Antecedents and consequences of knowledge sabotage in the Turkish telecommunication and retail sectors

Alexander Serenko and A. Mohammed Abubakar

Abstract

Purpose - This study aims to propose and test a model explicating the antecedents and consequences of knowledge sabotage.

Design/methodology/approach - Data obtained from 330 employees working in the Turkish retail and telecommunication sectors were analyzed by means of the Partial Least Squares Structural Equation Modelina technique.

Findings - Co-worker knowledge sabotage is the key factor driving knowledge sabotage behavior of individual employees, followed by co-worker incivility. Interactional justice suppresses individual knowledge sabotage, while supervisor incivility does not affect it. Co-worker knowledge sabotage reduces job satisfaction of other employees, which, in turn, triggers their voluntary turnover intention. Contrary to a popular belief that perpetrators generally benefit from their organizational misbehavior, the findings indicate that knowledge saboteurs suffer from the consequences of their action because they find it mentally difficult to stay in their current organization. Employees understate their own knowledge sabotage engagement and/or overstate that of others.

Practical implications - Managers should realize that interactional justice is an important mechanism that can thwart knowledge sabotage behavior, promote a civil organizational culture, develop proactive approaches to reduce co-worker incivility and strive towards a zero rate of knowledge sabotage incidents in their organizations. Co-worker incivility and co-worker knowledge sabotage in the workplace are possible inhibitors of intraorganizational knowledge flows and are starting points for job dissatisfaction, which may increase workers' turnover intention.

Originality/value - This study is among the first to further our knowledge on the cognitive mechanisms linking interactional justice and uncivil organizational behavior with knowledge sabotage and employee outcomes.

Keywords Knowledge sabotage, Interactional justice, Incivility, Job satisfaction, Employee turnover, Counterproductive work behavior, Knowledge management

Paper type Research paper

1. Introduction

Counterproductive work behavior, which refers to "volitional acts that harm or intend to harm organizations and their stakeholders" (Spector and Fox, 2005, p. 151), has become an Achilles heel of the contemporary organization. The social and economic costs of counterproductive work behavior are substantially large due to their devastating impacts on employees' moral, productivity and interaction with their fellow co-workers. Counterproductive work behavior is generally directed toward:

one's organization, e.g. theft (Greenberg, 1990a), tardiness, absenteeism (Robinson and Bennett, 1995) and cyberloafing (Ugrin and Pearson, 2013; Tandon et al., 2021; Tandon et al., 2022b); or

Alexander Serenko is based at the Faculty of Business and IT, University of Ontario Institute of Technology, Oshawa, Canada.

A. Mohammed Abubakar is based at the College of **Business and Social** Sciences, Antalya Bilim University, Antalya, Turkey.

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other employees, e.g. bullying (Boddy, 2011), aggression (Neuman and Baron, 2005), phubbing (i.e. ignoring co-workers in favor of using a smartphone) (Tandon et al., 2022a) and emotional abuse (Keashly and Harvey, 2005).

It is triggered by three factors: organizational and work-related problems (e.g. formal constraints, unrealistic demands, poor culture), interpersonal conflict (e.g. disagreement with others, personal incompatibility) and individual issues (e.g. personality traits, mental disorders, emotional dissonance). Recently, Serenko (2019) added knowledge sabotage to the list of counterproductive work behaviors and defined it as an incident "occurring when an employee intentionally provides incorrect knowledge to another or conceals knowledge from another while being fully aware that the knowledge in question is needed by and extremely important to the other party" (Serenko and Choo, 2020, p. 2299). The saboteur fully "realizes that the application of the wrong knowledge or a failure to apply the critically needed knowledge may have devastating consequences for the individual and/or the entire organization" and acts intentionally (Serenko and Choo, 2020, p. 2299).

Previous studies report that knowledge sabotage is mostly directed toward other employees rather than an entire organization and is generally driven by four factors: personal gratification (e.g. career opportunities, financial rewards), one's malevolent personality (e.g. narcissism, Machiavellianism, psychopathy), retaliation desire and the mimicking of knowledge sabotage behavior of other employees (Serenko, 2020; Serenko and Choo, 2020), which may be exacerbated by other personal, motivational and contextual variables (Lee, 2022; Perotti et al., 2022). Of these factors, the notions of retaliation and the mimicking of the misbehavior of others remain the most uncharted. Thus, this study focused on these issues as antecedents of knowledge sabotage. It hypothesized that interactional justice should suppress knowledge sabotage while supervisor incivility, co-worker incivility and co-worker knowledge sabotage were expected to instigate knowledge sabotage behavior of individual workers.

The extant literature emphasizes several organizational- and individual-level consequences of knowledge sabotage. Examples of the former include a waste of human capital and financial resources, lost customers, unnecessary hiring costs, understaffing, failed or delayed projects and poor quality of products or services. Instances of the latter include lower job efficiency, negative psychological impact, career impediment and direct financial effect (Serenko, 2019; Serenko, 2020). The present study continues this line of inquiry and focuses on two vital outcomes of knowledge sabotage: job satisfaction and turnover intention. Specifically, it argues that co-worker knowledge sabotage reduces job satisfaction of individual workers, which, in turn, makes them develop turnover intention. In addition, this study deviates from a widely held assumption that perpetrators (e.g. knowledge saboteurs, hiders, hoarders) always benefit from their actions. In particular, it proposes that knowledge saboteurs also carry the burden of their pernicious behavior and, as a result, may find it difficult to continue their long-term career in their present organization, which makes them develop turnover intention. In a similar vein, Syed et al. (2021) recently empirically confirmed a relationship between knowledge hiding and turnover intention.

Based on the arguments above, this study proposes and empirically tests a model in which interactional justice, supervisor incivility and co-worker incivility are hypothesized to have a direct effect on knowledge sabotage committed by individual workers. Co-worker knowledge sabotage has a direct impact on both individual knowledge sabotage and job satisfaction, which, in turn, affect workers' turnover intention.

Notably, all previous empirical knowledge sabotage investigations were conducted in the USA. However, conclusions and recommendations that are based on data samples drawn from the North American population of workers may not generalize to the rest of the world (Henrich et al., 2010; Palvia et al., 2017). Moreover, Perotti et al. (2022) emphasize the importance of organizational context wherein knowledge sabotage behavior takes place, which, in turn, may be influenced by national culture (Hofstede, 1980). Thus, the present study attempts to extend the validity and generalizability of the knowledge sabotage concept beyond the North American context by surveying employees from two knowledgeintensive industries in Turkey.

The rest of this paper is structured as follows. Section 2 offers theoretical background and the rationale for construct selection. Section 3 develops a set of hypotheses. Sections 4 and 5 present methodology and document the results, respectively. Section 6 discusses the findings by focusing on theoretical implications, practical recommendations, limitations and future research directions. Section 7 concludes the study.

Theoretical background

2.1 Antecedents of knowledge sabotage

Many instances of knowledge sabotage represent a form of retaliation, and the perpetrators' misbehavior is generally targeted toward other employees as well as, occasionally, toward their entire organization (Serenko, 2019; Serenko, 2020; Serenko and Choo, 2020). Prior research posits that employee retaliation is driven by various factors, e.g. poor relationships with a supervisor (Townsend et al., 2000), problematic customer behavior (Kumar Madupalli and Poddar, 2014) and negative performance feedback (Geddes and Baron, 1997). In addition, two types of antecedents of employee retaliatory behavior that clearly stand out pertain to the lack of organizational justice (Skarlicki and Folger, 2004) and the presence of workplace incivility (Samosh, 2019).

The concept of organizational justice has deep historical roots. The Greek philosopher Aristotle (384–322 BC) approached the notion of justice from the perspective of the sense of fairness in distributions and settlements (Cordero, 1988). In the 17th century, John Locke, an English philosopher and physician, revisited this concept to form a foundation for the development of a moral theory while accounting for the interests of both the individual and the communal (Gardner, 1992). An exponentially growing interest in the concept of justice in the philosophy, sociology and management domains occurred after Rawls (1971) published a seminal book titled *Theory of Justice* in an attempt to reconcile the principles of liberty and equality. Soon after that, organizational justice research has gained momentum (Greenberg and Colquitt, 2005), and organizational justice has become a key requirement for the successful functioning of contemporary organizations and the well-being of their stakeholders (Greenberg, 1990b). Overall, it has been concluded that organizational justice has the potential to deliver various benefits to both organizations and their workers because it improves job performance, cultivates citizenship behavior, reduces conflict and establishes mutual trust (Cropanzano et al., 2007). However, a lack of organizational justice may lead to various forms of retaliatory behavior including workplace sabotage (Skarlicki et al., 2008). As such, organizational justice is highly relevant in this study's context because, in many cases, workplace retaliation is driven by the workers' perceptions of injustice, and they feel compelled to respond by any means available.

There are three major types of organizational justice: distributive (the fairness of decision outcomes and the distribution of resources) (Homans, 1961), procedural (the fairness of the process that leads to decision outcomes and the distribution of resources) (Thibaut and Walker, 1978) and interactional (the quality of interpersonal interaction between decision makers and their subordinates) (Bies, 2015). While all of these may lead to retaliation in the workplace (Skarlicki and Folger, 1997), this study argues that interactional justice is more relevant than distributive and procedural justice in the context of knowledge sabotage. The rationale is that knowledge sabotage is frequently triggered by inter-employee conflict and a desire to retaliate against other workers rather than against the entire organization. In fact, in the analysis of open-ended comments provided by knowledge saboteurs and their

targets (Serenko, 2019; Serenko, 2020), no major themes pertaining to a fair distribution of rewards by an organization or the fairness of corresponding organizational procedures were discovered. Most incidents that arose from the distribution of rewards were associated with a particular individual who competed for the same reward rather than with an entire organization and its reward-distributing procedures. At the same time, one of the key themes was related to interpersonal conflict, and this theme was closely associated with interactional justice. Moreover, distributive justice and procedural justice are efficacious in the context of organizational practices determined by upper management, but they have less predictive power in the context of lower-level employee interactions. As a result, distributive and procedural justice policies and practices are less likely to explain knowledge sabotage, which is strongly driven by a desire to retaliate against a particular individual (Serenko, 2019; Serenko, 2020). This study, therefore, focuses on interactional justice.

Interactional justice refers to the quality of interpersonal and informational interactions and processes used by formal organizational decision-makers in executing work procedures (i.e. courtesy, politeness, shared values, language adequacy level, justifications, etc.) (Niehoff and Moorman, 1993; Colquitt et al., 2001; Bies, 2015). For example, interactional justice is present in a situation in which a decision-maker (e.g. a project lead, a manager, a human resource executive) engages in an honest conversation, expresses some level of consideration for the employee, provides clear explanations of the consequences of decisions and/or clarifies the reason why certain job decisions concerning the worker have been made. As daily interpersonal encounters between decision-makers and subordinates in organizations are inevitable, the importance and meaningfulness of interactional justice cannot be overstated. Interactional justice can result in positive outcomes such as citizenship behaviors (Niehoff and Moorman, 1993), while interactional injustice can produce various unwanted consequences (Holtz and Harold, 2013), and, potentially, trigger knowledge sabotage. Thus, interactional justice is included as an antecedent of individual knowledge sabotage.

Workplace incivility is a "low-intensity deviant workplace behavior with ambiguous intent to harm [other employees]" (Andersson and Pearson, 1999, p. 456). Examples include talking down to co-workers, uttering degrading remarks, spreading rumors and not listening to others (Pearson and Porath, 2005). After its introduction by Andersson and Pearson (1999), workplace incivility has become a focal concept in the organizational behavior literature (Vasconcelos, 2020). There are four characteristics that clearly differentiate workplace incivility from the other forms of counterproductive work behavior (Schilpzand et al., 2016). First, workplace incivility has low intensity and perpetrators refrain from overt aggression, bullying, harassment and physical violence, which are present in high-intensity types of deviant work behavior. Second, workplace incivility is ambiguous in nature: its harmful intentions are difficult to clearly identify, and victims may find it challenging to report the incident to initiate a corrective action. Third, workplace incivility may be enacted by all types of organizational stakeholders, including customers, managers and co-workers. Fourth, it is ubiquitous: 98% of all employees experience incivility and, as result, many of them decrease their work effort, output quality, time spent at work and overall performance (Porath and Pearson, 2013). Taken together, these features trigger unique affective, cognitive and behavioral responses in workplace incivility recipients compared to those who experience other types of counterproductive work behavior (Schilpzand et al., 2016). Most importantly, even though workplace incivility has low intensity, employees may respond to it with severe forms of negative behavior (Andersson and Pearson, 1999), including sabotage (Samosh, 2019), which makes it highly relevant in the context of this study.

Supervisor incivility and co-worker incivility are the two major categories of workplace incivility (Arasli et al., 2018), which are used in this study. Although both supervisors and coworkers are entities of the same organization, uncivil acts emerging from supervisors are conceptually different from those of co-workers. First, supervisors often have higher status and rank in the organizational hierarchy, while co-workers are employees who mostly occupy a similar rank. Second, as opposed to co-workers, supervisors have information power on work-related activities, and they have the authority to give formal and informal performance feedback. As a result, the norms of reciprocity differ between supervisors and their subordinates compared to those between same-level co-workers. Therefore, supervisor and co-worker incivility are considered two distinct constructs.

Supervisor incivility and co-worker incivility are interpersonal stressors resulting from the social aspects of work processes (Mitchell et al., 2012) and take place during superior-topeer and peer-to-peer interactions respectively with innate negative effects (Abubakar, 2018). When employees become victims of the uncivil actions of their supervisors or fellow co-workers, they often engage in a negative reciprocal behavior by using a variety of approaches. This study proposes that knowledge sabotage may serve as a tool used in such retaliatory behavior.

In addition to interactional justice, supervisor incivility and co-worker incivility, this study posits that knowledge sabotage committed by individual employees is influenced by the knowledge sabotage actions of their fellow co-workers (i.e. co-worker knowledge sabotage). Researchers from various schools of thought have investigated the power of crowd mentality, behavioral imitation and social contagion for over a century (Baldwin, 1894; Le Bon, 1897). According to the concept of social contagion, counterproductive work behavior may quickly spread within a group of employees because one individual acts as a stimulus for the imitative actions of the others (Marsden, 1998a; Marsden, 1998b). Recently, the organizational behavior literature has concluded that individual workers also tend to copy the counterproductive work behavior of other employees and supervisors (Robinson and O'Leary-Kelly, 1998; Robinson et al., 2014; Liang et al., 2018; Liang and Zhang, 2019). By relying on the memetic stance as a lens of analysis (Marsden, 1998a; Marsden, 1998b; Marsden, 2001), this study argues that knowledge sabotage behavior includes a number of unique attributes - extreme negative emotions, behavioral efficiency, strong cognitive and behavioral impacts, high memorability, resistance to disconfirmation and learnability which trigger a contagious chain of events when individual employees become knowledge sabotage victims (Serenko and Choo, 2020). As a result, individual workers tend to replicate the pernicious knowledge sabotage actions of others by using knowledge sabotage as a retaliation tool. Thus, co-worker knowledge sabotage is worth investigating as an antecedent of individual knowledge sabotage.

2.2 Consequences of knowledge sabotage

This study contradicts a popular view that workplace offenders always extrinsically and/or intrinsically benefit from their organizational misbehavior. Instead, it argues that knowledge saboteurs carry the costs of their wrongdoing - affectively (negative mood and feelings), psychologically (inability to maintain a positive self-image), relationally (lost social capital and damaged relationships), mentally (depleted mental resources) and cognitively (dissonance or psychological discomfort due to opposite cognitive elements) (Zhong and Robinson, 2021) – which makes them reconsider their tenure in their current organization and so develop turnover intention. This happens because all the costs above are associated with the offenders' place of employment, which leads to further negative emotions and the inability to enjoyably perform routine tasks. As a result, leaving their current organization seems like a logical choice to continue one's career.

Previous research shows that job satisfaction is an important factor in the context of knowledge management, yet its exact role has not been fully understood (Lei et al., 2022). In response to this claim, this study proposes that co-worker knowledge sabotage reduces workers' level of job satisfaction, which, in turn, increases their turnover intention. According

to affective events theory (Weiss and Cropanzano, 1996; Weiss et al., 1999; Weiss, 2002; Weiss and Beal, 2005), job satisfaction is influenced by a number of affective workplace events, including interaction with others, which determine employees' workplace moods and emotions. Knowledge sabotage represents extreme workplace events that have a profound impact on its victims who, as a result, exhibit negative emotions during and even after an incident. These negative affective states undermine victims' productivity and make them question their organizational identity, which diminishes their job satisfaction. As stipulated by the heuristic model of employee turnover (Mobley, 1977; Mobley et al., 1978; Hom et al., 1992), a lower level of job satisfaction leads, in turn, to higher turnover intention (Judge, 1993; Tett and Meyer, 1993).

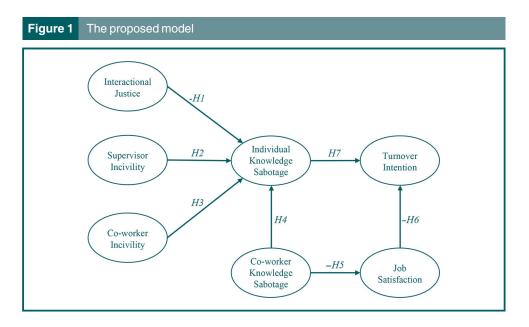
Figure 1 diagrammatically illustrates the proposed model. The following section explicates the causal relationships between the constructs in detail.

3. Hypotheses development

3.1 Interactional justice and individual knowledge sabotage

Interactional justice is violated when formal decision-makers treat employees with no consideration, dignity or courtesy and fail to provide explanations for the rationale behind their decisions. The lack of interactional justice can be viewed as damaging work events that infringe on the basic norms of respect, sincerity and politeness (Cropanzano et al., 2017). The absence of interactional justice generally promotes counterproductive work behavior while its presence suppresses such pernicious actions.

The impact of interactional justice on individual knowledge sabotage may be explained from the perspectives of the social exchange theory and the frustration-aggression-displacement theory. The social exchange theory is a comprehensive framework that views social life as a chain of sequential transactions between two or more entities in which resources (i.e. relations and behaviors) are exchanged through a reciprocal process such that good begets good and bad begets bad (Homans, 1958; Molm, 2006; Molm et al., 2007; Molm, 2010). Based on a meta-analysis of 52 studies, Liu et al. (2012) confirmed that the social exchange theory is robust and may be fruitfully used in the context of knowledge behavior. In the context of interactional justice, the social exchange process begins when a person in power who represents the organization (i.e. a formal decision-maker) treats a subordinate in a



positive or negative manner (Cropanzano and Mitchell, 2005; Cropanzano et al., 2017). Depending on the valance of treatment, the target engages in a particular reciprocating behavior: in the case of positive behavior by the decision-maker, the target responds in a positive manner and/or suppresses negative behavior, while in the case of negative treatment, the target reacts in a negative way and/or minimizes positive actions. Thus, when employees experience the absence of interactional justice (i.e. when they encounter interactional injustice), they are less likely to suppress their (extremely negative) knowledge sabotage behavior: this suggests a negative relationship between interactional justice and individual knowledge sabotage.

The frustration-aggression-displacement theory (Dollard et al., 1939; Berkowitz, 1989; Breuer and Elson, 2017) further suggests that knowledge saboteurs may act against their fellow co-workers even though these were not a direct source of interactional injustice. The theory posits that frustration is a necessary condition for aggression, and that people become frustrated when they cannot achieve their goals. Employment is generally recognized as a fundamental human right (Siegel, 1994), and individuals believe that they are entitled to a safe working environment, including having healthy interactions with their supervisors. Thus, employees who believe that they became victims of interactional injustice accumulate a certain degree of frustration, which leads to aggression. However, in many cases, they may not channel their aggression toward the actual source of their frustration because it may be too difficult or too risky to act aggressively against the entire organization or against a powerful decision-maker (e.g. a senior manager) who created the environment of injustice. In this case, the victims of interactional injustice may displace their aggression toward innocent, available targets such as co-workers. In other words, being unable to sabotage the entire organization or powerful decision-makers, they vent their frustration and aggression by engaging in knowledge sabotage against other workers.

Previous research has already established the efficacy and predictive power of interactional justice in the context of counterproductive work behavior, including workplace sabotage (Skarlicki and Folger, 1997; Ambrose et al., 2002), and concluded that interactional justice suppresses sabotage, while interactional injustice promotes it. In a similar vein, it is proposed:

H1. Interactional justice has a negative direct effect on individual knowledge sabotage.

3.2 Supervisor incivility, co-worker incivility and individual knowledge sabotage

This study further hypothesizes that workplace incivility also serves as an important antecedent of individual knowledge sabotage. Workplace incivility differs from interactional justice on several dimensions. First, the lack of interactional justice is associated with unfair treatment received from decision-makers during the execution of certain organizational procedures, while workplace incivility is associated with mistreatment received from any members of the organization, irrespective of their position or rank. Second, in contrast to the lack of interactional justice, workplace incivility can occur in the absence of a procedural context (Pearson et al., 2001). Third, the lack of interactional justice represents a clear violation of work and social norms, whereas incivility has a low intensity and an ambiguous nature, which leaves room for alternative interpretations.

Workplace incivility is represented by two distinct constructs: supervisor incivility and coworker incivility. Supervisor incivility refers to uncivil actions and behaviors initiated by a superior such as unjust criticism, harsh remarks, ignoring opinions and shunning subordinates publicly (Reio, 2011; Abubakar, 2018). Supervisors have power and authority in the workplace, which means that they can jeopardize employees' positions, assessments, assignments, promotions and compensation opportunities. The supervisor incivility construct is highly relevant in the context of individual knowledge sabotage because, as prior research attests, supervisor incivility triggers various forms of counterproductive work behavior (Lim and Teo, 2009). Previous studies have already established that supervisor incivility, which is often manifested in the form of abuse, leads to knowledge hiding (Khalid et al., 2018; Jahanzeb et al., 2019; Faroog and Sultana, 2021) because it reduces employees' perception of psychological safety (Agarwal et al., 2022), causes emotional exhaustion (Wang et al., 2021), creates job insecurity (Feng and Wang, 2019), triggers revenge attitudes (Rasheed et al., 2022) and breaches the psychological contract (Ghani et al., 2020; Pradhan et al., 2020).

Employees who experience uncivil behavior from their supervisors develop poor work attitudes, resistance, hostility, deviance and psychological distress (Tepper, 2007). They assume that, as professionals, they matter less, and that their organizational membership is in jeopardy. Building on the social exchange theory (Homans, 1958), it is suggested that supervisor incivility creates negative emotions, anger and frustration among employees responses that stir and motivate them to restore justice by means of retaliation. Their retaliatory behavior may be directed at three parties: the perpetrators themselves (i.e. supervisors who initiated the uncivil treatment), the entire organization and/or co-workers. First, employees can engage in knowledge sabotage against their supervisors to undermine their authority, competence and productivity, which may be reflected in the supervisors' performance appraisal and lead to some sort of disciplinary action or even dismissal. Doing so allows the victims of supervisor incivility to restore justice and get even. Second, employees may assume that their entire organization is responsible for allowing supervisors to mistreat their subordinates. In this case, their knowledge sabotage behavior would be targeted against their entire organization. Third, consistent with the frustration-aggression-displacement theory (Dollard et al., 1939; Berkowitz, 1989; Breuer and Elson, 2017), some employees may shift their anger from powerful, untouchable supervisors to innocent third parties, such as co-workers, and act against them merely to release their anger. Nevertheless, regardless of the target, it is likely that supervisor incivility triggers knowledge sabotage behavior.

In contrast to supervisor incivility, co-worker incivility refers to uncivil actions and behaviors initiated by co-workers (Arasli et al., 2018). It differs from supervisor incivility because offenders do not have legal authority over their victims: perpetrators and their targets are located at the same level within the organizational hierarchy. Uncivil behaviors emerging from co-workers signal that the subjects of uncivil action have a low social value within the work group (Abubakar, 2018), which breaks the norm of reciprocity. Co-worker incivility can instill the feeling of unjust and unfair treatment, especially when fellow co-workers show disregard for, ignore, exclude or spread rumors about others. According to the social exchange theory (Homans, 1958), targets are likely to respond to such uncivil behaviors in a negative way, taking revenge against their transgressors to restore equity. This study theorizes that targets of co-worker incivility are motivated to restore justice and fight back by means of knowledge sabotage to damage perpetrators' work performance, humiliate them and make them leave the workplace. Previous research has already found that co-worker incivility is associated with counterproductive knowledge behavior, namely, with knowledge hiding and hoarding (Aljawarneh and Atan, 2018; Arshad and Ismail, 2018; Irum et al., 2020; Aljawarneh et al., 2022). Knowledge sabotage behavior can be viewed as a form of "tit for tat" strategy to resolve tension and negative emotions caused by co-worker incivility. Based on the arguments above, it is suggested that:

- H2. Supervisor incivility has a positive direct effect on individual knowledge sabotage.
- H3. Co-worker incivility has a positive direct effect on individual knowledge sabotage.

3.3 Co-worker knowledge sabotage and individual knowledge sabotage

Research suggests that individual employees tend to copy the counterproductive work behavior of their fellow co-workers (Robinson and O'Leary-Kelly, 1998; Robinson et al., 2014).

In the context of the present study, it is argued that the impact of co-worker knowledge sabotage on individual knowledge sabotage may be explicated by using the memetic stance as a lens of analysis (Marsden, 1998a; Marsden, 1998b; Marsden, 2001) and, particularly, the notion of behavioral social contagion (Wheeler, 1966). From this perspective, knowledge sabotage is a meme (i.e. the unit of transmission), and the process of contagion is a chain of events that influence an individual employee's deliberate or automatic decision to copy the destructive actions of his or her co-workers. Specifically, a meme must possess unique attributes that make employees mimic the behavior of their fellow co-workers. In the case of knowledge sabotage, these unique attributes pertain to negative emotions, behavioral efficiency, strong cognitive and behavioral impacts, high memorability, resistance to disconfirmation and high learnability (Serenko and Choo, 2020).

First, knowledge sabotage victims and observers express negative emotions when experiencing or witnessing the malevolent behavior of their co-workers. As a result, they may fall into extremely negative affective states and turn their anger into reciprocal knowledge sabotage behavior toward alleged perpetrators and their accomplices. Second, knowledge sabotage is one of the most efficient insidious organizational misbehaviors which makes it highly attractive. Even though engaging in knowledge sabotage requires some physical or mental effort, the "return on investment" in knowledge sabotage is extremely high. Third, knowledge sabotage may produce truly devastating cognitive and behavioral consequences for its victims (Serenko, 2019; Serenko, 2020). Thus, it becomes a natural choice for those who decide to hurt their co-workers. Fourth, most knowledge sabotage incidents represent highly memorable, vivid, unique and emotional events that are likely to stay in employees' long-term memory for their entire organizational tenure. As a result, knowledge sabotage victims and observers have ample opportunity to ruminate on their experience and develop a retaliation plan.

Fifth, knowledge sabotage is resistant to disconfirmation because it may be difficult to convince its victims and observers that these were accidental, unintentional and isolated events and the perpetrators meant no harm. Last, knowledge sabotage behavior is easy to copy because the concepts of deception and ignorance are well established in contemporary society (Levine, 2014). Lying and ignoring others' plight to pursue one's own interest is not a novel phenomenon, which makes it easy for employees to execute knowledge sabotage actions that rely on the use of similar cognitive processes.

Thus, due to the six attributes above, employees are likely to mimic the knowledge sabotage behavior of their fellow co-workers. Prior research has already established that an individual worker tends to mimic the knowledge hiding behavior of his or her co-workers, supervisors and subordinates. For instance, Butt and Ahmad (2019) report that senior managers intentionally hide knowledge from others when they observe similar actions by other managers. Butt (2019; 2021), Butt and Ahmad (2019) and Arain et al. (2020; 2022a, 2022b) further confirm the contagious nature of knowledge hiding behavior. Moreover, Serenko and Choo (2020) demonstrate the presence of behavioral social contagion in the context of knowledge sabotage. It is hypothesized:

H4. Co-worker knowledge sabotage has a positive direct effect on individual knowledge sabotage.

3.4 Co-worker knowledge sabotage and job satisfaction

The affective events theory (Weiss and Cropanzano, 1996; Weiss et al., 1999; Weiss, 2002; Weiss and Beal, 2005) states that job satisfaction is an attitudinal variable that is formed based on people's affective workplace experience. Previous research has identified a number of constructs that influence workers' affective experience and, by extension, their job satisfaction (Serenko et al., 2022). Examples of well-established job satisfaction antecedents include work-home conflict (Cortese et al., 2010), work exhaustion

(Hülsheger et al., 2013) and personal accomplishment (Brewer and Clippard, 2002). This study hypothesizes and empirically demonstrates that co-worker knowledge sabotage impacts employees' affective workplace experience, which, in turn, determines their level of job satisfaction.

Workplace affect refers to mood and emotions that are formed based on employees' overall on-the-job experience (Weiss et al., 1999; Weiss, 2002), including interactions with their fellow co-workers: positive moods and emotions increase workers' job satisfaction, while negative moods and emotions undermine it. A vast majority of knowledge sabotage incidents are directed toward other employees rather than the entire organization or its management (Serenko, 2019). Thus, knowledge sabotage creates a unique type of interemployee conflict where one party (i.e. the saboteur) intentionally acts against another (i.e. the target). In the beginning, during and after a workplace conflict, victims exhibit negative mood, stress and emotional exhaustion (Nair, 2008). The same line of reasoning applies in the knowledge sabotage context: recently, Serenko (2020) showed that knowledge sabotage victims often fall into an extremely negative mental state and exhibit what Lazarus and Lazarus (1994) refer to as "nasty emotions," which are highly troublesome and may threaten the identification with and the existence of employees as productive members of an organization. Thus, the negative moods and emotions experienced by the victims and observers of knowledge sabotage events are likely to diminish their job satisfaction. The following hypothesis is proposed:

H5. Co-worker knowledge sabotage has a negative direct effect on job satisfaction.

3.5 Job satisfaction and turnover intention

A negative impact of job satisfaction on turnover intention has been well established in the literature (Judge, 1993; Tett and Meyer, 1993): workers who are unsatisfied with their jobs intend to voluntarily leave their organizations and look for employment opportunities elsewhere. According to the heuristic model of employee turnover (Mobley, 1977; Mobley et al., 1978; Hom et al., 1992), workers constantly assess and elaborate on all aspects of their employment, which produces a certain level of satisfaction or dissatisfaction with their present jobs. In the case of satisfaction, they carry on their workplace routine. However, job dissatisfaction triggers a withdrawal process during which employees consider:

- their chances of getting a comparable or better position;
- tangible (e.g. travel, time) and intangible (e.g. mental effort) search costs; and
- the costs of quitting (e.g. lost status, professional relationships, benefits, seniority).

If the expected utility of a job search is high while the costs are low, individuals develop an intention to terminate their present employment and actively engage in a search process. As such, the heuristic model of employee turnover posits that the level of job satisfaction is a key factor that determines the probability of employees engaging in a withdrawal process, which, in the case of job dissatisfaction, is likely to produce turnover intention. Consistent with the line of reasoning above, it is argued that:

H6. Job satisfaction has a negative direct effect on turnover intention.

3.6 Individual knowledge sabotage and turnover intention

In contrast to a popular belief that perpetrators generally benefit from organizational misbehavior, research suggests that breaking the conventionally defined moral principles is a double-edged sword: on the one hand, doing so may deliver desirable benefits to the offenders; on the other, organizational transgressors themselves often suffer a number of negative consequences that they had not envisioned a priori (Klass, 1978). Recently, Zhong and Robinson (2021) conducted an integrative review of 110 studies on this topic and concluded that perpetrators' costs of negative organizational behavior actually outweigh its potential benefits. These costs may be categorized under five perspectives: affective position, psychological needs, relational stance, psychological resources and cognitive dissonance (Zhong and Robinson, 2021). It is argued that these five perspectives also apply in the knowledge sabotage context.

The affective perspective shows that offenders experience negative moods, feelings and emotions resulting from their misbehavior, such as shame, guilt, rumination, inability to relax and anxiety (Zhong and Robinson, 2021). This happens because perpetrators are aware that they violated a certain code of organizational behavior, and thinking about their action may bring painful emotions and negative self-evaluation. Serenko (2019) documented that 26% of saboteurs regret their behavior, especially if they face the negative consequences of their action. Thus, some knowledge saboteurs may also experience a negative mental state in their workplace. The psychological needs view states that wrongdoers fail to obtain important psychological nutrients that are necessary for their mental well-being because their misbehavior contradicts their own positive self-image and makes them feel bad about themselves (Zhong and Robinson, 2021). An inability to satisfy these needs leads to damaged social worth and poor self-esteem. All types of workplace sabotage are considered highly negative behaviors (Crino, 1994; Klotz and Buckley, 2013). Knowledge sabotage is an extremely unethical behavior and is generally frowned upon in the professional environment. Once the pernicious actions of knowledge saboteurs become apparent to other employees, the offenders may find it difficult to position themselves in a positive light, which would damage their social worth and self-esteem.

The relational stance posits that transgressors lose their social capital and damage their relationships with other organizational members because their actions evoke negative reactions from those who do not tolerate deception, cheating and unethical behavior (Zhong and Robinson, 2021). This, in turn, damages the offenders' ability to communicate and collaborate with others, which is instrumental for performance and career advancement. Serenko (2020) empirically demonstrated that knowledge sabotage victims develop mistrust, avoidance and hostility toward saboteurs. The same may be assumed about knowledge sabotage observers because they do not wish to fall prey to the saboteurs' potential misdeeds. As a result, knowledge saboteurs may be ostracized and excluded from informal communication flows and, as a result, develop a low sense of organizational belonging.

The psychological resources position shows that those who engage in knowledge sabotage may quickly deplete their cognitive resources because dealing with the consequences of their behavior consumes cognitive resources, and this places an additional burden on saboteurs. The cognitive dissonance perspective argues that perpetrators may experience psychological discomfort due to the incompatibility of two cognitive elements (Festinger, 1954) – i.e. a self-view as a productive organizational member maintaining the moral high ground vs a morally deficient, unethical and dishonest employee (Zhong and Robinson, 2021). To reconcile this dichotomy, knowledge saboteurs must change their behavior (e.g. undo previous misdeeds and refrain from new ones) or change their cognition (e.g. accept a self-deprecating view), which may be difficult to achieve. Until such a change occurs, saboteurs may experience psychological stress and discomfort.

In summary, knowledge saboteurs may experience negative affective states, feel that they are not socially worthy of their colleagues, be shunned and ostracized by their co-workers, be mentally drained and experience a taxing cognitive dissonance. Most importantly, all these negative phenomena are associated with their current workplace. For instance, their negative affective states may be triggered by the very thought of entering the office every morning. A feeling of inferiority may make them skip work, and the exclusion from informal peer-to-peer communication may create a sense of isolation. At this point, it may be difficult or even impossible for them to continue their employment and, as a result, they are likely to seek employment elsewhere. In other words, saboteurs may eventually find it so mentally difficult to stay in the organization where they have committed knowledge sabotage offences that they develop turnover intention.

While a relationship between knowledge sabotage and turnover intention hitherto remained empirically untested, several studies confirm the line of reasoning above. For example, Avgar et al. (2014) and Hill et al. (2015) prove that inter-employee relationship conflict triggers employee turnover intention. Similarly, Shaukat et al. (2017) verify that interpersonal strain at work causes turnover intention. Most importantly, Syed and others (2021) who surveyed 281 employees working in the service sector reported that knowledge hiding, which is a form of counterproductive knowledge behavior, leads to turnover intention because knowledge hiders become unable to properly perform their job-related tasks. Thus, it is hypothesized:

H7. Individual knowledge sabotage has a positive direct effect on turnover intention.

4. Methods

4.1 Measures

This study was conducted in Turkey. All constructs were operationalized by relying on the previously established and validated scales that were originally published in English. Using the back-translation technique, the measures were translated into the Turkish language with cultural considerations. Demographic data included gender, age, education level, years of work experience and number of employees in the workplace. All constructs were operationalized by relying on the following well-established, pre-validated instruments: interactional justice - Niehoff and Moorman (1993), which was validated in the Turkish context by Gürbüz and Mert (2009); supervisor incivility and co-worker incivility – Sliter et al. (2012), which was validated in the Turkish context by Arasli et al. (2018); individual and coworker knowledge sabotage - Serenko and Choo (2020); job satisfaction - Judge et al. (1994); and turnover intention – O'Driscoll and Beehr (1994). These items were measured on the seven- and five-point Likert-type scales. The questionnaire was administered in the Turkish language. The instrument (in Turkish) is available from the corresponding author upon request.

4.2 Participants and study design

Participants were recruited from the Turkish telecommunication and retailing sectors. A constantly growing demand for knowledge-intensive service innovations and creative solutions through knowledge sharing in the telecommunication and retail sectors makes them very suitable for this study. The selected firms are characterized as highly competitive and knowledge intensive, and they hold several national awards. Data were collected by one of the authors of this paper, and all ethical issues were considered during data collection. Participation was voluntary. Participants were asked to answer as honestly as possible; they were told that there were no right or wrong answers, and their identity was not recorded. They were also assured that their individual responses would be used only for research purposes and would not be shared with their organization or third parties. This procedure has been shown to reduce the potential threat of common method variance and social desirability bias (CM&SDB) (Podsakoff et al., 2003). Due to Covid-19 restrictions, data were collected both online and by using a paper-based questionnaire. Human resources offices in the two firms emailed the survey link to all employees in various branches. For the online survey, 142 and 140 responses from telecommunication and retail firms were received, respectively. In addition, 48 responses were obtained using a penciland-paper approach from the retail firm.

5. Data analysis and results

5.1 Overview

A total sample of 330 responses was obtained, in which 53% of the participants were women. The participants' average age was 32 years old (standard deviation = 8.5), ranging from 18 to 59 years old. The participants were highly educated: 40.3% had a bachelor's degree; 29.7%, an associate degree/college diploma; 25.2%, a high school certificate; and 4.8% had a postgraduate degree. On average, they had seven years of work experience, and their firm/branch had 718 full-time equivalent employees.

5.2 The measurement model

This study deployed Partial Least Squares Structural Equation Modeling (PLS-SEM) to test and examine the measurement and structural models. PLS-SEM was chosen primarily because of its algorithmic capacity in handling complex models, factor determinacy and the ability to establish predictive validity as opposed to covariance-based Structural Equation Modeling (CB-SEM) that emphasizes model fit indices and is devised to test, confirm and/or disconfirm theories (Sarstedt et al., 2016; Hair et al., 2020). PLS-SEM is a frequently applied second-generation statistical modeling technique in knowledge management research to explore associations and explain the variance in the outcome variables (Sarstedt et al., 2016; Cepeda-Carrion et al., 2018). As most knowledge management constructs (e.g. knowledge sabotage) are best modeled as composites representing latent variables (Cepeda-Carrion et al., 2018), PLS-SEM analytical choice appears to be suitable for this study. Thus, the measurement and structural models were analyzed by using SmartPLS version 3 software package (Ringle et al., 2015). Confirmatory composite analysis (CCA) in PLS-SEM shares the objectives of confirmatory factor analysis (CFA) in CB-SEM. CCA is a diagnostic assessment of the measurement model (Schuberth et al., 2018).

All factor loadings and their significance levels were within the acceptable thresholds (0.70 and higher, significant at p < 0.01). In Table 1, construct reliability was assessed using Cronbach's α and composite reliability, which were equal to and above the 0.70 threshold. All corrected item-to-total correlations exceeded 0.50, and all average variance extracted (AVE) values were above the 0.50 threshold. This establishes internal consistency, reliability and convergent validity.

The square root of each construct's AVE was less than the inter-construct correlation coefficients (Table 1), which satisfies the Fornell-Larcker's discriminant validity criterion (Fornell and Larcker, 1981). Analysis of the heterotrait-monotrait (HTMT) ratio of correlations showed that all the ratios were below the 0.85 thresholds (Henseler et al., 2015), which further confirms constructs' discriminant validity (Table 2).

Because a nine-point (and above) Likert-type scale is long, complex, causes confusion and imposes a high cognitive load on survey participants, a combination of five- and

Measures	$C\alpha$	CR	AVE	1	2	3	4	5	6	7
Interactional justice	0.938	0.948	0.696	0.835						
2. Supervisor incivility	0.893	0.925	0.755	-0.249	0.869					
3. Co-worker incivility	0.893	0.926	0.757	-0.332	0.702	0.870				
4. Co-worker knowledge sabotage	0.956	0.968	0.884	-0.252	0.363	0.450	0.940			
5. Individual knowledge sabotage	0.945	0.960	0.858	-0.383	0.371	0.474	0.551	0.926		
6. Job satisfaction	0.947	0.966	0.903	0.216	-0.505	-0.528	-0.226	-0.240	0.950	
7. Turnover intention	0.935	0.958	0.885	-0.307	0.528	0.467	0.362	0.311	-0.639	0.941

Notes: $C\alpha$ – Cronbach's α ; CR – Composite reliability; AVE – Average variance extracted. Values along the diagonal are the square root of AVE; values below the diagonal are inter-construct correlations

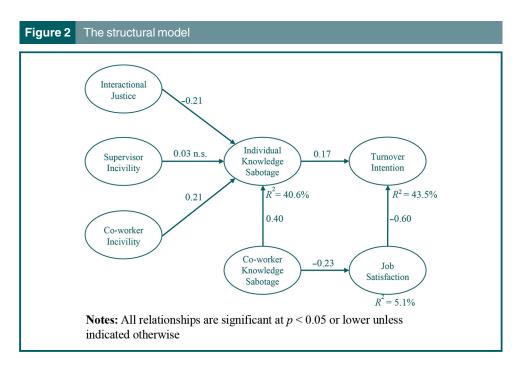
Table 2 Discriminant validity – HTMT ratios										
Measures	VIF	1	2	3	4	5	6	7		
Interactional justice	1.141	_								
2. Supervisor incivility	1.985	0.259	-							
3. Co-worker incivility	2.240	0.353	0.781	-						
4. Co-worker knowledge sabotage	1.280	0.261	0.386	0.484	_					
5. Individual knowledge sabotage	1.061	0.398	0.388	0.510	0.578	-				
6. Job satisfaction	1.061	0.225	0.549	0.572	0.237	0.253	-			
7. Turnover intention	N/A	0.323	0.575	0.510	0.382	0.330	0.678	_		
Note: VIF – Variance inflation factor										

seven-point Likert-type scales was chosen to reduce participants' frustration level, increase response rate and improve accuracy. Furthermore, in survey studies, a mixture of different Likert-type scales has been shown to reduce the potential threats of CM&SDB (Podsakoff et al., 2003). The fundamental assumption of Harman single-factor test in detecting CM&SDB is when a general factor explains large amount of covariance among the measures (> 50%) or a single factor emerges from the factor analysis. The results revealed that a general single factor accounts for only 37.9% of the variance, suggesting that CM&SDB is not a major threat (Podsakoff et al., 2003). Finally, in Table 2, the variance inflation factors (VIFs) exhibited by each construct were below the 3.0 threshold, suggesting the absence of the collinearity problem due to CM&SDB (Sarstedt et al., 2016; Hair et al., 2020).

5.3 The structural model

The structural model and hypotheses were tested using a bias-corrected bootstrapping technique with a resample of (n = 5,000) at the 95% confidence interval. Figure 2 presents the model. Out of seven hypotheses, six were supported, and one (H2) was rejected.

Overall, the model has a good predictive power: antecedent constructs explain 40.6 and 43.5% of variance in the individual knowledge sabotage and turnover intention constructs, respectively. According to Cohen (1977), f values of (> 0.020), (> 0.150) and (> 0.350)



represent small, medium and large effect sizes, respectively. Of all individual knowledge sabotage antecedents, co-worker knowledge sabotage plays the most important role, with a medium-large effect size ($f^2 = 0.205$). Interactional justice and co-worker incivility have a small effect size of ($\ell^2 = 0.064$) and ($\ell^2 = 0.032$) respectively, but interactional justice is more influential. Of two predictors of turnover intention, job satisfaction has a large effect size $(\ell = 0.598)$, while the effect size of individual knowledge sabotage is small $(\ell = 0.047)$ yet statistically significant ($\beta = 0.17$, p < 0.001).

Results of a t-test also indicate that employees rate the degree of knowledge sabotage exhibited by their co-workers higher than their own engagement in knowledge sabotage (p < 0.05).

6. Discussion

The present study examines the antecedents and consequences of individual knowledge sabotage behavior. To conceptualize this phenomenon, it applies the social exchange theory, affective events theory, frustration-aggression-displacement theory, the heuristic model of employee turnover and the memetic stance as lenses of analysis. The findings produced several important theoretical and practical implications as discussed below.

6.1 Implications for theory

First, this study highlights the efficacy and applicability of the social exchange theory (Homans, 1958; Molm, 2006; Molm et al., 2007; Molm, 2010) and the frustration-aggression-displacement theory (Dollard et al., 1939; Berkowitz, 1989; Breuer and Elson, 2017) in the context of counterproductive knowledge behavior. The social exchange theory states that individual employees reciprocate positive actions of organizational decision-makers by suppressing their pernicious behaviors, including knowledge sabotage, and the frustration-aggression-displacement theory shows that the victims of interactional injustice may vent their anger toward other individual employees because acting against powerful decision-makers may be too risky. While the former theory has received much attention in the knowledge management literature (Liu et al., 2012; Serenko and Bontis, 2016), the latter has been used to a lesser extent. As this study showed, the frustration-aggression-displacement theory offers a useful lens of analysis to explore the impact of interactional justice on counterproductive knowledge behavior. In a similar vein, Feng et al. (2022) and Pradhan et al. (2020) confirm that exploitative and abusive leaders make individual employees displace their aggression onto neutral targets (i.e. their co-workers) and hide knowledge from them. Thus, future researchers are recommended to apply the frustration-aggression-displacement theory in the context of counterproductive knowledge behavior.

Second, the findings highlight the importance of interactional justice in the context of knowledge management. Unfortunately, this construct has been underutilized in the knowledge management literature. For instance, the Journal of Knowledge Management, the leading discipline's journal (Serenko and Bontis, 2022), has published only a single empirical work that included this construct (Huo et al., 2016). This study showed that interactional justice suppresses workers' engagement in knowledge sabotage, and it is possible that it may also minimize or eliminate other types of counterproductive knowledge behavior. In fact, this proposition is in line with prior research that identified the effects of interactional justice on knowledge hiding (Abubakar et al., 2019) and hoarding (Aljawarneh et al., 2022). In addition, increasing interactional justice may facilitate productive knowledge behavior such as knowledge sharing.

Third, experiencing problems with a superior cannot always predict workers' engagement in knowledge sabotage. In contrast to the line of reasoning employed to support H2, it was found that supervisor incivility does not exert a positive impact on individual knowledge

sabotage, which contradicts the social exchange theory principles and past assertions (Wang et al., 2021). Three explanations for this unexpected finding are offered. One, victims of supervisor incivility may believe that they already have a bad relationship with their supervisor and that their organizational tenure is in danger. As a result, a possible negative reciprocation or escalation by means of knowledge sabotage can further threaten or jeopardize their positions in the organization, and so they retreat from the situation to protect themselves against further damage (Abubakar, 2018). Two, in some situations, victims of supervisor incivility may exhibit a higher moral superiority than their supervisor. Despite experiencing bad supervisor treatment and its consequences firsthand, they refrain from engaging in further wrongdoing against any parties. Three, some employees may take the uncivil actions of their supervisors for granted. In particular, Turkish society (i.e. where the data were collected) is characterized by having high-power distance, and victims of supervisor incivility may simply overlook such uncivil acts and even see them as normal. Similar insignificant findings were echoed in a study conducted in Singapore (Lim and Lee, 2011) and globally (Hofstede, 2011). At the same time, the above-mentioned propositions are speculative, and more empirical research is needed to ascertain the validity of these ideas.

Fourth, employees tend to respond to distressing and provocative acts negatively, and this study showed that they may do so by means of knowledge sabotage. As predicted, coworker incivility exerts a positive direct impact on individual knowledge sabotage. This shows that, when employees experience the incivility of their fellow co-workers, they try to redress the unfairness through knowledge sabotage. This finding is aligned with the social exchange theory principles and past studies that found incivility to predict unwanted work outcomes (Reio, 2011; Arshad and Ismail, 2018; Irum et al., 2020). In most organizations, co-workers typically outnumber supervisors; thus, the propensity and frequency of coworkers' uncivil acts may surpass those of supervisors.

Fifth, the memetic and behavioral social contagion perspective may potentially explicate the reasons why employees engage in counterproductive knowledge behavior. It posits that people have a tendency to mimic the behaviors of their counterparts in events that trigger painful and negative emotions (Wheeler, 1966). As hypothesized, this study concluded that co-worker knowledge sabotage exerts a positive direct effect on individual knowledge sabotage, which extends and validates past work by Serenko and Choo (2020) and confirms that victims and observers mimic their co-workers by exhibiting knowledge sabotage behavior toward perpetrators or other targets. It shows that knowledge sabotage behavior is not solely an individual issue, but rather has a domino effect within the organization and is a contagious behavior. This means that victims of knowledge sabotage (accidental or intentional) are likely to exhibit the same behavior later.

Sixth, in line with past research that postulates work events as important antecedents of job satisfaction (Cortese et al., 2010), the present study advances our knowledge by unpacking the association between co-worker knowledge sabotage and job satisfaction: as theoretically expected, it is concluded that co-worker knowledge sabotage has a negative direct impact on job satisfaction. Consistent with the affective events theory, the occurrence of affective workplace events such as co-worker knowledge sabotage influences individual dispositions. As a result, employees may experience frustration, express negative emotions and develop a feeling of alienation toward the entire organization (affective state), which in turn diminishes their job satisfaction (attitude).

Seventh, this study confirms the robustness and predictive power of the heuristic model of employee turnover (Mobley, 1977; Mobley et al., 1978; Hom et al., 1992) in the context of counterproductive knowledge behavior: job satisfaction exerts a negative direct effect on turnover intention. This is in line with the wider literature on this topic (Judge, 1993; Tett and Meyer, 1993): employees develop turnover intention when the level of job satisfaction is low and vice versa. While the relationships proposed in the other hypotheses (i.e. H1-H5 and H7) have not been tested in prior research, strong empirical support found for the job satisfaction → turnover intention link confirms the validity of this study's findings. This investigation contributes to the literature by modeling job satisfaction as a predictor of turnover intention in the presence of counterproductive knowledge behavior.

Eighth, engaging in knowledge sabotage is a double-edged sword. On the one hand, perpetrators may gain tangible rewards or psychological satisfaction from their misdeeds; on the other hand, they may also carry the cost of their action because individual knowledge sabotage has a positive direct effect on turnover intention. This finding has critical implications for the knowledge management literature because, except for a few notable attempts (Syed et al., 2021), prior studies assumed that workers engaging in counterproductive knowledge behavior always benefit from their action. By contrast, this study argues that knowledge saboteurs may feel isolated, mentally exhausted, shunned and undeserving of their organizational tenure and, as a result, are likely to voluntarily terminate their employment. Recently, Zhang and Min (2022) demonstrated that managers' counterproductive knowledge behavior makes their subordinates develop turnover intention, and the present study extends this line of work by showing that counterproductive knowledge behavior may have a similar negative impact on the perpetrators themselves.

In addition, this study advances our understanding of knowledge saboteurs' patterns of remorse. According to Weisman (2014), remorse has three essential qualities: an acknowledgement of immoral behaviors and inflicted harm, evidence of apparent pain for one's misdeeds and the willingness to make changes so that the offence will not recur. The current study demonstrates that knowledge saboteurs end up paying the price through voluntary turnover because some of the perpetrators realized their wrongdoing after observing their victims' plight and possibly decided to refrain from this misbehavior in the future. However, despite their regret, their organizational tenure had already been jeopardized.

Finally, employees understate their own knowledge sabotage engagement and/or overstate that of others. Recall that respondents rated their own degree of knowledge sabotage lower than that exhibited by their fellow co-workers. This finding may be explicated from the perspective of the social comparison theory (Festinger, 1954), which emphasizes the "better-than-average" effect (Alicke et al., 1995), according to which most people rate their positive and negative behaviors as above and below the average, respectively. They engage in such self-enhancement to increase their self-perception and feel good about themselves (Hoorens, 1993). This study confirms the presence of social comparison and self-enhancement in the context of knowledge behavior.

6.2 Implications for practice

This study not only extends the body of knowledge pertaining to inter-employee and supervisor-subordinate conflict management but also enriches interpersonal and knowledge management practices in several ways. First, the take-home lesson for practitioners is that interactional justice is an important mechanism that can thwart knowledge sabotage behavior. Managers generally consider knowledge sabotage behavior as actions exhibited by troublesome or immoral employees, but this notion may not apply to all knowledge saboteurs because they may act in response to perceived interactional injustice. Thus, interactional justice can reduce employees' inclination to engage in knowledge sabotage. Contrariwise, in the absence of institutionalized check mechanisms that ensure interactional justice in organizations, employees tend to negatively reciprocate by harming organizational entities, work processes and outputs by using knowledge sabotage as a medium. Managers in contemporary organizations aspiring to exploit the benefit of and to promote productive knowledge flows must ensure that interactional justice thrives in their workplace.

Second, practitioners should recognize the hidden costs of workplace incivility and develop proactive approaches to reduce it. Managers often pay little attention to incivility due to its low intensity and ambiguous nature. However, victims of incivility may be motivated to restore justice through myriad means, including knowledge sabotage. To reduce co-worker incivility, managers must initiate a civil organizational culture, including a zero-tolerance policy. In addition, they may offer positive psychology programs, special humorous lectures, open policy communication, teambuilding exercises and counseling sessions that focus on well-being, flourishing, spirituality and harmony. Moreover, such initiatives open doors through which victims can reconcile with and forgive their perpetrators and might inspire potential saboteurs to take other paths to solve work-related conflicts. Training sessions and awareness campaigns about the costs of workplace incivility can help workers grasp the danger of this negative behavior.

Third, managers should strive toward a zero rate of knowledge sabotage incidents in their organizations. Because employees tend to mimic the knowledge sabotage behavior of their fellow co-workers, even a single episode of knowledge sabotage may "inspire" others and trigger a chain reaction of similar pernicious events. Thus, managers should pay close attention to knowledge sabotage. Each knowledge sabotage incident should be properly investigated, and the perpetrators should suffer the consequences of their wrongdoing. Fourth, managers should realize that an organizational environment rife with counterproductive work behavior may lead to a high rate of voluntary turnover. The cost of replacing a knowledge worker generally ranges from US\$5,000 to US\$17,000 (Blatter et al., 2012), in addition to the loss of tacit knowledge which resides with an individual rather than with an organization, which may serve as a justification for the allocation of resources to address this problem.

Overall, the findings inform practitioners that organizational injustice and incivility may result in a wave of retaliatory incidents (i.e. knowledge sabotage), costing the business benevolence (i.e. tit-for-tat knowledge sabotage and lower job satisfaction), as well as the loss of skilled and productive workforce. When left unchecked, these phenomena not only breed contempt and diminish legitimate authority but also disrupt intra-organizational relationships and create a subversive work environment. In traditional work settings, most managers are unprepared to respond to signals of injustice and incivility or are reluctant to manage unpleasant interactional events primarily due to a lack of awareness of the cost of these pernicious actions. Therefore, organizations should educate their managers about the hidden cost of organizational injustice, incivility and knowledge sabotage and proactively develop corresponding policies and procedures. In addition, in line with Kroning's (2019) remedy for workplace incivility, organizations can use the "JOLI" mnemonic to promote just and civil environments: (J) denotes justice climate – equality among all ranks of employees; (O) corresponds to organizational zero-tolerance policies where perpetrators are punished and held accountable for their actions; (L) means leadership to foster a civil and justiceoriented organizational climate; and (I) denotes intervention wherein uncivil incidents are reported, consistent intolerance to uncivil behavior is displayed and resources are made available to educate workers.

6.3 Limitations and future research directions

Despite its valuable theoretical insights and practical recommendations, this study has several limitations that are worth acknowledging. First, although efforts were made to minimize the common method bias, the findings are based on cross-sectional designs and that rely on self-reported measures always require further validation. Future scholars are, therefore, encouraged to use multi-source data, secondary data and/or longitudinal designs (Podsakoff et al., 2003). Second, the findings cannot be fully generalized to other contexts because the data were drawn from a single country. For instance, it is possible that knowledge workers' perceptions of constructs used in this study depend on their country's national culture (Hofstede, 1980). Moreover, the Great Resignation trend has recently affected the functioning of North American and European knowledge-intensive organizations (Serenko, 2022). Thus, a fruitful future research avenue could be a replication of this study in other countries and world regions. Third, PLS-SEM techniques used in this study operate under linearity and net effects assumptions, which limit researchers' ability to quantify for configural combinations and equifinal and asymmetric effects. Thus, future research can benefit from the use of other methods such as fuzzy sets (Kaya et al., 2020), decision trees (Yeo et al., 2021) and neural networks (Abubakar, 2018) techniques. Fourth, knowledge sabotage is a relatively new concept in knowledge management research, and it should be further explored within lager nomological networks, which include other wellestablished constructs such as knowledge hiding and knowledge hoarding. Finally, while the proposed model explicated the phenomenon of interest relatively well, it is not comprehensive and may be further extended by including other variables. For example, recent research has emphasized the importance of personal power (Issac et al., 2022), adverse personality traits (Kmieciak, 2022) and mental conditions (Issac et al., 2021) in the context of counterproductive knowledge behavior, which may become interesting additions to the future models.

7. Conclusion

In the early days of knowledge management research, scholars and industry leaders focused on productive knowledge behaviors, namely, knowledge sharing and transfer. Gradually, they realized the importance of counterproductive knowledge behavior and started focusing on knowledge sharing ignorance (Israilidis et al., 2015), disengagement from knowledge sharing (Ford et al., 2015), partial knowledge sharing (Ford and Staples, 2008), bad counterknowledge sharing (Bolisani and Cegarra-Navarro, 2021), knowledge hoarding (Evans et al., 2015; Oliveira et al., 2021), knowledge hiding (Hernaus et al., 2019) and knowledge sabotage (Serenko, 2019). Of these, knowledge sabotage represents the most extreme form of counterproductive knowledge behavior due to its deleterious consequences for all parties involved. This study contributes to the body of knowledge by unearthing the antecedents and consequences of this pernicious organizational misbehavior. By drawing on several theories, this study developed and tested a model explicating this phenomenon by relying on a data set obtained from individuals employed in two Turkish knowledge-intensive industries.

Knowledge management is an interdisciplinary field that has progressed well toward academic maturity and recognition (Serenko, 2021; Kör et al., 2022). Interdisciplinary research integrates theoretical frameworks, perspectives and ideas from multiple disciplines, which fosters researchers' creativity and increases the scientific and practical value of their publications (Aboelela et al., 2007; Wannenmacher, 2020). This study followed the interdisciplinary research tradition and showed the fruitfulness of applying several theories that were invented in the organizational behavior and sociology domains (i.e. social exchange theory, the frustration-aggression-displacement theory, the memetic and behavioral social contagion perspective and affective events theory) to better understand knowledge management-related phenomena. We recommend that future researchers continue relying on the interdisciplinary perspectives to ensure a sustained success of our burgeoning field.

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About the authors

Dr Alexander Serenko is a Professor of Management Information Systems in the Faculty of Business and IT, University of Ontario Institute of Technology, and a Lecturer in the Faculty of Information, University of Toronto. Alexander holds a PhD in Management Information Systems from McMaster University. His research interests pertain to scientometrics, knowledge management, technology addiction and implicit cognitive processes. Alexander has published more than 110 articles in refereed journals, including MIS Quarterly, Journal of the Association for Information Systems, European Journal of Information Systems, Information and Management, Communications of the ACM and Journal of Knowledge Management, and his works have received more than 11,000 citations. Alexander has also won six best paper awards at Canadian and international conferences. In 2018, he was ranked one of the most productive and influential academics in the knowledge management discipline. Alexander is also included in the list of top 2% of the world's scientists. Alexander Serenko is the corresponding author and can be contacted at: a.serenko@utoronto.ca

A. Mohammed Abubakar serves as an Associate Professor of Management Information Systems at the College of Business and Social Sciences, Antalya Bilim University, Turkey. His research spans into information systems, business analytics, big data, knowledge management, digital labor and market platforms, workplace and employee relations domain. His work has appeared in top-tier journals, including International Journal of Information Management, Journal of Business Research, Journal of Innovation and Knowledge, Online Information Review, Journal of Destination Marketing and Management, International Journal of Contemporary Hospitality Management, Service Industries Journal and Employee Relations. He has been included in the list of top 2% of the world's scientists compiled by Stanford University and Elsevier BV.

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