

# Linking Tolerance to Workplace Incivility, Service Innovative, Knowledge Hiding, and Job Search Behavior: The Mediating Role of Employee Cynicism

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## Keywords

tolerance to workplace incivility, employee cynicism, service innovative behavior, knowledge hiding behavior, job search behavior.

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## Abstract

Although incivility has been identified as an important issue in workplaces, little research has focused on tolerance to workplace incivility. Drawing on conservation of resources and psychological ownership theory, this article investigates the mediating role of employee cynicism on the relationship between tolerance to workplace incivility and outcome variables (i.e., service innovative behavior, knowledge hiding behavior, and job search behavior) in the hospitality industry. Structural equation modeling and artificial neural network were applied on survey data obtained from five-star hotels in Jordan. Building on the proposed theories, we show that employee cynicism mediates the link between tolerance to workplace incivility and knowledge hiding behavior, and job search behavior. Implications for theory and practice are discussed.

doi: 10.1111/hcmr.12136

## Introduction

Incivility is becoming pervasive in the workplace, and it is highly destructive for employers, employees, and organizations (Pearson & Porath, 2008). In the last two decades, incivility has received substantial research attention that identifies several antecedents and consequences (see Andersson & Pearson, 1999; Cortina, 2008; Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013; Cortina, Magley, Williams, & Langhout, 2001; Hershcovis, 2011; Hershcovis & Barling, 2010; Hershcovis & Reich, 2013; Hershcovis, Reich, Parker, & Bozeman, 2012). Recent research that conceptualizes and investigates uncivil workplace behaviors from the victim's perspective subsumes bullying (e.g., Rai & Agarwal, 2018; Sheehan, McCabe, & Garavan, 2018), workplace incivility (e.g., Andersson & Pearson, 1999; Arasli, Hejrati, & Abubakar, 2018), social undermining (e.g., Eissa, Wyland, & Gupta, 2018; Smith & Webster, 2017), mobbing (e.g., Glambek, Skogstad, & Einarsen, 2018; Karsavuran & Kaya, 2015), workplace victimization (e.g., Aquino & Thau, 2009; Zhang, 2017), workplace aggression (e.g., Geoffrion et al., 2017; Hassard, Teoh,

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The authors wish to thank the reviewers and the editor in chief for their constructive comments and feedback in the earlier draft of the manuscript. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Visockaite, Dewe, & Cox, 2018), workplace ostracism (e.g., Abubakar, Yazdian, & Behraves, 2018; Steinbauer, Renn, Chen, & Rhew, 2018), and abusive supervision (e.g., Lam, Walter, & Huang, 2017; Lee, Kim, & Yun, 2017).

Research that conceptualizes and investigates uncivil behaviors from the instigator's perspective includes, antisocial behavior (Robinson & O'Leary-Kelly, 1998), instigated workplace incivility (e.g., Cortina et al., 2013; Loh & Loi, 2018), interpersonal deviance (Bennett & Robinson, 2000; Glomb & Liao, 2003), retaliation (e.g., Skarlicki & Folger, 1997; Vodanovich & Piotrowski, 2014), revenge (e.g., Aquino, Bies, & Tripp, 2001; Raver, 2013), and instigated workplace aggression (e.g., Geck, Grimbos, Siu, Klassen, & Seto, 2017; Greenberg & Barling, 1999). Workplace incivility is defined "as low-intensity deviant workplace behavior with an ambiguous intent to harm" (Andersson & Pearson, 1999, p. 457), characterized by impolite, ill-bred, discourteous actions, and/or demeaning remarks. The demarcating line that differentiates workplace incivility from other variables is its low intensity (e.g., workplace aggression, workplace ostracism, and workplace bullying are more severe) and its ambiguous (rather than overt or clearly diagnosable) intent to harm (Schilpzand, De Pater, & Erez, 2016). The upshots of workplace incivility have drawn the attention of practitioners, as it was estimated to affect 98% of employees in the United States (Schilpzand, De Pater, & Erez, 2016).

Empirical evidence suggested that workplace incivility is an antecedent of several unwanted organizational outcomes (e.g., Arasli et al., 2018; Cortina et al., 2001, 2013). Recent scholars (e.g., Walsh & Magley, 2018) argued that civility interventions do not only create change but also prevents workplace incivility; thus, civility climate can be achieved by training and managerial interventions. On the other hand, to measure and to understand the effects of workplace incivility, scholars often ask employees to rate their exposure to incivility or engagement in uncivil behaviors. In doing so, workplace incivility and its consequences have been cast as between-person phenomena rather than workplace climate perspective. Considering these issues, we present a theoretical model that cast workplace incivility as an organizational climate, because incivility cases are rarely reported in organizations with strict rule of conducts and punitive measures (e.g., Cortina et al., 2013; Hershcovis et al., 2012). Logically, organizational climate can boost or diminish workplace incivility.

Tolerance to workplace incivility is an organizational climate that permits or tolerates uncivil behaviors, epitomized by the degree of managements' response to workplace incivility (Abubakar, Yazdian, et al., 2018). Managements' failure to protect employees from workplace incivility may develop overtime and creates a climate for or a climate that accommodates uncivil behaviors (Abubakar, Megeirhi, & Shneikat, 2018; Loi, Loh, & Hine, 2015). Tolerance to workplace incivility denotes how conflicts among organizational members are managed. In other words, tolerance to workplace incivility represents an organizational climate that permits or makes no attempt to resolve potential conflicts among its members; primarily because of leaders' inability to resolve conflicts (Megeirhi, Kilic, Avci, Afsar, & Abubakar, 2018). Existing research has shown that poorly managed workplace conflict affects the level and frequency of future conflict and has a negative effect on employee outcomes (Desivilya, Somech, & Lidgoster, 2010; Raver, 2013). Terminologies such as workplace incivility and interpersonal conflicts are long recognized as the key dimensions of organizational conflicts (Liu, Steve Chi, Friedman, & Tsai, 2009). Conflict researchers argued that unresolved conflicts among members of organization may lead to the development of personal agency and a rebalanced sense of power (Shallcross, Ramsay, & Barker, 2013), such as negative emotions and revenge intentions.

Conflict experience such as incivility alleviates the degree of negative emotions and diminishes in-role and extra-role performance (Rispen & Demerouti, 2016) and innovation (Desivilya et al., 2010). Job search activities may arise as a result of workplace conflict, in form of tolerance to workplace incivility through social exclusions. Individuals exposed to social exclusion reported intense psychological distress (Abubakar, 2018). These individuals may attempt to repair faulty relationships through resilience and forgiveness or develop new and more rewarding relationships, for example, by searching for new jobs. Knowledge ownership is contested in the organizational context and it offers a suitable platform for

potential conflicts between employees and organizations; these conflicts escalate with increased tolerance to workplace incivility. Thus, when top management fails to punish perpetrators of incivility, the victim may choose resilience and forgiveness path, or revenge in form of withdrawal and other counter-productive work behaviors (Raver, 2013), for example, knowledge hiding behaviors.

Workplace incivility has been associated with unwanted outcomes such as high burnout, emotional exhaustion, negativity, workplace withdrawal, and intention to sabotage (e.g., Abubakar, Yazdian, et al., 2018; Cortina et al., 2001; Hur, Moon, & Jun, 2016); reduced performance and creativity (Arasli et al., 2018; Rahim & Cosby, 2016). The above said outcomes are distinct variables but shares several similarities with variables like employee cynicism, knowledge hiding behavior, job search behavior, and service innovative behavior. Thus, it is possible that tolerance to workplace incivility can be an antecedent of such outcomes. Tolerance to and incivility-related incidence can create unsupportive work atmosphere, deteriorated work relationships, and also result in loss of respect, dignity, and lack of trust and alienation toward employing organization (e.g., cynicism). Employees who are cynic may decline to use their expertise (e.g., hide knowledge), share experience (e.g., innovative actions), and at the same time strive to escape the ordeal by (e.g., job search). Building on this line of reasoning, this article examines the potential effect of tolerance to workplace incivility on employee cynicism, knowledge hiding behavior, job search behavior, and service innovative behavior. These outcomes are informed by conservation of resources (COR) and psychological ownership (PO) theories. According to COR theory, individuals becomes cynic when resources (e.g., social interruptions and colleagues support) are threatened or lost, employee cynicism is a defensive attitude aimed at the organization with a belief that management cannot be trusted (Abubakar & Arasli, 2016).

Cynicism has been a “centuries-old dilemma” (Lorinkova & Perry, 2017, p. 1632), it simply means that others are deficient in virtue and cannot be trusted. Cynical employees tend to be frustrated, disillusioned, distrust management, and often harbor feelings of inequality (Abraham, 2000). Besides, without counterbalancing resource replenishment or rebuilding trust, cynicism can further manifest unwanted behavioral outcomes (Chiaburu, Peng, Oh, Banks, & Lomeli, 2013). COR theory posits that individuals’ job performance and outcomes are affected by the availability of resources. Henceforth, employee cynicism may affect employee service innovative behavior and job search behavior. According to Barcet (2010), service innovation introduces something new into the way of life, organizing, timing, and placement of individual and organizational processes. However, job search behavior is a self-managed volitional and purposive course of actions that employees embark on with the aim of gaining reemployment (Caliendo, Cobb-Clark, & Uhlendorff, 2015), motivated by gravitation toward positive stimuli or deviating away from negative stimuli (Elliot, 2008).

It has been consistently shown that a sense of belonging and trust for organization can enhance commitment, knowledge sharing, and participative behaviors (Cox, Zagelmeyer & Marchington 2006; Han, Chiang, & Chang, 2010; Meyer and Allen 1997). Psychological ownership of knowledge (POK) is the “extent to which individuals believe on the possession and are responsible towards the knowledge they possess” (Pierce, Kostova, & Dirks, 2001). That is, POK explains the feeling of possession linking to knowledge in a psychological sense that makes individuals to regard intangible/tangible objectives as an addition of themselves (Han et al., 2010). Propagating the notion that tolerance to workplace incivility impairs social relationships, which may result in distrust for management in form cynicism, we theorize that employees may engage in knowledge hiding behaviors, due to the belief of knowledge ownership, lack of trust, and sense of belonging. Connelly, Zweig, Webster, and Trougakos (2012, p. 65) denote “withholding or concealing of relevant information or knowledge, ideas, and know-how requested by a co-worker at workplace”. This conception centers on the importance of knowledge, ideas, and know-how for the organizations; thus, knowledge hiding behavior is employee’s actions that impair organizational productivity. Employee activities aimed at disrupting organizational productivity are common behaviors among cynical employees, victims, and observers of workplace incivility (Chiaburu et al., 2013; Loi et al., 2015; Reich & Hershcovis, 2015).

Despite the proposal of a zero-tolerance policy to incivility by prior researchers (e.g., Cortina, Kabat-Farr, Magley, & Nelson, 2017; Hershcovis et al., 2017), only a handful of studies have investigated workplace incivility as an organizational climate (e.g., Abubakar, Yazdian, et al., 2018; Abubakar, Megeirhi, et al., 2018; Loi et al., 2015). This article responds to Schilpzand et al. (2016) research call, by revealing the mechanism through which tolerance to workplace incivility affects organizational outcomes. By blending COR and POK theories, this article extends the consequences beyond direct attitudinal outcomes (e.g., employee cynicism) resulting from tolerance to uncivil behaviors to behavioral domains (e.g., service innovative behavior, job search behavior, and knowledge hiding behavior). On this premise, this study draws on these theories to understand the proposed relationships (a) in the hospitality industry given its aggressive climate and (b) to interrogate the applicability of theories developed and tested in Western World in an Arabian setting. More specifically, we anticipate a dynamic-mediated relationship that explains how tolerance to workplace incivility relates to employee cynicism, which in turn affects work outcomes. That is, this study attempts to answer the question: Does employee cynicism mediate the link between tolerance to workplace incivility and the outcome variables? See Figure 1.

### Theory and Hypotheses

#### Tolerance to Workplace Incivility, Cynicism, and Service Innovative Behavior

Conservation of resources theory posits that individuals strive to acquire and preserve the resources they value (Hobfoll, 1989). Thus, when individuals are faced with a stressful situation, they tend to dispel their resources to cope. Incivility may not be aggressive in nature; its subtlety and ambiguity of intention make its effect more detrimental and costly (Hershcovis et al., 2017). While incivility in the workplace cannot be eradicated completely, employees expect their organizations to be on spot in dealing with it. The degree to which management of organizations permits uncivil behavior within their establishments delineates tolerance to workplace incivility (Loi et al., 2015). Based on the extant literature, tolerance to workplace incivility can be perceived as a social stressor (i.e., belongingness, social support, and emotional strength, etc.). Employee cynicism is “an evaluative judgment that stems from an individual’s employment experiences” (Cole, Bruch, & Vogel, 2006, p. 463). According to Reichers, Wanous, and

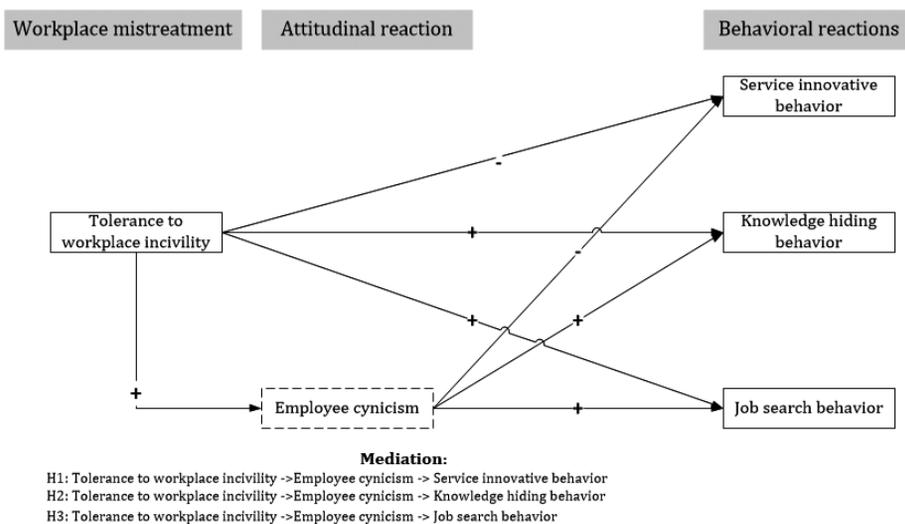


Figure 1. Conceptual model.

Austin (1997), cynicism is tripartite (a) a negative affect toward the organization, (b) belief that the organization lacks integrity, and (c) behavior—a tendency to disparage and criticize the organization. From COR theory lens, negative affect increases through further resource loss, as such victims or observers may become cynical if the management tolerates uncivil behaviors.

Also, as Abraham (2000) inferred, cynicism is an outright distrust in top management decisions and actions, it is expected that failure to quench the evasive influence of workplace incivility can be associated with management inability to handle incivility or keep promises, thus providing a basis for negative affect and distrust (Abubakar, Megeirhi, et al., 2018). Cynicism is characterized by negative affect and distrust; thus, cynics can display negative behavior, for example, reduced performance (Neves, 2012), badmouthing (Wilkerson, Evans, & Davis, 2008), and decrease exhibition of innovative behavior. Service innovative behavior is particularly concerned with employee contribution in implementing novel ideas, essentially designed to improve work and service outcomes (Ma Prieto & Pilar Perez-Santana, 2014). With the current competition in service industry, it has become paramount for hospitality managers to elucidate creative behaviors and that's why they are responsible for the provision of innovative climate (Ragab & Arisha, 2013). Favorable innovative climate is not enough, as innovative behaviors can only materialize with social support (Mainemelis, Kark, & Epitropaki, 2015), as healthy relationships at work precede innovative behavior (Dinh et al., 2014; Hammond, Neff, Farr, Schwall, & Zhao, 2011).

Service innovative behavior contributes novel ideas to create competitive advantage for an organization (Ma Prieto & Pilar Perez-Santana, 2014). It is a positive attitude motivated by positive service climate, and promoting a specific self-interest at the expense of others may affect innovative behavior negatively (Mintzberg, 1985). Ferris, Perrewé, Daniels, Lawong, and Holmes (2017) revealed that employees become skeptical, distant, and distrustful when their workplace is not serving the overall good of all, but few individuals. Moreover, passive leadership has been associated with workplace incivility (Harold & Holtz, 2015). For instance, cynics are known to hold negative feelings and intentions toward their organizations (Chiaburu et al., 2013), as cynicism increases workplace withdrawal increases (Abubakar, Namin, Harazneh, Arasli, & Tunç, 2017). When organizations tolerate workplace incivility, the chain of work relationships gets strained. In particular, each incivility-related occurrence is likely to result in losses to dignity, respect, and relationship quality and thereby likely to contribute to upward changes in employee cynicism, in such scenario employees may decline to use their personal resources (i.e., creative and innovative behaviors) for the organization. Thus, the following hypothesis was proposed:

**Hypothesis 1:** Employee cynicism mediates the relationship between tolerance to workplace incivility and service innovative behavior (see Figure 1).

## Tolerance to Workplace Incivility, Cynicism, and Knowledge Hiding Behavior

The Globe Mail carried out a survey in 2006 of almost 1,700 readers, and their findings reveal that about 76% of employees engage in knowledge hiding behavior. Knowledge hiding behavior is a negative organizational behavior which involves intentionally withholding valuable information (Connelly et al., 2012); knowledge hiding is not simply the absence of knowledge sharing. The two variables are distinct conceptual constructs and not mere opposite of each other. Toma, Jiang, and Hancock (2016) asserted that individuals engage in knowledge hiding behavior for the purpose of protection or confidentiality of other parties' interest. Abe et al. (2014) support this notion, arguing that such behavior is not consistently negative. On exceptional cases, knowledge hiding behavior can have positive objectives (Vardi & Weitz, 2016). Knowledge hiding behavior is tripartite: (a) rationalized hiding, individuals hide and do not give out the requested information (knowledge) without any explanations why s/he is unable to give the information; (b) evasive hiding, individual falsely assures the inquirer that the information requested will be given later; and (c) an individual who does both share even a fragment of the information

requested or denies having the requested information is said to be using the “playing dumb” strategy” (Connelly, Certo, Ireland, & Reutzel, 2011; Webster et al., 2008).

Tolerance to workplace incivility delineates the perception of organizational unresponsiveness in addressing uncivil behaviors (Loi et al., 2015). From COR theory perspective, hiring organization implicitly promises social support for employees, so when superiors do nothing to disparaging tones, hostile stares, demeaning comments, and other form of incivility acts. Over time, this creates a climate for uncivil behaviors, which is a form resources loss; contract violation has been shown to increase cynicism (Andersson, 1996). Organizational practices such as discourteous interpersonal treatment, perceived organizational support, organizational justice, organizational politics, psychological contract violation, and managerial incompetence have been proven to hold certain degree of influence over cynicism (Alcover, Rico, Turnley, & Bolino, 2017). Rapport (2014) stresses the effect of reciprocity in work relationships; that is, a positive action will provoke unsolicited positive reactions and vice versa.

Knowledge ownership is contested in the organizational context, and it offers a suitable platform for potential conflict between employees and organizations. Researchers (e.g., Brown, Lawrence, & Robinson, 2005; Dulipovici & Baskerville, 2007) argued that the tendency of organizations to “own what you know, can raise such conflicts with and among their employees”. Psychology of ownership is the feeling of being psychologically tied to an object, in the context of this study knowledge. According to Pierce et al. (2001), PO is a state in which individuals feel as though the target of ownership or a piece of that target is theirs. POK delineates employees feeling of knowledge ownership and its possession (Han et al., 2010; Pierce, Jussila, & Li, 2017), which may result in knowledge sharing or hiding. Ownership can be conceptualized as both an objective and a psychological state (Pierce & Jussila, 2011). Ownership-driven knowledge hiding occurs either through (a) overvaluing of knowledge or (b) anticipated loss of control (von der Trenck, 2015). Theorizing on COR, we argue that tolerance to workplace incivility would lead to employee cynicism, and drawing on POK, we theorize that cynics are likely to engage knowledge hiding behavior. More specifically, cynical attitudes because of tolerance to workplace incivility makes employee feel that they matter less in the organization and that if they share their knowledge, others or the organization could develop, use, and even benefit from it. Therefore, cynics, victims, and observers of uncivil behaviors may claim knowledge proprietorship and subsequently decline to share their intellectual knowledge for organizational use. Thus, the following hypothesis was proposed:

**Hypothesis 2:** Employee cynicism mediates the relationship between tolerance to workplace incivility and knowledge hiding behavior (see Figure 1).

## Tolerance to Workplace Incivility, Cynicism, and Job Search Behavior

Tolerance to workplace incivility may exert pressure on employees valued resources, such employees must find a coping mechanism to acquire, preserve, and protect these resources. According to COR theory, employees work best under conditions that sort to replenish and protect their personal resources (Hobfoll, 1989). In support of this argument, Kaya, Ergün, and Kesen (2014) illustrated that poor organizational practice is one of the roots of widespread cynicism in organizations. Employee cynicism is characterized by disillusion, frustration, and demotivation, and scholars agreed that losing employees’ comfort zone in the organization is a major antecedent of employee cynicism (Chiaburu et al., 2013; Neves, 2012). This demotivates employees leading to underperformance (Wang, Demerouti, & Le Blanc, 2017), turnover intention, lower organizational commitment, and work deviant behavior (Barton & Ambrosini, 2013; Neves, 2012). While turnover is the end product of turn over intention, it often starts with job search behavior.

According to Kanfer and Chen (2016), job search is autonomous, ambiguous, and unstructured self-regulated process that leads to employment offer; it requires commitment and effort from the job seeker due to the arduous and long processes involved in securing a job. Job search behavior requires drive and

motivation to stay on course with the intensity of search and effort to gain employment offers (Wanberg, 2012). COR theory shows that tolerance to workplace incivility represents a stressor that can deplete employee's resources. When this becomes a norm in an organization due to the complacent nature of top management and their inability to deal with uncivil behaviors, it is logical that victimized employees may engage in job search behavior with the hope of securing a better job and working environment. Similarly, COR theory posits that cynicism can increase the intention to quit and withdrawal (Chiaburu et al., 2013); thus, cynics are more likely to engage in job search behavior to change unfavorable job situation with a new job.

More importantly, the concept of "self" is at the core of both employee cynicism and job search behaviors are driven by the need to charter one's course in order to satisfy personal goals or agenda (Wanberg, 2012). Yamkovenko and Hatala (2014) suggested that job search behavior is not necessarily a means to get an alternative offer but also a means of coping with the situation at the current job. Therefore, individuals become cynical and respond with a negative attitude toward their organization in the absence of trust, for example, tolerance to workplace incivility. Individuals are not accustomed to job search, but often find themselves in the process either due to an abrupt organizational conflict (Van Hoye, Klehe, & Hoofst, 2013) and in a negative state that needs to come to an end (Saks, Zikic, & Koen, 2015). Therefore, tolerance to workplace incivility is characterized by increase cynicism, and such employees may choose to opt for another job that will provide the needed platform to self-fulfillment. Thus, the following hypothesis was proposed:

**Hypothesis 3:** Employee cynicism mediates the relationship between tolerance to workplace incivility and job search behavior (see Figure 1).

## Research Method

### Context and Procedure

As of 2010, the hospitality industry in Jordan accounts for 14% of the country's GDP, and in the following year, the country had about 6.8 million visitors and overnight guest in 2012 were 4.2 million people (Aaronallen, & Associates 2012). The big players in Jordan's hospitality industry include "Mövenpick, Four Seasons, Kempinski, and InterContinental, etc.". According to the information received from the Ministry of Tourism and Antiquities (2017), there are 15 five-star hotels operating across the country with a total of 9,657 employees in 2017. Moreover, five-star hotels are only not the most desired establishments, but also attract most of the tourists (Dinçer & Alrawadieh, 2017). Tourism and hospitality industry are characterized as an aggressive climate for employees (Abubakar, Megeirhi, et al., 2018) and the industry experiences frequent turnover (Back, Lee, & Abbott, 2011). This helps in explaining the rationale for selecting hotel employees. The contextual nature of the industry climate, Jordan's economy, and position as a developing country with high unemployment rate makes it suitable to study the nature and impacts of 'Tolerance to workplace incivility' which is a pressing issue even in developed nations.

The survey items were first developed in English and then back-translated to Arabic by two linguistic experts (Perrewe et al., 2002). A preliminary study was carried with 30 employees to ensure that the questions are not ambiguous and that participants are able to understand the questions, at the end, some changes and adjustment were made. Prior to data collection, the management of the surveyed establishments was contacted for permission. A brief information about the research intent was given, then anonymity and confidentiality of the participant were assured, they were told that there are no right answers or wrong answers, and that they should answer as honestly as possible. This strategy was utilized to reduce the threat of common method bias (Podsakoff et al., 2012). In phase one, 400 questionnaires were distributed to employees utilizing a systematic random sampling to capture tolerance to workplace incivility and cynicism, and 355 surveys were returned. After 4 weeks, the 355 employees were asked to

participate in the second phase of the study (to capture service innovative, knowledge hiding, and job search behavior), and at the end, only 329 valid responses were obtained due to missing data.

## Research Instruments

*Tolerance to workplace incivility* was measured with four items adopted from (Loi et al., 2015) uncivil workplace behavior study. Respondents were asked the following: “What would likely happen if you made a formal complaint against a co-worker who engaged in the following behavior? For example, repeatedly treated you in overtly hostile manner (e.g., spoke to you in aggressive tone of voice, made snide remarks to you, or rolled his or her eyes at you).” This measure was operationalized on a 7-point response scale, with values ranging from 1 (nothing) to 7 (there would be very serious consequences).

*Job search behavior* was measured via five items adopted from Blau (1964) study. Participants were asked to indicate how much time they had spent in the last 4 months on several preparatory and active job search activities. Sample item includes “made inquiries/read about getting a job”. This measure was operationalized on a 7-point response scale, with values ranging from 1 (never) to 7 (every time).

*Employee cynicism* was measured with 11 items adopted from Kim et al. (2009). *Service innovative behavior* was measured with six items adopted from prior studies (i.e., Hu, Horng, & Sun, 2009; Scott & Bruce, 1994). *Knowledge hiding behavior* is second-order construct with three dimensions namely *evasive hiding*, *rationalized hiding*, and *playing dumb*, each of these dimensions was measured with four items each adopted from (Connelly et al., 2012) work. The measures were operationalized on a 7-point response scale, with values ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

## Data Analysis and Results

### Demographic Breakdown

About 64.1% were males and the rest were female employees. Second, 48.9% of the examinees aged between 21 and 30, 38.3% of them aged between 31 and 40, 7.6% of them aged between 41 and 50, and the rest are below 20 years old. The age distribution in the sample provides support to Jackson’s (2005) claim that most workers in the service sector are mostly young. Third, an overwhelming number of the examinees (69%) earn <1,000 Dinar, 26.4% earn between 1,000 and 1,499 Dinar, 2.7% earn between 1,500 and 1,999 Dinar, and the rest earn more than 2,000 Dinar per month.<sup>1</sup> Fourth, most of the employees (56.5%) who participated in the study had bachelor’s degrees, 23.1% have some college degrees, 14.3% have high school diplomas, and the rest have higher degrees. About 44.4% of the examinees have between 1- and 3-year organizational tenure, 28.6% have between 4 and 6 years, 21.6% have more than 6 years, and the rest have <1-year organizational tenure.

### Confirmatory Factor Analysis and Model Fit Indices

This study adopts structural equation modeling (SEM) to test the structural model. Using self-report data entails a potential problem of common method bias as such procedural and statistical remedies were employed. The anonymity of the respondents was assured and Harman single-factor test following (Podsakoff et al., 2012) technique was carried out. The change in chi-square shows that a five-factor measurement model has satisfactory model fit indices than the single-factor model. Five-factor model  $\chi^2 = 1777.739$ , and the one-factor model  $\chi^2 = 5460.913$ , and change in  $\chi^2 = 3683.174$ . Model fit indices thresholds are highly contested; some scholars believe that fitness fit indices should be above .90, while

<sup>1</sup> 1 USD = 1.41 Jordanian Dinar.

others believe that values closer to 1 are acceptable. For instance, several papers (e.g., Abubakar & Arasli, 2016; Cai & Chi, 2018) published in top-tier journals have fitness indices  $<.90$ . After series of modifications, the fitness indices of the proposed model were  $<.90$ , but are still closer to  $.90$  and/or  $1.00$ . Relative chi-square was less than the cutoff point of  $5.00$ , and root-mean-square error of approximation (RMSEA) was also  $<.080$ . See Table 1. Overall, the impoverished model fit indices for the single-factor model against the measurement model, as well as the longitudinal nature of the dataset suggest that common method bias seems not to be a major problem (Podsakoff et al., 2003). The possibility of nonresponse bias was examined following (Armstrong & Overton, 1977; Collier & Bienstock, 2007) suggestions we compare the demographic characteristics of sample and that of the general population. We concluded that nonresponse bias does not appear to be a significant problem as no significant differences were found.

### Construct Validity

The retained scale items from the confirmatory factor analysis have standardized factor loadings (SFL) above  $.50$  and significant  $t$ -values ( $p < .05$ ) as noted by Bagozzi (1980); and Bagozzi & Yi (1988). The SFL values ranged from  $(.502-.987)$  and the  $t$ -statistics ranged from  $(8.390-53.925)$ . Hair et al. (1998) added that composite reliability (CR) above  $.70$  and average variance extract (AVE) above  $.50$  suggest evidence of convergent validity. Hair et al. (1998) asserted the evidence of discriminant validity if maximum shared variance (MSV) is less than AVE. The correlation coefficients of the variables under investigation did not exceed the threshold of  $.80$  (Kline, 2005). All things considered, the obtained results provided evidence of convergent and discriminant validity. The accepted threshold for the Cronbach alpha, CR, and MaxR(H) was also above  $.70$ , thus satisfying internal consistency and scale reliability (Cronbach, 1951; Hair et al., 1998; Jöreskog, 1971). See Tables 2 and 3.

### Correlations Coefficients

The mean scores and standard deviations are particularly high; the correlativity of tolerance to workplace incivility and employee cynicism was found to be statistically significant and positive ( $r = .524$ ,  $p < .001$ ). Tolerance to workplace incivility was found to have a positive and significant relationship with knowledge hiding behavior ( $r = .503$ ,  $p < .001$ ), and job search behavior ( $r = .421$ ,  $p < .001$ ), except for service innovative behavior. Next, the correlativity of employee cynicism and service innovative behavior was positive and statistically significant ( $r = .129$ ,  $p < .05$ ). Similarly, the correlativity of employee cynicism and knowledge hiding behavior ( $r = .517$ ,  $p < .001$ ), and job search behavior ( $r = .310$ ,  $p < .001$ ) were found to be positive and statistically significant. See Table 3.

Table 1  
Model Fit

Indices	Single factor	Measurement model
Degree of freedom ( $df$ )	434	597
Chi-square ( $\chi^2$ )	5460.913	1777.739
Relative chi-square (chi-square/ $df$ )	12.583	2.978
Normed fit index (NFI)	.424	.847
Incremental fit index (IFI)	.445	.893
Tucker–Lewis index (TLI)	.403	.880
Comparative fit index (CFI)	.443	.892
Root-mean-square error of approximation (RMSEA)	.188	.078

Table 2  
Standardized Factor Loadings and *t*-Statistics

Measures	Loadings ( <i>t</i> -statistics)
Tolerance to workplace incivility	
"Repeatedly gossiped about you to other co-workers"	.979 (50.452)
"Regularly withheld important information relevant to your job and/or excluded you from key decisions"	.987 (53.925)
"Repeatedly invaded your privacy (e.g., read communications addressed to you, took items from your desk, or opened your desk drawers without permission)"	.816 (23.491)
"Repeatedly treated you in overtly hostile manner (e.g., spoke to you in aggressive tone of voice, made snide remarks to you, or rolled his or her eyes at you)"	.961 (–)
Employee cynicism	
"I believe top management says one thing and does another"	.565 (–)
"Top management's policies, goals, and practices, seem to have little in common"	.724 (12.731)
"When top management says it is going to do something, I wonder if it will really happen"	.787 (13.490)
"Top management expects one thing of its employees, but rewards another"	.888 (11.352)
"When I think about top management, I feel irritation"	.774 (10.612)
"When I think about top management, I feel aggravation"	.825 (11.005)
"When I think about top management, I feel tension"	.824 (10.998)
"When I think about top management, I experience anxiety"	.756 (10.458)
"I criticize top management's practices and policies with others"	.779 (10.648)
"I often talk to others about the way things are run at top management"	.771 (10.424)
"I complain about how things happen at top management to friends outside the organization"	.705 (9.861)
Job search behavior	
"Made inquiries/read about getting a job"	.604 (11.755)
"Prepared/revised resume"	.878 (18.620)
"Talked with friends or relatives about possible job leads"	.896 (–)
"Looked for jobs on the Internet"	.518 (9.724)
"Made inquiries to prospective employers"	.521 (9.781)
Knowledge hiding behaviors	
Evasive hiding	
"Agreed to help him/her but never really intended to"	.502 (–)
"Agreed to help him/her but instead gave him/her information different from what s/he wanted"	–*
"Told him/her that I would help him/her out later but stalled as much as possible"	.552 (10.281)
"Offered him/her some other information instead of what he/she really wanted"	.512 (9.249)
Playing dumb	
"Pretended that I did not know the information"	.732 (8.883)
"Said that I did not know, even though I did"	.866 (9.574)
"Pretended I did not know what s/he was talking about"	.771 (9.106)
"Said that I was not very knowledgeable about the topic"	.847 (9.479)
Rationalized hiding	
"Explained that I would like to tell him/her, but was not supposed to"	.822 (9.372)
"Explained that the information is confidential and only available to people on a particular project"	.738 (8.919)
"Told him/her that my boss would not let anyone share this knowledge"	.655 (8.390)
"Said that I would not answer his/her questions"	.684 (8.550)
Service innovative behavior	
"At work, I come up with innovative and creative notions"	.588 (10.456)
"At work, I try to propose my own creative ideas and convince others"	.812 (14.560)
"At work, I seek new service techniques, methods, or techniques"	.820 (14.697)
"At work, I provide a suitable plan for developing new ideas"	.924 (16.610)
"At work, I try to secure the funding and resources needed to implement innovations"	.948 (16.977)
"Overall, I consider myself a creative member of my team"	.718 (–)

Note. \*Dropped items during confirmatory factor analysis.

Table 3  
Correlativity, Mean Values, and Standard Deviations

Variables	Mean (SD)	$\alpha$	CR	AVE	MSV	MaxR(H)	1	2	3	4	5
Tolerance to workplace incivility	4.57 (1.51)	.963	.967	.880	.288	.987	–				
Employee cynicism	4.59 (1.31)	.938	.940	.589	.288	.989	.524**	–			
Service innovative behavior	5.15 (1.14)	.925	.918	.658	.018	.992	.071	.129*	–		
Knowledge hiding behavior	4.68 (1.18)	.919	.916	.506	.265	.991	.503**	.517**	.130*	–	
Job search behavior	5.39 (1.06)	.826	.822	.496	.222	.993	.421**	.310**	.112*	.407**	–

Notes.  $\alpha$ , Cronbach’s alpha; AVE, average variance extracted; CR, construct reliability; MSV, maximum shared variance; SD, standard deviation.

\*\*Correlations are significant at the .01 level. \*Correlations are significant at the .05 level.

**Direct and Indirect Effects**

Structural equation modeling technique was used with AMOS program version 20. Result shows that tolerance to workplace incivility has a positive impact on employee cynicism ( $\beta = .524, \rho < .001$ ), knowledge hiding behavior ( $\beta = .319, \rho < .001$ ), and job search behavior ( $\beta = .357, \rho < .001$ ). Similarly, employee cynicism has a positive impact on knowledge hiding behavior ( $\beta = .350, \rho < .001$ ), and job search behavior ( $\beta = .122, \rho < .05$ ). Contrary to our expectation, tolerance to workplace incivility and employee cynicism did not influence service innovative behavior. According to Hayes (2013), the beauties of bootstrapping are that its inference is based on an estimate of the indirect effect itself. Unlike Sobel test, bootstrapping makes no assumptions about the shape of the sampling distribution, which makes it a powerful tool to testing indirect effects. In this article, the author(s) bootstrapped the sample with a resample of ( $n = 5,000$ ) using a bias-corrected confidence interval of 95%.

The indirect effect of tolerance to workplace incivility on employee service innovative behavior through employee cynicism was nonsignificant ( $\beta = .066, \rho > .10$ ). Thus, hypothesis 1 was rejected. The indirect effect of tolerance to workplace incivility on knowledge hiding behavior through employee cynicism was significant ( $\beta = .183, \rho < .001$ ). The bias-corrected estimate suggested a partial mediation as follows (95% confidence interval: 0.125 and 0.250). Thus, hypothesis 2 was supported. Similarly, the indirect effect of tolerance to workplace incivility on job search behavior through employee cynicism was significant ( $\beta = .064, \rho < .05$ ). The bias-corrected estimate suggested a partial mediation as follows (95% confidence interval: 0.005 and 0.130). Thus, hypothesis 3 was supported. All of the significant paths are presented in Figure 2 (Table 4).

**Predictive analytics**

Predictive analytics is used interchangeably with the term machine learning today. If there is one technique within predictive analytics which captures estimation aspect more than any others, it is artificial neural network (ANN) modeling. ANN is a mathematical models for human cognition meant for

- (1) Information processing of many simple elements that are called neurons, that are also connection links.
- (2) In a given neural network, each connection link is associated with a weight, used to multiply the signal transmitted.

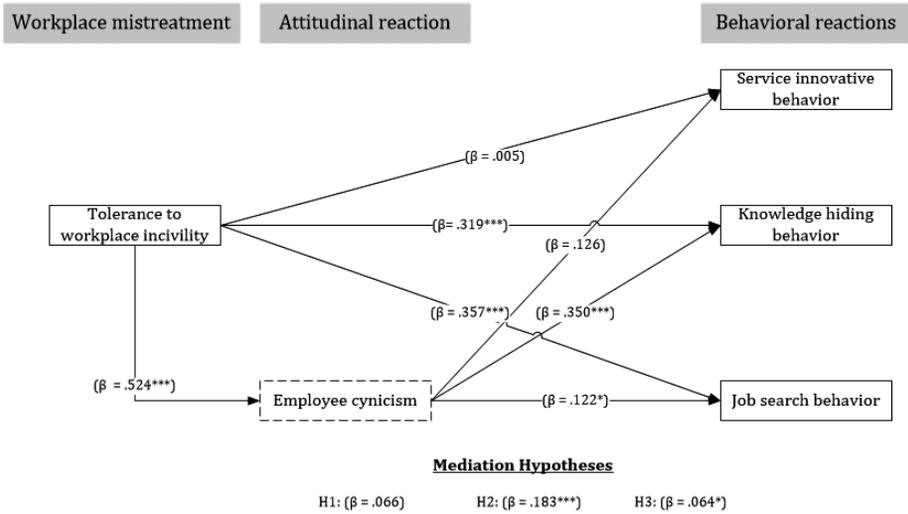


Figure 2. Measurement model and effects. Notes. Significance codes: “\*\*\*” 0.01; “\*” 0.05; “.” 0.1; “” 1.

Table 4  
Standardized Total, Direct, and Indirect Effects Coefficient

Independent variables	Dependent variables	Total	Direct	Indirect	LO	UP	$\rho$	H	Decision
Tolerance to workplace incivility	Employee cynicism	.524	.524	.000					
Tolerance to workplace incivility	Service innovative behavior	.071	.005	.066	-0.006	0.140	.072	H1	Rejected
Tolerance to workplace incivility	Knowledge hiding behavior	.503	.319	.183	0.125	0.250	***	H2	Supported
Tolerance to workplace incivility	Job search behavior	.421	.357	.064	0.005	0.130	**	H3	Supported
Employee cynicism	Service innovative behavior	.126	.126	.000					
Employee cynicism	Knowledge hiding behavior	.350	.350	.000					
Employee cynicism	Job search behavior	.122	.122	.000					

Notes. H, hypotheses; LO, confidence level lower bound; UP, confidence level upper bound.  
\*\*Significant at the  $p < 0.05$  level (two-tailed). \*\*\*Significant at the  $p < 0.001$  level (two-tailed).

- (3) In a given neural network, all neuron applies a nonlinear function to its net input (sum of weighted input signals) to determine its output signal.
- (4) ANNs are usually modeled into one input layer, one or several hidden layers, and one output layer” as noted by Simpson (1990) and Fausett (1994).

In spite of its simple structure, the presence of a hidden unit, together with a nonlinear activation function, gives ANN the ability to solve several complex problems. The input layer ( $x_1 \dots x_3$ ) can be considered the stimuli of the model, and the output layer ( $z_1 \dots z_2$ ) is the outcome of the input stimuli. The hidden layer ( $y_1 \dots y_2$ ) determines the mapping relations between the input and the output layer. The mapping relations between units are stored as the weights of the connecting links ( $w_{11} \dots w_{33}$ ), ( $v_{11} \dots v_{22}$ ). The input layer is an analogy to the independent variables, and the output layer is to dependent variables. See Figure 3.

One significant distinction between ANNs and regression models is that regression models relate independent variables directly to the dependent variables, whereas ANNs relate both directly and indirectly by determining the weights between units among layers (Abubakar, 2018; Abubakar, Karadal, Bayighomog, & Merdan, 2018). The structure of hidden layers together with the link weights is considered the representation of the internal structure of the input data (Rumelhart, Hinton, & Williams, 1986), which may yield a better approximation in terms of mapping input data onto output patterns. In this study, the assessments of the networks performance will be made based on the obtained coefficient of mean-square error (*MSE*). *MSE* is a frequently used to measure the differences between values (sample and population values) predicted by a model or an estimator and the values actually observed. The *MSE* represents the sample standard deviation of the differences between predicted values and observed values.

Structural equation modeling was employed in this study as it is a popular method to infer and test causal relationships, but sometimes it can oversimplify the complexities. ANN was used as it can outperform traditional regression and SEM, due to its ability to identify both linear and nonlinear relationships (Abubakar et al., 2017; Sim, Tan, Wong, Ooi, & Hew, 2014). Moreover, ANN does not require any distribution assumption and it has high prediction accuracy (Leong, Hew, Lee, & Ooi, 2015). To increase the methodological robustness of the present study, we employed both SEM and ANN. Logistic function was used as the activation function for both hidden and output layer of the ANN model, and sum of squared errors was used as differentiable error function. Using prediction function in neuralnet R package, generalized linear model predicted a *MSE* equals to 934.904, while neural network prediction produced *MSE* that is equals to 0.973, suggesting that the model is best predicted via neural nodes.

The objective of ANN algorithm is to minimize error until the ANN learns through the learning or training process. During the training process, random synaptic weights were assigned to the connections and the aim was to adjust them in order to obtain minimal error. ANNs have been attributed as having “superior predictive power,” because complex interactions can be modeled by the ANN giving highly flexible nonlinear response values (Olden & Jackson, 2002). In addition, the plot.nn function we used has some undesirable behavior (Beck, 2015) in terms of interpretation; thus, distribution of the generalized weights is easy and useful interpreting the nature of the effects (Abubakar, 2018; Alice, 2015). The synaptic weights of the input nodes (independent variables) on the hidden and output nodes are presented in Figure 4.

In Figure 5, the distribution of the generalized weights for the response variables is illustrated. As expected, tolerance to workplace incivility has a significant nonlinear effect on the response variables (employee cynicism, knowledge hiding behavior, and job search behavior) because the variance of the

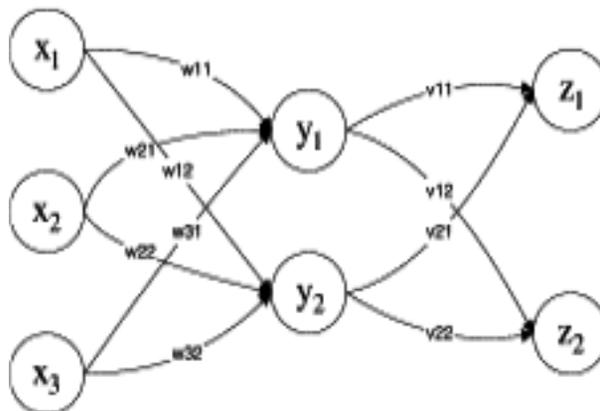


Figure 3. Artificial neural network (ANN) structure.

generalized weights is greater than zero, except service innovative behavior in which most of the generalized weights were below zero. The training process needed 8,080 steps until all absolute partial derivatives of the error function were smaller than 0.01. Overall, this outcome provided additional support for our findings in SEM. A 10-fold cross-validation with a ratio of 75:25 data for training and testing was conducted. MSE from the 10 networks was used to examine the accuracy of the model. Table 5 shows that the mean MSE for training is between 0.971 and 1.195, while for testing between 0.815 and 1.493. Based on this, we concluded that the model predictions are reliable.

### Discussion

The motivation of this study is to diagnose the impact of tolerance to workplace incivility on employees' attitudinal (e.g., cynicism) and behaviors (e.g., service innovative behavior, knowledge hiding behavior, and job search behavior) in the hospitality industry. We conceptualized tolerance to incivility as organizational climate that tolerates and accommodate the acts of incivility. A situation in which perpetrators of uncivil actions are neither punished nor rebuked. Drawing on the tenets of COR and POK theories, we theorize that employee cynicism will mediate the link between tolerance to workplace incivility and (i.e., service innovative behavior, knowledge hiding behavior and job search behavior). Upon this foundation, we built our model with SEM and ANN to examine how the proposed variables interact with each other. Contrariwise to our expectation, employee cynicism did not mediate the link between tolerance to workplace incivility and service innovative behaviors; moreover, the path linking the predictor

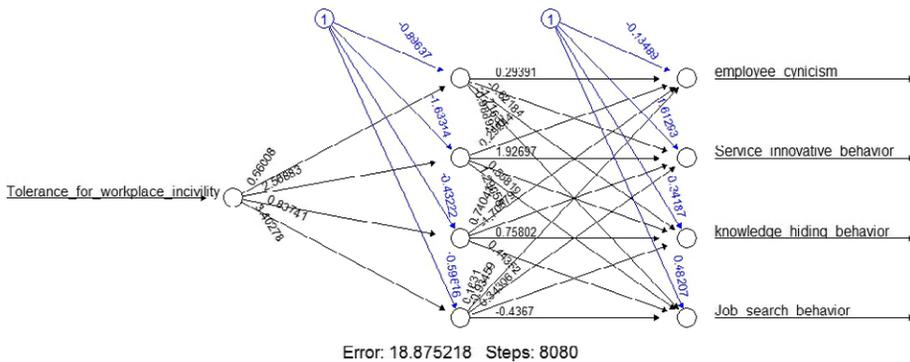


Figure 4. Neural network modeling.

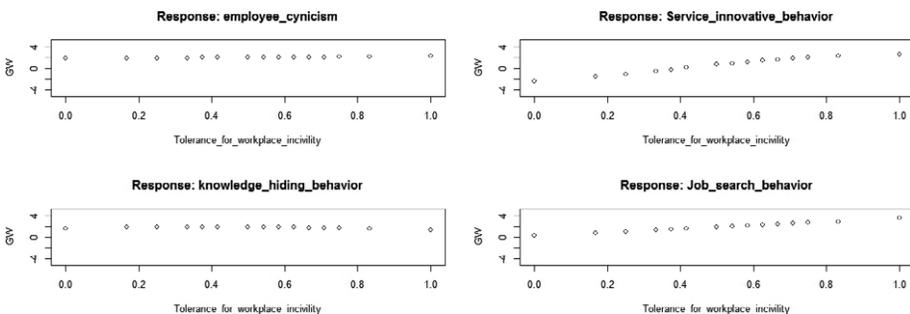


Figure 5. Distribution of the generalized weights.

variable and the mediator variable with service innovative behavior is statistically nonsignificant. Thus, hypothesis 1 was rejected.

Scholars (e.g., Hur et al., 2016) revealed a negative relationship between incivility and service employees' creativity, and this link was mediated by emotional exhaustion in South Korean hotels. Cho, Bonn, Han, and Lee (2016) also documented that incivility increases emotional exhaustion, which lowers job service performance of restaurants employees in the United States. Tolerance to incivility was linked with increased workplace withdrawal (Loi et al., 2015), and organizational support has been associated with increased innovation (Ma Prieto & Pilar Perez-Santana, 2014). Therefore, a possible reason for the non-significant relationship might arise from cultural differences. For instance, Liu, Steve Chi, Friedman, and Tsai (2009) noted that collectivism orientation culture can moderate the link between incivility and achievement orientation. Thus, it is possible that the Arabian culture played an important role in inhibiting employees from showing lesser innovative behavior, but might have engaged in other severe kinds of deviant behaviors. It is worthwhile to note that the economic situation of the country under investigation differs greatly from the United States and South Korea.

As expected, we found that employee cynicism mediates the association between tolerance to workplace incivility and knowledge hiding behavior and job search behavior, thereby providing support for hypothesis 2 and 3. Germer, Siegel, and Fulton (2016) argued that the fundamentals to the success of an individual's work-life are a sense of belongingness to a workgroup or organization. In line with Cole et al. (2006) contentions, our findings show that cynicism is a response to management's inability to handle workplace incivility. It is worth noting that cynicism exerts significant influence on knowledge hiding and job search behavior, this outcome corresponds to Chiaburu et al. (2013) contentions that cynics often respond with deviant behaviors, this study extends this to knowledge hiding and job search behavior. From the lens of COR theory, uncivil behaviors challenge the validity of an individual belongingness to the workgroup or organization (Cortina & Magley, 2009), and such individuals may become cynical toward the group and/or organization, especially when justice or order is not restored.

These individuals may retaliate by exhibiting knowledge hiding behavior, or even engage in sidestepping knowledge sharing, as this strategy will put them in control of their knowledge, which they can either take charge and revenge their uncivil ordeal or jeopardize organizational productivity. This contention is in line with POK theory; moreover, prior research has linked perceived knowledge ownership with increase knowledge hiding behavior (von der Trenck, 2015). This article complements previous finding by taking a different perspective, tolerance to workplace incivility. From the lens of COR theory, uncivil behaviors challenge the validity of individuals belongingness (Cortina & Magley, 2009), and

Table 5  
Neural Network Model Prediction for 10 Models

Model #	MSE training	MSE testing
10% [1]	1.19525199312753	0.815238269041526
20% [1]	0.989559846016206	1.19371514743619
30% [1]	1.04721043776049	1.06876774379374
40% [1]	1.13908058597062	1.072685478824
50% [1]	0.971127858247261	1.49301157931805
60% [1]	1.10524699498581	1.04005740726309
70% [1]	1.09117341606066	1.06158018972682
80% [1]	0.985111256521853	0.944829292941634
90% [1]	1.00961457679131	1.20403903003938
100% [1]	1.00993909010596	1.12863960161625
MSE mean	1.054331606	1.102256374

Note: MSE, mean-square error. Source: neuralnet in R.

employee cynicism seems to be an early form of 'escape' that results in more overt forms of 'escape' job search behavior. Job search behavior is a coping mechanism, to which victims and observers of incivility engage in to protect their valuable resources, in line with Kaya et al. (2014) contentions.

Individual who has reported uncivil acts may feel unwanted and irrelevant when action is not taken. Thus, in line with COR theory, such individual may feel more comfortable by searching for alternative opportunities, thereby engaging in job search behavior. This makes sense, as tolerance to workplace incivility manifest cynicism which was co-related with increased time-theft and other unwanted behaviors (Lorinkova & Perry, 2017). Cynics may feel that hiding knowledge can harm the progress of the perpetrators and the organization and that leaving the job can be a way of escaping the ordeals of incivilities in their workplace. In line with our findings, research has shown that cynics reciprocate frustrating experiences by withdrawing in minor, yet impactful and deviant, ways in efforts to balance their exchange with the organization (Abubakar et al., 2017; Cortina et al., 2017; Lorinkova & Perry, 2017).

### Theoretical and Managerial Implications

Prior research stream on workplace incivility mostly focuses on its effect on job satisfaction, intention to quit, workplace withdrawal, emotional exhaustion, cynicism, negative affect, absenteeism, tardiness, job performance, etc. Much attention has not been paid to the cognitive effects workplace incivility (i.e., service innovative behavior, knowledge hiding behavior, and job search behavior). The article seems to be among the first to illustrate and empirically test the association between tolerance to workplace incivility, service innovative behavior, and knowledge hiding behavior. By combining the rationales of COR theory and POK theory, this article is among the first to link tolerance to workplace and employee cynicism with knowledge hiding behavior, a construct that needs further exploration (Connelly et al., 2011). Theoretically, we link tolerance to workplace incivility with increased employee cynicism; further, cynicism encourages employees to develop strategies to cope with uncivil behavior, over time knowledge hiding behavior can emerge as a coping mechanism. Thus, the ideas of COR theory and POK theory have been extended.

This article suggests that tolerance to workplace incivility is indeed harmful, and incremental organizational practices are a feasible approach to eliminate it, for example, zero-tolerance policy and team-building meetings. This is because most perpetrators of incivility are not aware of deleterious effects of incivility, and supervisors are not well-equipped to resolve or handle uncivil behaviors (Sguera, Bagozzi, Huy, Boss, & Boss, 2016). Activities such as training can help (Abubakar, 2018; Özdemir-Akyıldırım & Talay-Değirmenci, 2015); furthermore, zero-tolerance policy and team-building meetings can provide an informal complaint system that may concretely assist superiors to coach victims and provide social support (e.g., Scott, Zagenczyk, Schippers, Purvis, & Cruz, 2014). Such meetings may also enhance perpetrators awareness of antisocial behaviors (Sguera et al., 2016). Inspiring open dialogue policy among departments and teams regarding what constitute incivility and what is acceptable norms and behavior within their divisions. Employee cynicism results from feelings of injustice, violation, and vulnerability due to management's inability to provide convincing solution to complaints and handling mechanism of uncivil behaviors.

Given the pervasive nature of workplace incivility, this study's result buttress the view of Tripp and Bies (2015) which suggest that managers must act as the first responder, the mediator, and the judge. Through mediation, managers in hospitality establishments can encourage perpetrators to make amendments, thereby creating an atmosphere of reconciliation and wellness. Alternatively, hospitality management should ensure that perpetrators are punished, others both victims and observers can understand the organization's position regarding incivility. To the best of our knowledge, this study is one of the forerunners examining how tolerating incivility can procreate attitudinal and behavioral changes among hotel employees using PO and COR theory as theoretical framework. This study extends the use of PO theory beyond its known application in organizational studies relating to psychological contract to

explain how tolerance to incivility may alter employee's behavior. This study is also among the first to adopt ANN in the hospitality management research stream.

### Limitations and Future Scholarly Work

However, noncompensatory ANN can complement the weaknesses of compensatory linear SEM. Despite these methodological cautionary procedures (the use of ANN and SEM) and longitudinal design that is known to reduce common method variance, this study has several limitations that worth mentioning. First, the self-report nature of the data is potentially limiting in that social desirability bias. The sample was drawn from five-star hotels only which may limit the generalizability of findings. The use of a larger sample size, coverage, and experimental data collection research design could further our understanding. Cultural factor may have inflated or deflated the strengths of the relationships as Jordan has a high-power distance culture. Thus, future study may replicate the current model in a Western culture where freedom of expression is considered as everyone's right. In line with (Abubakar, 2018; Abubakar et al., 2017; Leong et al., 2015; Sim et al., 2014) recommendations and following (Abubakar, Karadal, et al., 2018) suggestions, this article also advises scholars to utilize artificial intelligence techniques (i.e., ANN), because of its (a) predictive accuracy and validity, (b) its dominance over regression, CB-based SEM and PLS-SEM, and (c) less restrictive nature, for example, normality assumptions, linearity, homoscedasticity, and sample size.

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