharing behavior and motivation. In this study, an instrument designed by Bock and Kim (2002) was used to measure knowledge sharing behavior. The coefficient  $\alpha$  was 0.88.

*3.2.4 Collaborative climate.* To measure collaborative climate, this study used selected questions from the collaborative climate survey developed by Sveiby and Simon in 2002. The survey instrument contains four clusters of factors influencing knowledge sharing, based on their literature review, and each cluster has five items: each cluster includes questions describing the respondent’s own attitudes, EA; the knowledge sharing behavior of the individual’s nearest colleagues, WGS; the behaviors of the immediate manager, named the IS; and the leadership factors outside the individual’s nearest working environment, which they referred to as OS. Responses were measured on a five-point scale ranging from 1 (strongly disagree) to 5 (agree). Sample questions include the following: “Sharing of knowledge is encouraged by the department in action and not only in words,” and “We often share work experiences informally in our unit/section.” We conducted a confirmatory factor analysis (CFA) to test the four-dimensional structure of this measure. The fit indexes fell within a good range ( $\chi^2$  (132) = 371.52,  $p < 0.01$ ; comparative fit index (CFI) = 0.93; incremental fit index (IFI) = 0.93; Tucker-Lewis index (TLI) = 0.93; root mean square error of approximation (RMSEA) = 0.10). The Cronbach’s  $\alpha$  coefficient estimates calculated for this instrument shows internal consistency reliability; its value was 0.89.

*3.2.5 Control variables.* We included several control variables at both the individual and team levels. Following previous research, we controlled for gender, and educational level at the individual level (Amabile, 1988; George and Zhou, 2007; Madjar *et al.*, 2002), and for team size and average team tenure at the team level (Harrison *et al.*, 2002). Second, we controlled for team task interdependence (rated by team members), as this might influence the creative process (Van der Vegt and Janssen, 2003). We measured this variable using a single item from Shin and Zhou (2007): “The work I usually do is a group project rather than an individual project” (1 = “strongly disagree,” 5 = “strongly agree”). In addition, in keeping with Shin and Zhou (2007), we controlled for face saving to partial out any potential cultural effects on team creativity. We measured face saving using two items (“I’m embarrassed when my weaknesses or mistakes are revealed to others” and “I’m embarrassed when I hear someone talk about bad things about me”) (1 = “strongly disagree,” 5 = “strongly agree”).

#### 4. Results

Means, SD, correlation coefficient and reliability estimates for all variables are shown in Table I.

The reliability of all scales was satisfactory, with  $\alpha$  scores ranging from 0.85 to 0.92. To assess the convergent and discriminant validity of all the multi-item measures, a CFA was conducted using a four-factor measurement model (leader's incivility, knowledge sharing intention, team's creative performance and collaborative climate) to one with a single factor (i.e. common method factor). The overall fit statistics for our four-factor model indicate an acceptable fit to the data:  $\chi^2(74, n = 219) = 233.21$ ,  $p < 0.01$ ; CFI = 0.93; IFI = 0.93; TLI = 0.93; RMSEA = 0.11. The model fit was significantly better than for a one-factor or common method model ( $\Delta\chi^2(3) = 422.89$ ,  $p < 0.01$ ).

To assess further discriminant validity of the factors, we compared a two-factor model for every pair of factors in the measurement model, as suggested by Bagozzi *et al.* (1991). For each combination of measures, the two-factor model had a significantly better fit than the one-factor model. This evidence shows that in this study the individual's intention to share knowledge was discriminant from team members' perceptions about collaborative climate inside teams. Lastly, we calculated the average variance extracted for each pair of constructs, which exceeded the square of the correlation between the two constructs in each case, demonstrating further evidence of discriminant validity of our measures (Fornell and Larcker, 1981). These steps confirm that the items representing variables in this research are distinct from each other in our model.

Next, we needed to justify aggregating team's creative performance and collaborative climate to create uni-level constructs. In order to achieve this goal, both agreement within groups and variability between groups (Hofmann, 1997) were required. We computed the interclass correlation coefficient, referred to as ICC (1), using one-way random ANOVA to identify between-groups variability (Bliese, 2000;

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Gender	1.49	0.50	–									
2. Educational level <sup>a</sup>	2.17	1.41	0.02	–								
3. Team size	8.78	3.14	–0.01	–0.60**	–							
4. Team tenure	4.20	5.44	0.05	0.04	0.0	–						
5. Teamwork interdependence	2.58	1.27	0.02	–0.26**	0.21*	0.14	–					
6. Team face saving	3.05	1.36	–0.09	–0.03	0.04	–0.00	0.20*	–				
7. Leader's incivility	2.10	0.97	–0.05	0.05	–0.04	–0.09	–0.31**	–0.26**	0.91			
8. Knowledge sharing intention	4.21	0.71	0.15	0.22*	–0.21*	0.06	–0.00	–0.01	–0.038	0.88		
9. Collaborative climate	3.44	0.78	0.14	0.29**	–0.18	0.06	0.03	–0.02	–0.12	0.21**	0.89	
10. Team's creative performance	3.09	1.02	0.05	0.20*	–0.10	–0.02	0.25**	0.18	–0.41**	0.07	0.53**	0.85

**Notes:**  $n = 312$  employees (individual level) in 42 teams (group level). Cronbach's  $\alpha$ s are in italics on the diagonal. 1 = male; 2 = female; <sup>a</sup>1 = "bachelor's," 2 = "master's," 3 = "doctorate". \* $p < 0.05$ ; \*\* $p < 0.01$

**Table I.**  
Means, standard deviation and individual-level correlations and reliability estimates

Shrout and Fleiss, 1979). Additionally, we computed the  $r_{wg(j)}$  as an index that conveys mean inter-rater agreement within the groups (James, 1982). The one-way ANOVA indicated significant between-groups variance in collaborative climate ( $F(62, 310) = 3.38, p < 0.01, ICC(1) = 0.30$ ) and team's creative performance ( $F(75, 310) = 4.18, p < 0.01, ICC(1) = 0.34$ ). The average  $r_{wg(j)}$  for collaborative climate and team's creative performance were 0.87 and 0.91, which exceeded the minimum level of average within-group agreement of 0.70 (James, 1982), further justifying our aggregation efforts. Together, these statistics show acceptable levels of within-group agreement and between-group variability in collaborative climate and team's creative performance, and we can examine this contrast at the unit level.

In short, the evidence bolstered that responses to all factor items were unidimensional, internally consistent and discriminant from each other. Thus, we proceeded with hypothesis testing.

#### 4.1 Results of hypotheses testing

Since we have cross-level predictions and our respondents may have non-independent responses due to working in units with similar physical resources, types of patient care and coworkers, we applied multi-level analyses in SAS 9.2. This approach permits assessment of variance at the group and individual level, and cross-level relationships, without having to aggregate individual responses to the unit-level or disaggregate unit-level constructs to the individual level (Bryk and Raudenbush, 1987; Hofmann, 1997).

*4.1.1 Leader's incivility predicting team's creative performance.* *H1* predicts that individual-level frequency of incivility by leaders is negatively related to team's creative performance when interacting with those persons. We tested this prediction at the individual level, while also controlling for individual-level characteristics and unit-level variations in creativity shown by individuals. As shown in Table II, individual perceptions of incivility by leaders were significantly and negatively associated to team's creative performance when interacting with team leaders ( $\beta = -0.34, p < 0.01, CL(-0.62, -0.13)$ ; Model 3). Thus *H1* is supported.

*4.1.2 Leader's incivility predicting intention to share knowledge.* *H2* predicts that individual-level frequency of incivility by leaders is negatively related to the intention of individuals to share knowledge with the leader and teammates when interacting with those persons. We tested this prediction at the individual level, while also controlling for individual-level characteristics and unit-level variations in creativity shown by individuals. As shown in Table II, individual perceptions of incivility by leaders were significantly and negatively associated to the intention to share knowledge when interacting with leaders ( $\beta = -0.23, p < 0.01, CL(-0.37, -0.01)$ ; Model 1).

*4.1.3 Intention to share knowledge as a partial mediator of incivility on team's creative performance.* We proposed that leader's incivility results in knowledge flow blockage, and that this kind of interaction causes reluctance to share information in teams. We used the conservative four-stage mediation test (Baron and Kenny, 1986; Kenny *et al.*, 1998), and the results of the multi-level regression analysis are shown in Table II.

First, it is found that individual perceptions of leader's incivility were significantly and negatively associated with team's creative performance ( $\beta = -0.34, p < 0.01, CL(-0.62, -0.13)$ ; Model 3). Second, leader's incivility was associated with the potential mediator, intention to share knowledge, as demonstrated in the test for *H2*. For the final steps, both the predictor (i.e. leader's incivility) and mediator (i.e. intention to share

Level and Variable	Intention to share knowledge			Team's creative performance		
	Model 1	Model 2	Model 3	Model 4	Model 3	Model 4
	Effects	Lower CI	Upper CI	Effects	Lower CI	Upper CI
<i>Level 1: employee</i>						
Gender <sup>a</sup>	0.12	0.05	0.69	0.09	-0.25	0.63
Educational level	0.11	-0.03	0.58	0.15	0.02	0.86
Team size	-0.20	-0.03	0.00	-0.01	-0.02	0.03
Team tenure	0.13	-0.01	0.06	0.17*	0.00	0.03
Team task interdependence	-0.04	-0.16	0.11	-0.06	-0.01	0.37
Face saving	-0.09	-0.17	0.07	0.04	-0.14	0.19
Leader's incivility	-0.23***	-0.37	-0.01	-0.46***	-0.62	-0.13
Intention to share knowledge				-0.34***	-0.22***	-0.54
				0.29***	0.06	0.70
<i>Level 2: work unit</i>						
Collaborative climate (CC)				0.12	-0.26	0.68
<i>Cross-level</i>						
Leader's incivility × CC				0.25*	-0.01	0.37
R <sup>2</sup>		0.31			0.57	
ΔR <sup>2</sup>					0.26***	
					0.26	
						0.54
						0.28***

Notes: *n* = 312 employees (individual level) in 42 teams (group level). Lower CI = lower confidence interval; upper CI = upper confidence interval. <sup>a</sup>1 = male; 2 = female. \**p* < 0.05; \*\*\**p* < 0.01

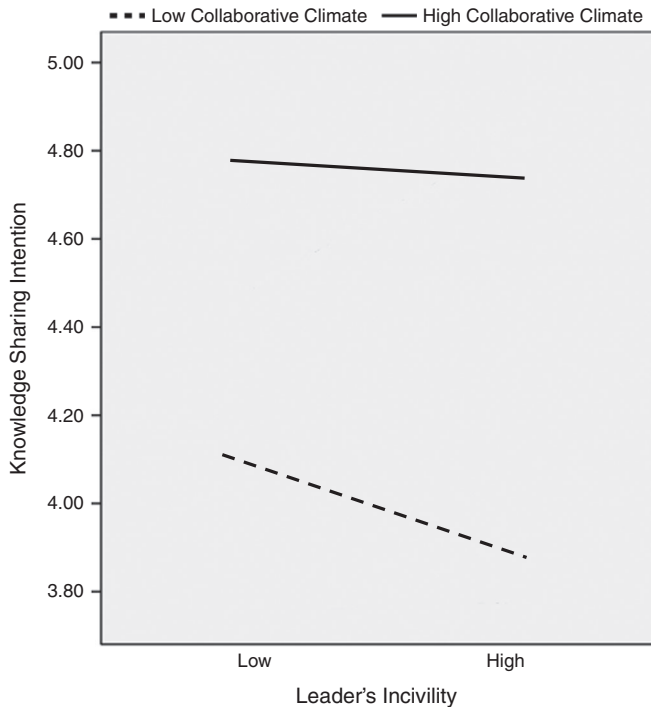
Incivility  
impair team's  
creative  
performance

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**Table II.**  
Results from multi-level analysis predicting team's creative performance and knowledge sharing intention

knowledge) were included in the prediction of team's creative performance. To support *H3* and *H4*, Table II reveals that intention to share knowledge was positively and significantly associated with creative team performance beyond leader's incivility ( $\beta = 0.29, p < 0.01, CL (0.06, 0.70)$ ; Model 4), supporting *H4*, and the negative effect of leader's incivility on creative team performance decreased ( $\beta = -0.23, p < 0.01, CL (-0.54, -0.06)$ ; Model 4), suggesting support for our prediction of partial mediation (Kenny *et al.*, 1998). A Sobel test further suggested that leader's incivility had an indirect effect on team's creative performance ( $z = 1.91, p < 0.05$ ) due to intention to share knowledge (MacKinnon *et al.*, 2002). Overall, both leader's incivility and intention to share knowledge had unique effects on creativity of teams, and we found some support for indirect effects as proposed in *H3*.

*4.1.4 Interaction of leader's incivility and collaborative climate on team's creative performance.* *H5* proposed that a unit's collaborative climate mitigates the negative effects of leader's incivility on intention to share knowledge. First, we assessed the predicted cross-level moderating effect, to see if the slope of the Level-1 relationship between leader's incivility and intention to share knowledge varies based on Level-2 climate of authenticity. As shown in Table II (Model 2), beyond the control variables and main effects, the interaction term of Level-2 collaborative climate and Level-1 leader's incivility had a significant effect on individual's intention to share knowledge ( $\beta = 0.25, p < 0.01, CL (-0.01, 0.37)$ ; Model 2). To facilitate the interpretation of the interaction, we plotted the simple slopes showing the moderating effect of collaborative climate (see Figure 2). Quite interestingly, for units with low-collaborative climate,



**Figure 2.**  
Overall moderating effects of collaborative climate on knowledge sharing intention

the simple slope for the relationship between leader's incivility and intention to share knowledge was significantly more negative ( $b = -0.82$ , standard error (SE) = 0.39,  $\beta = -0.88$ ,  $t = 2.54$ ,  $p < 0.01$ ); for employees working in units with high-collaborative climate, the relationship between leader's incivility and intention to share knowledge did not differ significantly from zero ( $b = -1.10$ , SE = 0.48,  $\beta = -1.22$ ,  $t = 2.26$ ,  $p > 0.05$ ). These statistics support the fifth hypothesis, but also showed that a high climate of collaboration decreases the negative impact of incivility on individual's knowledge sharing. The possible reasons are discussed in the discussion section.

## 5. Discussion

Since the publication of a seminal paper by Andersson and Pearson (1999), incivility has attracted much attention of researchers. The effects of incivility have been explored according to different foci and the quality of relationships. Some scholars have explored the detrimental reciprocal effects of incivility on customers (e.g. van Jaarsveld *et al.*, 2010; Sliter *et al.*, 2010; Grandey *et al.*, 2004); some have investigated the effects of peers' incivility on employees (e.g. Penney and Spector, 2005; Cortina and Magley, 2009). However, there are few empirical studies exploring the effects of uncivil leaders or supervisors on team outcomes (for exceptions, see Porath and Erez, 2007 and Porath and Erez, 2009).

This research examined whether and how leader's incivility may cascade down to block knowledge sharing of individuals and decrease creative performance of teams. A model was developed and empirically tested based on the ideas of componential theory of creativity (Amabile, 1988); affective event theory (Weiss and Cropanzano, 1996) and social exchange theory (Gouldner, 1960); which conceptualized leader's incivility as an insidious factor muting employees and decreasing knowledge sharing as an important factor impacting team performance (Mesmer-Magnus and DeChurch, 2009). In the proposed model, the negative relationship between team leader's incivility and team members' intention to share knowledge is attenuated by team's collaborative climate. The findings of this research have some interesting theoretical and managerial implications.

### 5.1 Theoretical implications and future research

The findings of this study contributes to the literatures of incivility, knowledge sharing and creativity of teams in several ways. First, this research enhances the understanding of the role incivility plays in the mechanisms related to team performance. Past research concerning the correlation between authority figure and peer's incivility and observer's performance on routine and creative tasks has exclusively concentrated on the negative impact of witnessing rudeness as the third person (Porath and Erez, 2009). As a consequence, the negative impact on teams' performance as a higher level than individuals' has generally been left unexplored. This research has the intention to address this gap and try to give a more panoramic view of the impact team leader's incivility may have on teams which are the important building blocks of creative and high-reliability organizations such as hospitals. Although parallel to leader's incivility, abusive leadership has been proved to harm individual and teams' creative performance (Liu *et al.*, 2012), the "silent nature" of incivility can cause supervisors and authority figures to take it for granted. However, it is important to notice that despite its low intensity and ambiguity (Andersson and Pearson, 1999), it can deleteriously impact teams' creative performance. This research empirically proved that incivility is a counterproductive behavior for individuals as well as teams.

Also, once again, this empirical research showed that leaders' behaviors play a significant role in the growth or stifling of creativity (Hennessey *et al.*, 2010).

Importantly, the current research casts some light on the multi-level theory of creativity. Team creativity scholars have generally concentrated on the roles of team-level variables rather than those related to individuals. One noteworthy finding of this study is the mediation of a variable that is individualistic (i.e. intention to share knowledge) and may emanate from intrinsic or extrinsic motivation to exchange information among team members. The paucity of research dissecting the psychological mechanism leading to knowledge sharing blockage in teams is obvious in the literature. Researchers may explore the roles of psychological safety, intrinsic and extrinsic motivation as well as trust in the relationship between incivility and knowledge sharing.

Conservation of resources theory (COR) (Hobfoll and Freedy, 1993) may provide a theoretical explanation for why employees get silent and stop disseminating their knowledge. COR specifies that many parameters, both objective (e.g. money, a home) and psychological (e.g. self-esteem, social support), can be considered as personal resources. Very recently, Whitman *et al.*, (2014), by using COR theory, showed that abusive supervision including incivility can cause emotional exhaustion and this mediating factor leads to feedback avoidance. Then the vicious cycle of feedback avoidance-emotional exhaustion may perpetuate. They explored one-level construct which only depicts the problems happening in interactions. However, we tried to explore the harmful effects of rude leader's on teams which shatter the fabric of connectivity among members. We may add knowledge to the list and conclude that when employees face uncivil supervisors or even peers, they may view "keeping silent" as an avoidance coping strategy (Connor-Smith and Flachsbart, 2007) to keep their resources and curtail further incivility. Future research may substantiate the selection of this strategy through some empirical research. An unexplored reason behind avoiding sharing knowledge can be taking revenge to harm the supervisor, team or even the organization or providing an opportunity for the targets to make themselves relaxed by witnessing the challenges the supervisor will face due to lack of creativity and productivity. This may open a new avenue of research to unearth what goes on in the mind of instigation target. It is a gap in research that the black box of "spiral of incivility" (Andersson and Pearson, 1999) is not completely decoded yet. More importantly, incivility of leaders may cause constant thinking about the specific events inducing incivility which is called rumination and it can adversely impact cognitive ability and cause distress (Huffziger *et al.*, 2012).

The second contribution of this research is related to the effect of leader's incivility on team's overall creative performance. The implication of this paper is that individuals must be brought back into the study of team creativity. Since team creativity is associated with both team information exchange and averaged individual creativity of team members (Gong *et al.*, 2013), this research supports the idea that team creativity should be considered as a higher level construct which is impacted both by member's creativity and their positive interactions with each other. It implies that although creativity is a function of individual's creativity, aggregation of individuals' creativity is just a factor in the equation and other factors related to the interaction of members should be seriously explored and considered. Moreover, our findings showed that the relationship between leader's incivility and team's performance is linear. Lee *et al.* (2013) showed that in a high-power distance country such as South Korea, there is a curvilinear relationship between abusive leadership and individual creativity.



Similarly, Iran is a country characterized by high-power distance (Hofstede, 1980), however lack of curvilinear relationship between leader's incivility and team's performance might be attributed to the idiosyncratic nature of team creativity. Also, some research is needed to prove the assumption that inclusion in teams may decrease the perception of power distance because supervisors of medical teams have similar specialties and the relationships are closer between the supervisors and the members of medical teams than those relationships between CEOs and employees in manufacturing companies. Future research may explore the relationship between supervisors' incivility from two different perspectives of individuals and teams and compare them with each other.

The third contribution is related to the collaborative climate. In this study, it is found that collaborative climate moderates the relationship between leader's incivility and the intention of members to share knowledge. In 2010, Shim showed that there was no significant moderating role of collaborative climate on the relationship between workplace incivility and intention to share knowledge. In his research in Korea, different industries were considered and the researcher claimed it was the first research about incivility done in Korea. His research was a one-level study among individuals and the collaborative climate may differ in different organizations, departments and even teams. Second his research did not consider a specific source of incivility and the questions were generally addressed to the feelings of employees. Considering the former gaps in their research, we tried to consider different departments in health care centers and view the IS of those teams as the genesis of incivility perception. The undeniable role of national culture should not be taken for granted. Iran is a country characterized by strong in-group collectivism and high-power distance (Javidan and Dastmalchian, 2003). They claim, a potential result of strong family orientation is the reduction in "radius of trust." They postulate that members of such cultures have a tendency to elevate learning to put immense trust in their in-group members but little in outsiders. Accordingly, our findings showed that high climate of collaboration among team members can mitigate the negative impact of incivility of supervisors on sharing knowledge among team members. Uncivil leaders and supervisors may be supposed to be outsiders because of weak ties between supervisors and team members who have the power distance and further incivility may entrench the distance between the supervisor and team members. This can cause avoidance coping strategy (Connor-Smith and Flachsbart, 2007) from members to find a shelter from resource depletion, as a result, this strategy may increase their reliance on their own potential resources such as trust and collaboration to sustain their intimate relationship and feel committed to knowledge sharing which in return can lead to more creative performance. It is noteworthy to mention that collaborative climate is intertwined with OS. The findings imply that OS and team climate can act as an antidote to the harmful effects of incivility. However, since the intensity of incivility is low, some other counterproductive behaviors with higher level of intensity such as abusive supervision should be considered to explore if collaborative climate can be a buffer against the insidious effects of more abusive behaviors.

### 5.2 Practical implications

Since most creative activities are often done by teams, understanding what factors can stifle their creativity is of great importance to managers. This study demonstrated that perceived incivility can end up to ceased creative performance of teams. Managers may find the results useful for HRD in various ways. Pearson *et al.* (2000) assert the

importance of setting expectations by defining some standards in organizations for interpersonal interactions to highlight the importance of civil relationships and their internal and external benefits. HRD can provide orientations concerning this issue and can lead supervisors and employees to understand and acknowledge the importance of civility, mutual respect and positive interpersonal relationships. It is claimed that when uncivil behaviors are wisely coped with by leaders, incivility is curtailed and its vice branches are truncated (Johnson and Indvik, 2001). The most serious problem in workplace incivility is related to the nature of incivility. Incivility is difficult to notice because of its low intensity. Moreover, incivility is easily taken for granted because of a lack of acknowledgment about its potential escalating seriousness. Hence, through orientation sessions, HRD can train managers what uncivil behaviors are and what serious consequences it may have. After these training sessions, managers may be more aware of uncivil behavior and can intervene more quickly when they see uncivil behaviors in their workplace. Furthermore, more direct forms of training can be provided by HRD, such as anger management or conflict management to employees to curtail incivility at workplace. Some antecedents of incivility, such as downsizing, increasing diversity (Baron and Neuman, 1996), increased workload, job insecurity and organizational change (Johnson and Indvik, 2001) are believed to contribute to employees' anger and stress. Before employee anger and stress are expressed in the forms of uncivil behaviors, HRD should organize anger management programs and training in conflict management skills so that employees can deal with their stress and anger and can maintain mutual respect toward one another.

Moreover, HRD can provide some training courses on emotional intelligence (EI) to reduce rudeness and disrespect in organizations by increasing employees' ability to read, appraise and understand others and their emotions accurately. By offering EI training, companies can develop this newly required ability of employees (George, 2000) and can decrease workplace incivility at the same time. EI training also enhances managers' EI; hence, supervisors would be more sensitive to their subordinates' feelings and could recognize uncomfortable climates and intervene in uncivil behavioral incidents more appropriately. Additionally, for global companies, more active diversity training and communication skill training are offered, along with other kinds of training because diversity and differences in cultural norms are rising factors that foster miscommunication and rudeness in the workplace (Pearson and Porath, 2005). In Iran, because of immigration of people from towns or villages to cities and even from cities to cities, there might be the sense of diversity. In this respect, capital city settlers in the capital city may treat other people from other towns impolitely and even central organizations may not consider other organizational branches important enough and treat them uncivilly.

More importantly, it was reported that three-fourths of the instigation targets were unhappy with the ways that their organizations handled the uncivil behaviors (Pearson *et al.*, 2000). This large proportion implies either an absence of organization's formal processes punishing uncivil instigators or supervisor's lack of knowledge in handling such problems between instigators and victims. High rate of turnover among high-quality personnel along with a decrease in the satisfaction and energy of the rest are the negative consequences of incivility (Johnson and Indvik, 2001). Additionally and more importantly, in health care centers the flow of information among nurses, doctors and other professionals is sometimes synonymous with the death or life of people. Managers may supply institutionalized platforms or channels to exchange ideas, information, perspective and knowledge. These factors, along with supervisors' respect, can bolster

individual creativity, which in turn ameliorate a supportive climate for creativity that is essential and beneficial to team's creativity. Last but not least, establishing a climate of trust and collaboration among team members can buffer the insidious effects of "creeping and crippling" factor called incivility from an authority figure.

### 5.3 Research limitations

Several limitations of this study need to be addressed. Some variables of interest are measured by self-perceptions consistent with our theoretical model (i.e. incivility and knowledge sharing); therefore, our approach increases the likelihood of common method variance as an explanation for the identified relationships. We have addressed this limitation in several ways (Podsakoff *et al.*, 2003). First, we assured respondents of confidentiality and had them return their responses directly to the researchers to reduce social desirability response biases. Second, we controlled for individual- and unit-level factors that might spuriously increase relationships among our variables, and conducted CFA to provide evidence against the argument that the construct associations exist merely due to response biases. Third, while common method variance may increase the direct individual-level associations (i.e. *H2*), it is less likely to explain the cross-level relationships (i.e. *H1*, *H3*, *H4*, *H5*, *H6*). We cannot rule out the possibility that the variables have a reversed or reciprocal causal pattern; however, the directionality of our proposed model and results are informed by established theory (i.e. constitutional theory of creativity, affect theory and social exchange theory). Our investigation was restricted to health care professionals at large hospitals and because hospitals are distinct contexts in terms of knowledge sharing essence and creative performance of teams to save lives, we must be cautious in generalizing the results of this study to other service contexts (e.g. manufacturing section). Also, some variables such as intention to share knowledge inside teams or the perception of team members about supervisors may differ from culture to culture. The context of this research was Eastern and unless this research is replicated in Western contexts, a conservative view to use the findings seems plausible. There may be some overlap of climate of collaboration with intention to share knowledge. Table I shows that there is a positive and significant correlation between these two constructs, however, the combination of the two as a moderator or mediator worsened the fit of model in CFA. Furthermore, climate of collaboration has a considerably broader view of sharing knowledge and is related to the overall feeling employees have about their organization rather than a restricted view of sharing knowledge with team members. Finally, our model, like most models, is underspecified in that we do not exhaust all possible predictors of knowledge sharing, team's creativity, and collaborative climate. Our goal was to provide an initial test of the relative effects of supervisor's incivility and impaired intention to share knowledge on team's performance.

## 6. Conclusion

In this study, we provided some initial evidence that leader's incivility can negatively impact individuals and teams. From individual point of view, incivility can lead to lack of intention to share knowledge from the side of team members and this blockage of knowledge flow can decrease teams' creative performance. In other words, in our two-level research, we tried to investigate the negative impact of leader's incivility on team's creative performance via the mediating role of intention to share knowledge. Moreover, the climate of collaboration functions as a moderator on the relationship between leader's incivility and intention to share knowledge, whereby it attenuates the negative

influence of incivility on the willingness of team members to share knowledge. The findings showed that incivility can negatively impact not only individuals but also teams and one mechanism through which creativity of teams is stifled is through making team members reluctant to participate in knowledge sharing activities. However, climate of collaboration in the antidote to this reluctance. We hope this study will stimulate the discernable views of researchers to view the effects of mistreatment in team level and on creativity as two potential research areas deserving more attention. It may convince managers and practitioners to pay earnest heed to the HRD strategies to curtail incivility at workplace.

### References

- Amabile, T.M. (1988), "A model of creativity and innovation in organizations", in Stew, B.M. and Cummings, L.L. (Eds), *Research in Organizational Behavior*, JAI, Greenwich, CT, pp. 123-167.
- Amabile, T.M. (1996), *Creativity in Context*, Westview Press, Boulder, CO.
- Amabile, T.M. (1997), "Motivating creativity in organizations: on doing what you love and loving what you do", *California Management Review*, Vol. 40 No. 1, pp. 39-58.
- Amabile, T.M., Schatzel, E.A., Moneta, G.B. and Kramer, S.J. (2004), "Leader behaviors and the work environment for creativity: perceived leader support", *The Leadership Quarterly*, Vol. 15 No. 1, pp. 5-32.
- Andersson, L.M. and Pearson, C.M. (1999), "Tit for tat? The spiraling effect of incivility in the workplace", *Academy of Management Review*, Vol. 24 No. 3, pp. 452-471.
- Appelbaum, E. and Blatt, R. (1994), *The New American Workplace: Transforming Work Systems in the United States*, ILR Press, Ithaca, NY.
- Argote, L. (1999), *Organizational Learning: Creating, Retaining, and Transferring Knowledge*, Kluwer, Norwell, MA.
- Aryee, S., Chen, Z.X., Sun, L.Y. and Debrah, Y.A. (2007), "Antecedents and outcomes of abusive supervision: test of a trickle-down model", *Journal of Applied Psychology*, Vol. 92 No. 1, pp. 191-201.
- Bagozzi, R.P., Yi, Y. and Phillips, L.W. (1991), "Assessing construct validity in organizational research", *Administrative Science Quarterly*, Vol. 36 No. 3, pp. 421-458.
- Banker, R.D., Field, J.M., Schroeder, R.G. and Sintia, K.K. (1996), "Impact of work teams on manufacturing performance: a longitudinal field study", *Academy of Management Journal*, Vol. 39 No. 4, pp. 867-890.
- Bantel, K.A. and Jackson, S.E. (1989), "Top management and innovations in banking: does the composition of the top team make a difference?", *Strategic Management Journal*, Vol. 10 No. S1, pp. 107-124.
- Baron, R.A. and Neuman, J.H. (1996), "Workplace violence and workplace aggression: evidence on their relative frequency and potential causes", *Aggressive Behavior*, Vol. 22 No. 3, pp. 161-173.
- Baron, R.M. and Kenny, D.A. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182.
- Blau, G. and Andersson, L. (2005), "Testing a measure of instigated workplace incivility", *Journal of Occupational and Organizational Psychology*, Vol. 78 No. 4, pp. 595-614.
- Blau, P.M. (1964), *Exchange and Power in Social Life*, Wiley, New York, NY.
- Bliese, P.D. (2000), "Within-group agreement, non-independence, and reliability: implications for data aggregation and analysis", in Klein, K.J. and Kozlowski, S.W. (Eds), *Multilevel Theory, Research and Methods in Organizations*, Jossey-Bass, San Francisco, CA, pp. 349-381.

- Bock, G.W. and Kim, Y.G. (2002), "Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing", *Information Resources Management Journal (IRMJ)*, Vol. 15 No. 2, pp. 14-21.
- Boden, M.A. (1994), "Précis of the creative mind: myths and mechanisms", *Behavioral and Brain Sciences*, Vol. 17 No. 3, pp. 519-531.
- Boggiano, A.K., Ruble, D.N. and Pittman, T.S. (1982), "The mastery hypothesis and the overjustification effect", *Social Cognition*, Vol. 1 No. 1, pp. 38-49.
- Brislin, R.W. (1970), "Back-translation for cross-cultural research", *Journal of Cross-Cultural Psychology*, Vol. 1 No. 3, pp. 185-216.
- Bryk, A.S. and Raudenbush, S.W. (1987), "Application of hierarchical linear models to assessing change", *Psychological Bulletin*, Vol. 101 No. 1, pp. 147-158.
- Burke, C.S., Stagl, K.C., Klein, C., Goodwin, G.F., Salas, E. and Halpin, S.M. (2006), "What type of leadership behaviors are functional in teams? A meta-analysis", *The Leadership Quarterly*, Vol. 17 No. 3, pp. 288-307.
- Cohen, W.M. and Levinthal, D.A. (1990), "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, Vol. 35 No. 1, pp. 128-152.
- Connor-Smith, J.K. and Flachsbart, C. (2007), "Relations between personality and coping: a meta-analysis", *Journal of Personality and Social Psychology*, Vol. 93 No. 6, pp. 1080-1107.
- Cortina, L.M. and Magley, V.J. (2009), "Patterns and profiles of response to incivility in the workplace", *Journal of Occupational Health Psychology*, Vol. 14 No. 3, pp. 272-288.
- Cortina, L.M., Magley, V.J., Williams, J.H. and Langhout, R.D. (2001), "Incivility in the workplace: incidence and impact", *Journal of Occupational Health Psychology*, Vol. 6 No. 1, pp. 64-80.
- Csikszentmihalyi, M. and Sawyer, K. (2014), *Creative Insight: The Social Dimension of a Solitary Moment*, in the Systems Model of Creativity, Springer, pp. 73-98.
- Davenport, T.H. and Prusak, L. (1998), *Working Knowledge: Managing What Your Organization Knows*, Harvard Business School Press, Boston, MA.
- Deci, E.L. and Ryan, R.M. (1980), "The empirical exploration of intrinsic motivational processes", in Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY, pp. 39-80.
- Deci, E.L. and Ryan, R.M. (1985), *Intrinsic Motivation and Self-Determination in Human Behavior*, Plenum, New York, NY.
- Dixon, N. (2002), "The neglected receiver of knowledge sharing", *Ivey Business Journal*, Vol. 66 No. 4, pp. 35-40.
- Easterbrook, J.A. (1959), "The effect of emotion on cue utilization and the organization of behavior", *Psychological Review*, Vol. 66 No. 3, pp. 183-201.
- Edmondson, A. (1999), "Psychological safety and learning behavior in work teams", *Administrative Science Quarterly*, Vol. 44 No. 2, pp. 350-383.
- Einarsen, S. and Raknes, B.I. (1997), "Harassment in the workplace and the victimization of men", *Violence and Victims*, Vol. 12 No. 3, pp. 247-263.
- Ellis, H.C., Moore, B.A., Varner, L.J. and Ottaway, S.A. (1997), "Depressed mood, task organization, cognitive interference, and memory: irrelevant thoughts predict recall performance", *Journal of Social Behavior & Personality*, Vol. 12 No. 2, pp. 453-470.
- Ellis, H.C., Thomas, R.L. and Rodriguez, I.A. (1984), "Emotional mood states and memory: elaborative encoding, semantics processing, and cognitive effort", *Journal of Experimental Psychology: Learning, Memory, and Cognition*, Vol. 10 No. 3, pp. 470-482.

- Ellis, H.C., Varner, L.J., Becker, A.S. and Ottaway, S.A. (1995), "Emotion and prior knowledge in memory and judged comprehension of ambiguous stories", *Cognition & Emotion*, Vol. 9 No. 4, pp. 363-382.
- Eysenck, M.W. (1982), *Attention and Arousal: Cognition and Performance*, Springer-Verlag, New York, NY.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 25 No. 2, pp. 382-388.
- George, J.M. (2000), "Emotions and leadership: the role of emotional intelligence", *Human Relations*, Vol. 53 No. 8, pp. 1027-1055.
- George, J.M. and Zhou, J. (2007), "Dual tuning in a supportive context: joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity", *Academy of Management Journal*, Vol. 50 No. 3, pp. 605-622.
- Goh, S.C. (2002), "Managing effective knowledge transfer: an integrative framework and some practice implications", *Journal of Knowledge Management*, Vol. 6 No. 1, pp. 23-30.
- Gong, Y., Kim, T.Y., Zhu, J. and Lee, D.R. (2013), "A multilevel model of team goal orientation, information exchange, and creativity", *Academy of Management Journal*, Vol. 56 No. 3, pp. 827-851.
- Gouldner, A.W. (1960), "The norm of reciprocity: a preliminary statement", *American Sociological Review*, Vol. 25 No. 2, pp. 161-178.
- Grandey, A.A., Dickter, D.N. and Sin, H.P. (2004), "The customer is not always right: customer aggression and emotion regulation of service employees", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 397-418.
- Granovetter, M.S. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78 No. 6, pp. 1360-1380.
- Griffin, R.W. and Lopez, Y.P. (2005), "'Bad behavior' in organizations: a review and typology for future research", *Journal of Management*, Vol. 31 No. 6, pp. 988-1005.
- Hansen, M.T. (1999), "The search-transfer problem: the role of weak ties in sharing knowledge across organization subunits", *Administrative Science Quarterly*, Vol. 44 No. 1, pp. 82-111.
- Harrison, D.A., Price, K.H., Gavin, J.H. and Florey, A.T. (2002), "Time, teams, and task performance: changing effects of surface-and deep-level diversity on group functioning", *Academy of Management Journal*, Vol. 45 No. 5, pp. 1029-1045.
- Hennessey, B.A., Amabile, T.M. and Mueller, J.S. (2010), *Chapter 46: Consensual Assessment*, *Encyclopedia of Creativity*, 4th ed.
- Hershcovis, M.S. (2011), "Incivility, social undermining, bullying ... oh my!": a call to reconcile constructs within workplace aggression research", *Journal of Organizational Behavior*, Vol. 32 No. 3, pp. 499-519.
- Hirst, G., Van Knippenberg, D. and Zhou, J. (2009), "A cross-level perspective on employee creativity: goal orientation, team learning behavior, and individual creativity", *Academy of Management Journal*, Vol. 52 No. 2, pp. 280-293.
- Hobfoll, S.E. and Freedy, J. (1993), "Conservation of resources: a general stress theory applied to burnout", in Schaufeli, W.B., Maslach, C. and Marek, T. (Eds), *Professional Burnout: Recent Developments in Theory and Research*, Taylor & Francis, Washington, DC, pp. 115-129.
- Hofmann, D.A. (1997), "An overview of the logic and rationale of hierarchical linear models", *Journal of Management*, Vol. 23, pp. 723-744.

- Hofstede, G.H. (1980), *Culture's Consequences: International Differences in Work-Related Values*, Sage, Beverly Hills, CA.
- Huffziger, S., Ebner-Priemer, U., Koudela, S., Reinhard, I. and Kuehner, C. (2012), "Induced rumination in everyday life: advancing research approaches to study rumination", *Personality and Individual Differences*, Vol. 53 No. 56, pp. 790-795.
- Hutton, S. and Gates, D. (2008), "Workplace incivility and productivity losses among direct care staff", *AAOHN Journal: Official Journal of the American Association of Occupational Health Nurses*, Vol. 56 No. 4, pp. 168-175.
- Ilies, R. and Judge, T.A. (2005), "Goal regulation across time: the effects of feedback and affect", *Journal of Applied Psychology*, Vol. 90 No. 3, pp. 453-467.
- James, L.R. (1982), "Aggregation bias in estimates of perceptual agreement", *Journal of Applied Psychology*, Vol. 67 No. 2, pp. 219-229.
- Javidan, M. and Dastmalchian, A. (2003), "Culture and leadership in Iran: the land of individual achievers, strong family ties, and powerful elite", *The Academy of Management Executive*, Vol. 17 No. 4, pp. 127-142.
- Johnson, P.R. and Indvik, J. (2001), "Slings and arrows of rudeness: incivility in the workplace", *Journal of Management Development*, Vol. 20 No. 8, pp. 705-714.
- Joo, B. (2007), *The Impact of Contextual and Personal Characteristics on Employee Creativity in Korean Firms*, doctoral dissertation, UMI No. 3263468.
- Kane, K. and Montgomery, K. (1998), "A framework for understanding dysempowerment in organizations", *Human Resource Management (1986-1998)*, Vol. 37 Nos 3-4, pp. 263.
- Kenny, D.A., Kashy, D.A. and Bolger, N. (1998), "Data analysis in social psychology", *The Handbook of Social Psychology*, Vol. 1 No. 4, pp. 233-265.
- Klimoski, R.J. and Karol, B.L. (1976), "The impact of trust on creative problem solving groups", *Journal of Applied Psychology*, Vol. 61 No. 5, pp. 630-633.
- Koestner, R., Ryan, R.M., Bernieri, F. and Holt, K. (1984), "Setting limits on children's behavior: the differential effects of controlling vs informational styles on intrinsic motivation and creativity", *Journal of Personality*, Vol. 52 No. 3, pp. 233-248.
- Kogut, B. and Zander, U. (1992), "Knowledge of the firm, combinative capabilities, and the replication of technology", *Organization Science*, Vol. 3 No. 3, pp. 383-397.
- Lee, S., Yun, S. and Srivastava, A. (2013), "Evidence for a curvilinear relationship between abusive supervision and creativity in South Korea", *The Leadership Quarterly*, Vol. 24 No. 5, pp. 724-731.
- Levin, D.Z. and Cross, R. (2004), "The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer", *Management Science*, Vol. 50 No. 11, pp. 1477-1490.
- Lim, S., Cortina, L.M. and Magley, V.J. (2008), "Personal and workgroup incivility: impact on work and health outcomes", *Journal of Applied Psychology*, Vol. 93 No. 1, pp. 95-107.
- Lim, V.K. and Teo, T.S. (2009), "Mind your e-manners: impact of cyber incivility on employees' work attitude and behavior", *Information & Management*, Vol. 46 No. 8, pp. 419-425.
- Liu, D., Liao, H. and Loi, R. (2012), "The dark side of leadership: a three-level investigation of the cascading effect of abusive supervision on employee creativity", *Academy of Management Journal*, Vol. 55 No. 5, pp. 1187-1212.
- Locke, E.A., Latham, G.P. and Erez, M. (1988), "The determinants of goal commitment", *Academy of Management Review*, Vol. 13 No. 1, pp. 23-39.
- McGraw, K.O. and Fiala, J. (1982), "Undermining the Zeigarnik effect: another hidden cost of reward", *Journal of Personality*, Vol. 50 No. 1, pp. 58-66.

- MacCurtain, S., Flood, P.C., Ramamoorthy, N., West, M.A. and Dawson, J.F. (2010), "The top management team, reflexivity, knowledge sharing and new product performance: a study of the Irish software industry", *Creativity and Innovation Management*, Vol. 19 No. 3, pp. 219-232.
- MacKinnon, C. (1994), *Only Words*, Basic Books, New York, NY.
- MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G. and Sheets, V. (2002), "A comparison of methods to test mediation and other intervening variable effects", *Psychological Methods*, Vol. 7 No. 1, pp. 83-104.
- Madjar, N., Oldham, G.R. and Pratt, M.G. (2002), "There's no place like home? The contributions of work and nonwork creativity support to employees' creative performance", *Academy of Management Journal*, Vol. 45 No. 4, pp. 757-767.
- Mandler, G. (1975), *Consciousness: Respectable, Useful, and Probably Necessary*.
- Mesmer-Magnus, J.R. and DeChurch, L.A. (2009), "Information sharing and team performance: a meta-analysis", *Journal of Applied Psychology*, Vol. 94 No. 2, pp. 535-546.
- Milliken, F.J., Bartel, C.A. and Kurtzberg, T. (2003), "Diversity and creativity in work groups: a dynamic perspective on the affective and cognitive processes that link diversity and performance", in Paulus, P. and Nijstad, B. (Eds), *Group Creativity*, Oxford University Press, New York, NY, pp. 32-62.
- Miner, A., Glomb, T. and Hulin, C. (2005), "Experience sampling mood and its correlates at work", *Journal of Occupational and Organizational Psychology*, Vol. 78 No. 2, pp. 171-193.
- Mohammed, S. and Dumville, B.C. (2001), "Team mental models in a team knowledge framework: expanding theory and measurement across disciplinary boundaries", *Journal of Organizational Behavior*, Vol. 22 No. 2, pp. 89-106.
- Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", *Academy of Management Review*, Vol. 23 No. 2, pp. 242-266.
- Nonaka, I. (1994), "A dynamic theory of organizational knowledge creation", *Organization Science*, Vol. 5 No. 1, pp. 14-37.
- Nonaka, I. and Von Krogh, G. (2009), "Perspective – Tacit knowledge and knowledge conversion: controversy and advancement in organizational knowledge creation theory", *Organization Science*, Vol. 20 No. 3, pp. 635-652.
- Ohlinger, J., Brown, M.C., Laudert, S., Sue, S. and Fofah, O. (2003), "Development of potentially better practices for the Neonatal intensive care unit as a culture of collaboration: communication, accountability respect, and empowerment", *Pediatrics*, Vol. 111 No. 4, pp. 471-482.
- Oldham, G.R. and Cummings, A. (1996), "Employee creativity: personal and contextual factors at work", *Academy of Management Journal*, Vol. 39 No. 3, pp. 607-634.
- Pearson, C.M. and Porath, C.L. (2005), "On the nature, consequences and remedies of workplace incivility: no time for 'nice'? Think again", *The Academy of Management Executive*, Vol. 19 No. 1, pp. 7-18.
- Pearson, C.M., Andersson, L.M. and Porath, C.L. (2000), "Assessing and attacking workplace incivility", *Organizational Dynamics*, Vol. 29 No. 2, pp. 123-137.
- Pearson, C.M., Andersson, L.M. and Wegner, J.W. (2001), "When workers flout convention: a study of workplace incivility", *Human Relations*, Vol. 54 No. 11, pp. 1387-1419.
- Pelz, D.C. (1963), "Relationships between measures of scientific performance and other variables", in Taylor, C.W. and Barron, F. (Eds), *Scientific Creativity: Its Recognition and Development*, Wiley, New York, NY, pp. 302-310.
- Penney, L.M. and Spector, P.E. (2005), "Job stress, incivility, and counterproductive work behavior (CWB): the moderating role of negative affectivity", *Journal of Organizational Behavior*, Vol. 26 No. 7, pp. 777-796.



- Perry-Smith, J.E. and Shalley, C.E. (2003), "The social side of creativity: a static and dynamic social network perspective", *Academy of Management Review*, Vol. 28 No. 1, pp. 89-106.
- Phelan, S. and Young, A.M. (2003), "Understanding creativity in the workplace: an examination of individual styles and training in relation to creative confidence and creative self-leadership", *The Journal of Creative Behavior*, Vol. 37 No. 4, pp. 266-281.
- Pirola-Merlo, A. and Mann, L. (2004), "The relationship between individual creativity and team creativity: aggregating across people and time", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 235-257.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Polanyi, M. (1966), "The logic of tacit inference", *Philosophy*, Vol. 41 No. 155, pp. 1-18.
- Porath, C.L. and Erez, A. (2007), "Does rudeness really matter? The effects of rudeness on task performance and helpfulness", *Academy of Management Journal*, Vol. 50 No. 5, pp. 1181-1197.
- Porath, C.L. and Erez, A. (2009), "Overlooked but not untouched: how rudeness reduces onlookers' performance on routine and creative tasks", *Organizational Behavior and Human Decision Processes*, Vol. 109 No. 1, pp. 29-44.
- Porath, C.L. and Pearson, C. (2013), "The price of incivility", *Harvard Business Review*, Vol. 91 Nos 1-2, pp. 114-121.
- Porath, C.L. and Pearson, C.M. (2010), "The cost of bad behavior", *Organizational Dynamics*, Vol. 39 No. 1, pp. 64-71.
- Powell, W.W., Koput, K.W. and Smith-Doerr, L. (1996), "Interorganizational collaboration and the locus of innovation: networks of learning in biotechnology", *Administrative Science Quarterly*, Vol. 41 No. 1, pp. 116-145.
- Reagans, R. and McEvily, B. (2003), "Network structure and knowledge transfer: the effects of cohesion and range", *Administrative Science Quarterly*, Vol. 48 No. 2, pp. 240-267.
- Reio, T.G. and Ghosh, R. (2009), "Antecedents and outcomes of workplace incivility: implications for human resource development research and practice", *Human Resource Development Quarterly*, Vol. 20 No. 3, pp. 237-264.
- Reio, T.G. Jr and Sanders-Reio, J. (2011), "Thinking about workplace engagement: does supervisor and coworker incivility really matter?", *Advances in Developing Human Resources*, Vol. 13 No. 4, pp. 462-478.
- Robinson, S.L. and Bennett, R.J. (1995), "A typology of deviant workplace behaviors: a multidimensional scaling study", *Academy of Management Journal*, Vol. 38 No. 23, pp. 555-572.
- Robinson, A.G., Stern, S. and Stern, S. (1997), *Corporate Creativity: How Innovation and Improvement Actually Happen*, Berrett-Koehler Publishers, San Francisco, CA.
- Senge, P. (1990), *The Fifth Discipline: The Art and Science of the Learning Organization*, Currency Doubleday, New York, NY.
- Shalley, C.E. and Gilson, L.L. (2004), "What leaders need to know: a review of social and contextual factors that can foster or hinder creativity", *The Leadership Quarterly*, Vol. 15 No. 1, pp. 33-53.
- Shalley, C.E. and Perry-Smith, J.E. (2001), "Effects of social-psychological factors on creative performance: the role of informational and controlling expected evaluation and modeling experience", *Organizational Behavior and Human Decision Processes*, Vol. 84 No. 1, pp. 1-22.

- Shalley, C.E., Gilson, L.L. and Blum, T.C. (2009), "Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance", *Academy of Management Journal*, Vol. 52 No. 3, pp. 489-505.
- Shalley, C.E., Zhou, J. and Oldham, G.R. (2004), "The effects of personal and contextual characteristics on creativity: where should we go from here?", *Journal of Management*, Vol. 30 No. 6, pp. 933-958.
- Shin, S.J. and Zhou, J. (2007), "When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator", *Journal of Applied Psychology*, Vol. 92 No. 6, pp. 1709-1721.
- Shrout, P.E. and Fleiss, J.L. (1979), "Intraclass correlations: uses in assessing rater reliability", *Psychological Bulletin*, Vol. 86 No. 2, pp. 420-428.
- Sliter, M., Jex, S., Wolford, K. and McInnerney, J. (2010), "How rude! Emotional labor as a mediator between customer incivility and employee outcomes", *Journal of Occupational Health Psychology*, Vol. 15 No. 4, pp. 468-481.
- Sveiby, K.E. and Simons, R. (2002), "Collaborative climate and effectiveness of knowledge work-an empirical study", *Journal of Knowledge Management*, Vol. 6 No. 2, pp. 420-433.
- Tepper, B.J. (2007), "Abusive supervision in work organizations: review, synthesis, and research agenda", *Journal of Management*, Vol. 33 No. 3, pp. 261-289.
- Tierney, P. and Farmer, S.M. (2002), "Creative self-efficacy: its potential antecedents and relationship to creative performance", *Academy of Management Journal*, Vol. 46 No. 6, pp. 1137-1148.
- Tierney, P., Farmer, S.M. and Graen, G.B. (1999), "An examination of leadership and employee creativity: the relevance of traits and relationships", *Personnel Psychology*, Vol. 52 No. 3, pp. 591-620.
- Tsai, W. and Ghoshal, S. (1998), "Social capital and value creation: the role of intrafirm networks", *Academy of Management Journal*, Vol. 41 No. 4, pp. 464-476.
- Utman, C.H. (1997), "Performance effects of motivational state: a meta-analysis", *Personality and Social Psychology Review*, Vol. 1 No. 2, pp. 170-182.
- Uzzi, B. (1997), "Social structure and competition in interfirm networks: the paradox of embeddedness", *Administrative Science Quarterly*, Vol. 42 No. 1, pp. 35-67.
- Uzzi, B. and Spiro, J. (2005), "Collaboration and creativity: the small world problem1", *American Journal of Sociology*, Vol. 111 No. 2, pp. 447-504.
- Van der Vegt, G.S. and Janssen, O. (2003), "Joint impact of interdependence and group diversity on innovation", *Journal of Management*, Vol. 29 No. 5, pp. 729-751.
- van Jaarsveld, D.D., Walker, D.D. and Skarlicki, D.P. (2010), "The role of job demands and emotional exhaustion in the relationship between customer and employee incivility", *Journal of Management*, Vol. 36 No. 6, pp. 1486-1504.
- van Woerkom, M. and Sanders, K. (2010), "The romance of learning from disagreement. The effect of cohesiveness and disagreement on knowledge sharing behavior and individual performance within teams", *Journal of Business and Psychology*, Vol. 25 No. 1, pp. 139-149.
- Varner, L.J. and Ellis, H.C. (1998), "Cognitive activity and physiological arousal: processes that mediate mood-congruent memory", *Memory & Cognition*, Vol. 26 No. 5, pp. 939-950.
- Weiss, H.M. and Cropanzano, R. (1996), "Affective events theory: a theoretical discussion of the structure, causes, and consequences of affective experiences at work", *Research in Organizational Behavior*, Vol. 18, pp. 1-74.
- West, M.A. and Anderson, N.R. (1996), "Innovation in top management teams", *Journal of Applied Psychology*, Vol. 81 No. 6, pp. 680-693.

- Whitman, M.V., Halbesleben, J.R. and Holmes, O. (2014), "Abusive supervision and feedback avoidance: the mediating role of emotional exhaustion", *Journal of Organizational Behavior*, Vol. 35 No. 1, pp. 38-53.
- Wilson, J.M., Goodman, P.S. and Cronin, M.A. (2007), "Group learning", *Academy of Management Review*, Vol. 32 No. 4, pp. 1041-1059.
- Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993), "Toward a theory of organizational creativity", *Academy of Management Review*, Vol. 18 No. 2, pp. 293-321.
- Zhang, X. and Bartol, K.M. (2010), "Linking empowering leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement", *Academy of Management Journal*, Vol. 53 No. 1, pp. 107-128.
- Zhou, J. (2003), "When the presence of creative coworkers is related to creativity: role of supervisor close monitoring, developmental feedback, and creative personality", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 413-422.
- Zhou, J. and George, J.M. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, Vol. 44 No. 4, pp. 682-696.

### Further reading

- Brislin, R.W. (1986), "The wording and translation of research instruments", in Lonner, W.J. and Berry, J. (Eds), *Field Methods in Cross-Cultural Research*, Sage, Beverly Hills, CA, pp. 136-164.

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