



Longitudinal relations between abusive supervision, subordinates' emotional exhaustion, and job neglect among Pakistani Nurses: The moderating role of self-compassion

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Abstract

The main purpose of this study was to investigate reciprocal relationships between abusive supervision, subordinates' emotional exhaustion, and job neglect, and to examine the mediating role of emotional exhaustion in the cross-lagged relationship between abusive supervision and job neglect. Besides, we tested the moderating role of self-compassion in the cross-lagged relationship between abusive supervision and emotional exhaustion. We applied a two-wave cross-lagged panel design with a time lag of six months. Participants were 331 staff nurses of public sector hospitals in Islamabad, Pakistan. Data were collected using a self-report questionnaire at two points in time. Longitudinal structural equation modeling (SEM) was used to compare nested models. Results of cross-lagged SEM analyses supported the posited reciprocal model, indicating that abusive supervision, emotional exhaustion, and job neglect are mutually related. Results of mediation analysis showed that emotional exhaustion partially mediates the cross-lagged relationship between abusive supervision and job neglect. Further, we found that self-compassion attenuates the positive cross-lagged effect of abusive supervision on emotional exhaustion, and the indirect effect of abusive supervision on job neglect was weaker at higher levels of self-compassion. Our findings suggest that subordinates may find themselves in abusive relationships, in part, because their own behavioral responses to abuse can reinforce abusive supervision. Moreover, we identified the stress-buffering effect of self-compassion on emotional exhaustion.

Keywords Abusive supervision · Emotional exhaustion · Job neglect · Self-compassion · Cross-lagged panel design

Introduction

Abusive supervision has become an increasingly serious problem that affects contemporary organizations (Lim et al., 2021), distressing around 10–16% of all employees (Tepper et al., 2004). Abusive supervision is a salient type of severe abuse and is status-degrading (Rice et al., 2020). Abusive supervision has many well-documented negative attitudinal, behavioral, and health outcomes, such as job dissatisfaction (Peltokorpi & Ramaswami, 2021), diminished affective commitment (Caesens et al., 2019), decreased work engagement (Lyu et al., 2016), lowered job performance (Harris et al., 2007), higher turnover intentions (Rodwell et al., 2014), psychological distress

(Park et al., 2018), and poor physical health (Liang et al., 2018). Moreover, a plethora of studies have demonstrated that abusive supervision leads abused subordinates to engage in workplace deviance – violation of organizational norms – targeted at either the organization or its members (e.g., Mitchell & Ambrose, 2007; Tepper et al., 2009; Thau et al., 2009). Alternatively, abusive supervision researchers have also demonstrated that subordinates' workplace deviance positively predicts abusive supervision (e.g., Eissa et al., 2020; Shillamkwese et al., 2020). However, these two streams of research within the abusive supervision literature have assumed that supervisor-subordinate relationships are static and unidirectional, thus ignoring the fact that both supervisor and subordinate may influence each other's behavior over time (Simon et al., 2015). Underscoring the temporal and dynamic nature of the supervisor-subordinate relationships, Lian et al. (2014a) demonstrated that abusive supervision and subordinates' organizational deviance are reciprocally related and mutually reinforcing; however, they did not investigate any mediating mechanism underlying this

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relationship. Extending this line of reasoning, Whitman et al. (2014) in their study found that subordinates' emotional exhaustion mediates the cross-lagged relationship between abusive supervision and feedback avoidance, and feedback avoidance was positively associated with subsequent emotional exhaustion. Likewise, Simon et al. (2015) results revealed reciprocal relationships between abusive supervision and both supervisor-directed deviance and supervisor-directed avoidance, and that negative emotions (anger and fear) mediate the effects of abusive supervision on subordinates' behavior. Notably, Simon et al. (2015) neither hypothesized reciprocal relationships between abusive supervision and negative emotions nor between negative emotions and subordinates' deviant behavior.

In the current study, we propose that abusive supervision, subordinates' emotional exhaustion, and job neglect are reciprocally related. In doing so, we utilize the job demands-resources (JD-R) model (Demerouti et al., 2001) and conservation of resources (COR) theory (Hobfoll, 1989). The JD-R model and COR theory are the two predominant theoretical frameworks used to capture stressor-strain effects, and integrating the two in a multi-theoretic approach increases the explanatory power of the stressor-strain models (Simha et al., 2014). We contribute to the extant literature in a number of ways. First, previous studies investigating the reciprocal relationship between abusive supervision and workplace deviance have used broader conceptualizations of workplace deviance construct (e.g., Lian et al., 2014a; Simon et al., 2015); consequently, numerous potential sub-dimensions of workplace deviance have been ignored in the abusive supervision literature (Bowling & Gruys, 2010; Mackey, 2021). Recent research on deviant workplace behavior has demonstrated that various types of workplace deviance, such as job neglect, time theft, and sabotage, are differentially and uniquely related to potential antecedents and outcomes (e.g., Hu et al., 2022; McLarty et al., 2021; Xu et al., 2022). In this study, we focus exclusively on job neglect and posit that abusive supervision and job neglect are reciprocally related. That is, abusive supervision leads abused subordinates to engage in job neglect, that, in turn, leads to subsequent abusive supervision. Second, we assume that abusive supervision leads to emotional exhaustion, whereas emotional exhaustion also leads to subsequent abusive supervision. Empirical evidence of reciprocal causation between abusive supervision and subordinates' emotional exhaustion is very limited. For example, Perko et al. (2016) found that participants in the good well-being class and participants in the deteriorating well-being class had no statistical difference in their ratings of abusive supervision. Likewise, Whitman et al. (2014) in their study did not find support for the reverse or reciprocal causation hypothesis between abusive supervision and emotional exhaustion. Perko et al.

(2016) noted that low prevalence of abusive supervision in Western cultures might be a possible reason for not detecting reverse or reciprocal causation between abusive supervision and emotional exhaustion. It is thus worthwhile to investigate reciprocal causation between abusive supervision and emotional exhaustion in non-Western high power distance cultures like Pakistan that have high prevalence of abusive supervision (e.g., Karatuna et al., 2020; Malik et al., 2020). Third, our research model provides an important insight into the emotional exhaustion-job neglect process. We expect that individuals who engage in job neglect following emotional exhaustion may endanger their job-related resources, thus leading to more emotional exhaustion over time. Fourth, we contribute to the literature by investigating the mediating role of emotional exhaustion in the cross-lagged relationship between abusive supervision and job neglect. Here, we acknowledge that Whitman et al. (2014) have demonstrated that emotional exhaustion mediates the cross-lagged relationship between abusive supervision and feedback avoidance; however, job neglect and feedback avoidance are conceptually and empirically distinct from each other. That is, job neglect is a mechanism by which employees cope with stressors in the workplace and conserve resources by neglecting aspects of their jobs (Greenbaum et al., 2014), whereas feedback avoidance is an impression management tactic used by employees to avoid negative feedback from their supervisors (Moss & Sanchez, 2004). Fifth, Tepper (2007) noted that abusive supervision does not affect all subordinates equally. Several dispositional characteristics of subordinates have been found to moderate the abusive supervision-outcomes relationships, such as agreeableness and extraversion, positive core self-evaluations, and political skill (e.g., Li et al., 2016; Wang et al., 2015; Zhang et al., 2014). In their recent review on abusive supervision, Tepper et al. (2017) have suggested future researchers to further explore the full range of coping strategies available to abused subordinates and determine their effectiveness. Accordingly, we respond to this call and contribute to the abusive supervision literature by hypothesizing and testing the moderating role of self-compassion in the cross-lagged relationship between abusive supervision and emotional exhaustion. Self-compassion has been recognized as a valuable personal resource linked to a wide range of psychological outcomes, including lower levels of depression, stress, and burnout as well as higher well-being (Dev et al., 2020). Finally, we contribute to the literature methodologically, as our use of a cross-lagged panel design enabled us to simultaneously test possible reciprocal relationships between abusive supervision, subordinates' emotional exhaustion, and job neglect. Moreover, a cross-lagged panel design allowed us to consider alternative model specifications and control for autoregressive effects (Cole & Maxwell, 2003).

Theoretical background and hypotheses

The core assumption of the JD-R model is that every occupation has its specific job characteristics associated with job stress or burnout, described in terms of job demands and job resources (Demerouti et al., 2001). Job demands can be described as “physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs” (Demerouti et al., 2001, p. 501). Crawford et al. (2010) extended this definition by differentiating between challenging and hindering job demands. Employees tend to perceive challenging job demands as opportunities to learn and may promote their personal growth and future gains. Conversely, employees tend to perceive hindering job demands as constraints or barriers and may thwart their personal growth and goal attainment. Job resources, on the other hand, can be defined as “physical, psychological, social, or organizational aspects of the job that may [...] be functional in achieving work goals, reduce job demands and its related costs, or stimulate personal growth or development” (Demerouti et al., 2001, p. 501). An important proposition of the JD-R model is that two fairly independent psychological processes lead to the development of job strain and motivation. In the first, health impairment process, job demands lead to job strain in the form of emotional exhaustion that, in turn, predicts negative organizational outcomes. In the second, motivational process, job resources lead to increased levels of motivation in the form of work engagement that, in turn, predicts positive organizational outcomes (Bakker & Demerouti, 2007). In addition, the JD-R model assumes that job resources as well as personal resources can buffer the undesirable impact of job demands on job strain (Bakker & Demerouti, 2017).

COR theory (Hobfoll, 1989) is both a stress and motivational theory that outlines a key axis that determines individual’s behavior. The basic tenet of COR is that “individuals strive to obtain, retain, protect, and foster those things that they value” (Hobfoll, 2001, p. 341). These valued entities are called resources, and can be delineated into objects, conditions, personal characteristics, and energies (Hobfoll, 1989, 2001). According to COR theory, psychological stress arises when people are (1) threatened with resource loss, (2) lose resources, or (3) fail to obtain resources after resource investment (Hobfoll, 2001). A number of principles and corollaries follow from COR theory’s central tenet. The primacy of loss principle of COR theory holds that resource loss is disproportionately more salient than resource gain. A related corollary of this is that initial resource loss begets future resource loss (Halbesleben et al., 2014; Hobfoll & Shirom, 2000).

Resources are linked with each other in a ‘web like’ nature, which suggests that resource loss will occur in spirals (Bakker & Costa, 2014; Demerouti et al., 2004), and these loss spirals gain in momentum and magnitude (Hobfoll et al., 2018). The resource principle of COR theory posits that people must invest resources in order to protect against resource loss, recover from losses, and gain resources (Hobfoll, 2001). Further, according to the desperation principle of COR theory, when people’s resources are exhausted, they enter a defensive mode to preserve the self which is often defensive, hostile, and may become irrational (Hobfoll et al., 2018).

In the sections below, we build on propositions from the JD-R model and COR theory, as well as research on these theories related to abusive supervision, in the development of our conceptual model and hypotheses.

Reciprocal relationships between abusive supervision, subordinates’ emotional exhaustion, and job neglect

Based on the JD-R model (Demerouti et al., 2001), we first posit that abusive supervision and job neglect are reciprocally related. Tepper (2000) defined abusive supervision as “subordinates’ perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (p. 178). Supervisors play an important role in most employees’ work lives, because they maintain control over resources which are valuable to employees (e.g., work assignment, feedback, and promotions), and employees spend ample time interacting with their supervisor (Mitchell & Ambrose, 2012). Consistent with the JD-R model and the description of job demands (Bakker & Demerouti, 2007), abusive supervision can be viewed as signifying the social and organizational aspects of the job that entails sustained cognitive or emotional effort on the part of abused subordinates, and is therefore linked with certain physiological and psychological costs (Huang et al., 2020). Subordinates who experience abusive supervision develop negative feelings and attitudes towards their jobs, and may even engage in retaliation against the supervisor (Martinko et al., 2013). However, as supervisors hold power over their subordinates, directly confronting them seems an irrational choice as it can result in lost rewards, punishment, or counterretaliation (Lian et al., 2014b). Given the possibility for such aversive outcomes, subordinates may choose to engage in job neglect to psychologically withdraw themselves from the source of abuse (i.e., the supervisor) in order to reduce their psychological discomfort (Klaussner, 2014). For example, Atwater et al. (2016) showed that abusive supervision is positively related to work withdrawal among abused subordinates. Job neglect is defined as “a tendency for employees to passively allow

conditions at work to deteriorate through a focus on nonwork interests” (Bennett & Naumann, 2005, p. 115). It is considered a passive response to undesirable work situations and may manifest itself through reduced effort, higher absence rate or lateness, or decreased work speed.

Consequently, when subordinates engage in job neglect in response to abusive supervision they are likely to impede their supervisor’s goal achievement and may also threaten his or her role as a leader (Bozeman, 2016). Supervisors may intentionally act abusively to effect subordinate compliance, to save face and reestablish power by promoting an image of toughness, and to rectify subordinate norm-violating behaviors by punishing subordinates with abusive supervision (Lian et al., 2014a). Indeed, the abusive supervision literature suggests that subordinates may invite supervisor abuse through their personalities, attitudes, or actions. For example, Eissa et al. (2020) found that subordinates’ interpersonal deviance stimulated abusive supervision in response. From a victim precipitation perspective, subordinates who enact job neglect may represent provocative victims, whereas supervisors represent perpetrators engaging in corrective abusive behaviors.

Taken together, we assume that abusive supervision will trigger job neglect among abused subordinates, and subordinates’ display of job neglect, in turn, will result in more abusive supervision over time, leading to a vicious cycle of dysfunctional behavior. Klaussner (2014) noted that supervisor-subordinate relationships are dynamic and bidirectional in nature and both supervisor and subordinate influence each other’s behavior over time. Supporting these arguments, Simon et al. (2015) and Lian et al. (2014a) in their studies demonstrated that abusive supervision and subordinates’ deviant behavior are reciprocally related over time, suggesting that subordinates’ deviant behavior is both a cause and a consequence of abusive supervision. In another study, Yu and Duffy (2015) demonstrated that abusive supervision leads to changes in subordinate performance, and those changed subordinate performance, in turn, lead to more abusive supervision. Overall, we conclude:

Hypothesis 1a: Abusive supervision at Time 1 is positively associated with job neglect at Time 2; likewise, job neglect at Time 1 is positively associated with abusive supervision at Time 2.

Second, we posit that abusive supervision and subordinates’ emotional exhaustion are reciprocally related. Following the JD-R model (Demerouti et al., 2001), abusive supervision can be viewed as a hindrance job demand that exhausts subordinates’ physical or mental resources, which may eventually lead to energy-depletion and stress-related outcomes (Wang et al., 2020). For example, when a subordinate is criticized, ridiculed, or devalued by an

abusive supervisor, such treatment may lead to detrimental psychological consequences (such as stress and emotional exhaustion) as the abused subordinate is required to invest physical and emotional efforts to remain composed and continue accomplishing his or her tasks in a hostile working environment. The empirical evidence suggests that abusive supervision leads to emotional exhaustion among abused subordinates (e.g., Chi & Liang, 2013; Huang et al., 2020; Whitman et al., 2014). Emotional exhaustion describes “feelings of being emotionally overextended and exhausted by one’s work” (Wright & Cropanzano, 1998, p. 486).

Moreover, we expect that employees who feel emotionally exhausted in response to abusive supervision may perceive higher levels of abusive supervision over time. The reverse relationship between abusive supervision and subordinates’ emotional exhaustion can be explained using the ‘gloomy perception mechanism’ (De Lange et al., 2005). The gloomy perception mechanism suggests that employees with mental health problems interpret their work environment more negatively over time, and hence perceive the work as more demanding. As abusive supervision is a perceptual construct that represents the subordinates’ subjective evaluation of their supervisor’s behavior they witness and experience in the workplace (Tepper et al., 2017), it is thus reasonable to expect that perceptions of emotionally exhausted employees may become gloomier and they may perceive the behavior of their supervisors as more abusive over time. For instance, De Lange et al. (2005) demonstrated that subordinates with mental health problems perceived the same supervisors as unsupportive and tyrannical over time.

Taken together, we assume that abusive supervision leads to emotional exhaustion among subordinates, and emotionally exhausted subordinates, in turn, may perceive more abusive supervision over time, leading to a vicious cycle of resource loss in which one problem leads to another that exacerbates the previous problem (Bakker & Demerouti, 2018). Reciprocal relationships between job demands and burnout are compatible with the notion of ‘loss spirals’ as proposed by COR theory (Hobfoll, 1989). Loss spirals will follow initial losses, with each loss resulting in depletion of resources for confronting next threat or loss (Hobfoll, 2002). Moreover, these loss spirals gain in momentum as well as magnitude (Hobfoll et al., 2018). Supporting these arguments, Demerouti et al. (2004) found evidence for such a loss spiral in which work pressure led to work-home interference and consequently feelings of exhaustion. These feelings of exhaustion, consequently, resulted in increased work pressure and work-home interference over time. Nielsen et al. (2012) in their study found a mutual relationship between workplace bullying and psychological distress indicating a vicious cycle where bullying and distress reinforce their own negative effects. Overall, we conclude:

Hypothesis 1b: Abusive supervision at Time 1 is positively associated with emotional exhaustion at Time 2; likewise, emotional exhaustion at Time 1 is positively associated with abusive supervision at Time 2.

Lastly, we posit that subordinates' emotional exhaustion and job neglect are reciprocally related. It is well-documented in the literature that emotionally exhausted subordinates are likely to adopt psychological withdrawal behaviors as a passive coping strategy to counter continued depletion of emotional resources due to sustained exposure to abusive supervision (e.g., Chi & Liang, 2013; Huang et al., 2020). Maslach et al. (2001) underscored that emotional exhaustion is not something that is only experienced, but it has the potential to trigger actions to distance oneself physically and psychologically from one's work in an attempt to cope with job demands. For example, Whitman et al. (2014) found that under stressful situations (experiencing abusive supervision), exhausted subordinates engaged in feedback avoidance as a passive coping strategy.

Consequently, when emotionally exhausted subordinates engage in psychological withdrawal behaviors, such as job neglect, it may jeopardize the completion of their work tasks, thereby causing inconvenience to their supervisor as well as their coworkers as the supervisor may have to reallocate the incomplete work tasks to other subordinates, resulting in increased workload and time pressure for coworkers (Bozeman, 2016). Emotionally exhausted subordinates who engage in job neglect may endanger their job-related resources (e.g., supervisor and coworker support, the feeling of being valuable to others, and job autonomy) as they fail to maintain positive interpersonal relationships at work due to their involvement in disruptive behaviors and they may even be socially excluded (LePine & Dyne, 2001), ultimately leading to emotional exhaustion over time (Grobelna, 2021). Moreover, subordinates who withhold work effort may also lose the positive feeling about themselves as they violate the expectation of their employer that an employee will provide a fair day's work for a fair day's wage, leading them to emotional exhaustion (Hobfoll, 2001). Past research has demonstrated that employees who engage in passive coping strategies, such as avoidance behavior and neglect, in response to stressful situations increase their emotional exhaustion levels over time as displaying such antisocial behaviors causes more harm than good (e.g., Montero-Marín et al., 2014; Whitman et al., 2014).

Taken together, we assume that emotionally exhausted employees may engage in job neglect as a passive coping strategy to protect their limited resources, and subordinates' display of job neglect, in turn, may lead to further loss of resources resulting in higher emotional exhaustion over time. Supporting these arguments, Bamonti et al. (2019) demonstrated that individuals who employed dysfunctional coping

strategies in response to work stressors reported higher levels of emotional exhaustion over time. Overall, we conclude:

Hypothesis 1c: Emotional exhaustion at Time 1 is positively associated with job neglect at Time 2; likewise, job neglect at Time 1 is positively associated with emotional exhaustion at Time 2.

Mediating role of subordinates' emotional exhaustion

Consistent with the health impairment process proposed by the JD-R model (Demerouti et al., 2001), we assume that emotional exhaustion will mediate the cross-lagged relationship between abusive supervision and job neglect. Abusive supervision constituting a hindrance job demand taxes the abused subordinates' mental and physical resources that may lead to job-related strain in the form of emotional exhaustion and, consequently, negative organizational outcomes. There is some empirical evidence from cross-sectional studies supporting this line of reasoning, for instance, Chi and Liang (2013) in their study demonstrated that emotional exhaustion mediates the impact of abusive supervision on subordinates' work withdrawal. Similarly, Atwater et al. (2016) showed that exposure to abusive supervision resulted in increased work as well as job withdrawal mediated through subordinates' negative emotional responses. We only found one study that used a longitudinal design to demonstrate that emotional exhaustion mediates the cross-lagged relationship between abusive supervision and coping behavior i.e., feedback avoidance (Whitman et al., 2014). In the present study, we propose that sustained exposure to abusive supervision wears out the abused subordinates' mental and physical resources, leading to emotional exhaustion over time. In turn, emotionally exhausted subordinates may decide to engage in job neglect to passively cope with the interpersonal stressor of abusive supervision, leading us to state the following hypothesis:

Hypothesis 2: Subordinates' emotional exhaustion at Time 1 mediates the relationship between abusive supervision at Time 1 and job neglect at Time 2.

Moderating role of self-compassion

An important extension of the original JD-R model (Demerouti et al., 2001) is the inclusion of personal resources in the model (Xanthopoulou et al., 2007). One of the propositions of the JD-R model is that job demands and personal resources interact to predict job strain (Bakker & Demerouti, 2017; Schaufeli & Taris, 2014). COR theory (Hobfoll, 1989) also postulates that personal resources may help individuals to mitigate the deleterious effects of stress

(e.g., Lin et al., 2015). Personal resources are positive self-evaluations that are associated with resilience and refer to “individuals’ sense of their ability to control and impact upon their environment” (Bakker & Demerouti, 2014, p. 48). Individuals who are high in personal resources believe that good things will happen to them, and they are capable to handle stressful situations (Bakker & De Vries, 2021). One such personal resource is self-compassion taken from Buddhist tradition into contemporary Western psychology (Neff, 2003a). Self-compassion comprises three elements: (1) self-kindness refers to treating oneself with kindness and understanding rather than with harsh self-criticism; (2) common humanity refers to one’s recognition that unfavorable life events are common to all humans rather than unique or personal; and (3) mindfulness refers to holding one’s painful thoughts and feelings in balanced awareness rather than over-identifying with them (Neff, 2003b). Based on this conceptualization of self-compassion, it can be argued that after being exposed to abusive supervision, self-compassionate subordinates will treat themselves kindly, recognize their victimization experience as common experience in the workplace, and will not be carried away with the accompanying negative feelings, and thus will be less emotionally exhausted (Chu et al., 2018). Empirical evidence in support of this argument suggests that self-compassion buffers the effects of various kinds of job demands on job strain (e.g., Anjum et al., 2020; Lee & Lee, 2022; Ma et al., 2022). Accordingly, we expect that self-compassion will buffer the positive relationship between abusive supervision and emotional exhaustion over time. Thus, we derive:

Hypothesis 3: Self-compassion at Time 1 moderates the relationship between abusive supervision at Time 1 and subordinates’ emotional exhaustion at Time 2, such that the positive relationship between abusive supervision at Time 1 and emotional exhaustion at Time 2 will be weaker (stronger) at higher (lower) levels of self-compassion at Time 1.

Conditional indirect effect

Integrating our predictions, we propose a first stage moderated mediation model in which the indirect effect of abusive supervision on job neglect via emotional exhaustion will be moderated by self-compassion, such that the indirect effect will be weaker (stronger) at higher (lower) levels of self-compassion. In this vein, the health impairment process within the JD-R model (Demerouti et al., 2001) provides an indication that the strength of the mediational path linking job demands to outcome variables depends on an individual’s personal resources.

Hypothesis 4: Self-compassion at Time 1 moderates the strength of the indirect effect of abusive supervision at

Time 1 on job neglect at Time 2 via subordinates’ emotional exhaustion at Time 1, such that the indirect effect will be weaker (stronger) at higher (lower) levels of self-compassion at Time 1.

Methods

Research design

We applied a two-wave cross-lagged panel design with a time lag of six months using structural equation modeling (SEM) in Amos 20.0. Cross-lagged panel analysis employing SEM provides robust evidence of temporal precedence and stability compared to any kind of cross-sectional design (Eby et al., 2015). Moreover, the cross-lagged panel design is more robust for testing the mediational hypothesis compared to the cross-sectional design as it controls for prior levels of the mediator and the outcome (at time $t - 1$) and examines the significance of the influences on the change variance of the mediator and the outcome (Cole & Maxwell, 2003). Although it is difficult to determine theoretically the optimal time interval between measurements as there is lack of clear guidelines (Lesener et al., 2019), we considered six months as suitable time lag to test the posited relationships as a time lag of six months has been the most typical time lag in studies on stressor-strain relationships (e.g., Rodríguez-Muñoz et al., 2015). Further, Meier and Spector (2013) found no significant difference in the effects of work stressors on counterproductive work behavior (as well as the effects of counterproductive work behavior on work stressors) across time lags covering five different measurement points ranging from 2 to 8 months apart. Huang et al. (2012) who investigated cross-lagged relationships between job characteristics, burnout, and psychological health using a time lag of six months noted that in a long time lag the multi-factors resulting from individual and environment would increase, which may interfere the relationships between variables. Recently, Caniels et al. (2022) argued that a time lag of six months is appropriate for studies capturing behavioral outcomes. More importantly, Lian et al. (2014a) using a time lag of six months found that abusive supervision and workplace deviance were reciprocally related; however, with a time lag of twenty months the reciprocal relationship between these two variables was not supported.

Participants and procedure

The sample comprised staff nurses at different clinical departments of main government hospitals situated in Islamabad, Pakistan. Selection of participants was based on the following inclusion criteria. The participating nurses must have spent at least twelve months in the same position/

department. Besides, the participating nurses do not occupy any supervisory position at the time of investigation.

The study was conducted on-site during normal working hours and a self-report questionnaire was used for data collection. Wave 1 data were collected in the month of July 2019, and Wave 2 data were collected in the month of February 2020, just prior to the COVID-19 pandemic outbreak in Pakistan. The sample was drawn using a purposive sampling technique. All participants signed informed consent forms and anonymity and confidentiality were assured to the participants. In the first wave at Time 1 (T1), 700 nurses were requested to participate and 399 (response rate 57%) provided their demographic information and completed measures which included their perceptions of abusive supervision, emotional exhaustion, job neglect, and self-compassion. Six months later, at Time 2 (T2), all 399 nurses were requested to participate again in the second survey and 331 participated, resulting in a response rate of 83%. Data at both occasions were matched using an anonymous code that

each participant had to fill in at both waves, that is, their initials followed by the month of their birth. To determine whether subject attrition led to non-random sampling, we tested the probability of remaining in the sample at T2 was predicted by T1 substantial variables and controls (Goodman & Blum, 1996). The criterion was a dummy-coded variable classifying respondents as stayers (coded 1) or leavers (coded 0). The results of multiple logistic regressions showed that all of the logistic regression coefficients were non-significant (see Table 1). In addition, χ^2 and two-sample *t*-tests were performed to assess whether stayers (*n*=331) differed from leavers (*n*=68) with respect to their demographics and baseline levels on the variables of interest. As depicted in Table 2, two samples neither differed regarding their demographics nor regarding their mean scores on the variables of interest. Taken together, these results suggest that the employees who dropped out of the study did so randomly. Accordingly, we used listwise deletion to arrive at the panel group (*n*=331) for our cross-lagged panel analysis (e.g., Houkes et al., 2011; Wayne et al., 2022), and the panel group consisted of about 83% of the initial sample. In terms of gender, the panel group comprised 269 females (81.3%) and 62 males (18.7%), and the mean age of respondents was 30.63 years (SD=5.09). Respondents were in their current jobs for approximately 7.21 years. The majority of participants 204 (61.6%) had a nursing diploma followed by 98 (29.6%) who had a bachelor's and 29 (8.8%) who had a master's degree in nursing.

Table 1 Logistic regression: Stayers vs. Leavers^a

Construct	Path coefficient	SE	<i>p</i>
Age	-0.009	0.089	0.919
Gender	-0.111	0.333	0.740
Tenure	0.002	0.123	0.984
Education (1)	-0.003	0.302	0.991
Education (2)	-0.004	0.482	0.994
Abusive supervision	-0.029	0.216	0.893
Emotional exhaustion	-0.032	0.215	0.883
Job neglect	0.069	0.249	0.781
Self-compassion	0.071	0.133	0.594
Constant	1.587	2.249	0.480
- 2 log likelihood	363.751		
Model Chi-square	0.585 (<i>p</i> =1.000)		

a. *n* = 399, logistic regression for differences between those who did and did not respond to the Time 2 questionnaire. Leavers=0; Stayers=1

Measures

We used Mitchell and Ambrose's (2007) shortened 5-item version of the 15-item scale originally developed by Tepper (2000) to assess subordinates' perceptions of active-aggressive abusive supervision. A sample item is "My boss puts me down in front of others." Scale anchors ranged from 1 (strongly disagree) to 5 (strongly agree). Composite reliability was 0.936 and 0.929 at T1 and T2, respectively.

Table 2 Demographic characteristics and dropout: *n* (%)

		Participants only in the first wave (<i>n</i> =68)	Participants in both waves (<i>n</i> =331)	Difference
Gender	Female	54 (79.4)	269 (81.3)	$\chi^2=0.045; p=0.832$
	Male	14 (20.6)	62 (18.7)	
Age	Mean (SD)	30.838 (4.961)	30.625 (5.094)	<i>t</i> =-0.315; <i>p</i> =0.753
Tenure	Mean (SD)	7.353 (3.590)	7.209 (3.591)	<i>t</i> =-0.302; <i>p</i> =0.763
Educational level	Diploma	42 (61.8)	204 (61.6)	$\chi^2=2.286; p=0.131$
	BSN	20 (29.4)	98 (29.6)	
	MSN	6 (8.8)	29 (8.8)	
Abusive supervision	Mean (SD)	3.973 (0.423)	3.981 (0.806)	<i>t</i> =0.071; <i>p</i> =0.943
Emotional exhaustion	Mean (SD)	3.868 (0.571)	3.856 (0.725)	<i>t</i> =-0.125; <i>p</i> =0.901
Job neglect	Mean (SD)	4.321 (0.488)	4.339 (0.582)	<i>t</i> =0.243; <i>p</i> =0.808
Self-compassion	Mean (SD)	3.021 (0.918)	3.096 (1.114)	<i>t</i> =0.423; <i>p</i> =0.672

We used a 3-item scale to measure subordinates' emotional exhaustion as derived by Riley et al. (2018) from the Maslach Burnout Inventory (Maslach et al., 1996). A sample item is "I feel emotionally drained from my work." Scale anchors ranged from 1 (strongly disagree) to 5 (strongly agree). Composite reliability was 0.837 at T1 and 0.838 at T2.

Job neglect was measured with a 5-item scale developed by Kidwell and Robie (2003). A sample item is "I put in less effort in my work than I know I can." Scale anchors ranged from 1 (never) to 5 (daily). Composite reliability was 0.899 and 0.908 at T1 and T2, respectively.

Self-compassion was assessed with a 12-item scale developed by Raes et al. (2011). A sample item is "When I'm going through a very hard time, I give myself the caring and tenderness I need." Scale anchors ranged from 1 (strongly disagree) to 5 (strongly agree). Composite reliability was 0.982 at T1 and 0.983 at T2.

We controlled for respondents' gender, age, tenure, and level of education as they are related with job neglect (Gruys & Sackett, 2003). Gender was coded '0' for female and '1' for male. Age was measured as a continuous variable in years, as was tenure with current employer. Education was categorized into three categories: nursing diploma, bachelor of science in nursing (BSN), and master of science in nursing (MSN); and coded '1' to '3,' respectively.

Analytical strategy

Our analysis comprised four steps. First, to obtain an initial idea about the relationships among the variables of interest, we used correlational analyses. Second, before assessing the structural models, we assessed the measurement models for each of the variables consistent with the procedure outlined by Anderson and Gerbing (1988). Specifically, we conducted confirmatory factor analyses (CFAs) at the item-level for the two measurement points separately. Error covariances were modeled between all of the T1 and T2 indicators, because repeated measures of the same variable result in correlated errors (Colquitt & Rodell, 2011). Third, we examined measurement invariance (i.e., configural, metric, and scalar), which is a prerequisite to adequately test cross-lagged relations (Little, 2013). Fourth, we tested the hypotheses by comparing competing models regarding the causal relations between the variables of interest. Specifically, we tested four competing models. First, the baseline or stability model (M_1) modeled temporal stabilities (self-correlations between the variables at T1 and T2) and synchronous correlations, without any cross-lagged relations (Fig. 1, Panel A). T1 synchronous correlations were modeled by allowing the explanatory latent variables to covary, whereas T2 synchronous correlations were modeled by allowing the disturbance terms for the

dependent latent variables to covary (Newsom, 2015). Second, the normal causal model (M_2) was identical to M_1 , but modeled additional cross-lagged effects from abusive supervision at T1 to emotional exhaustion and job neglect at T2, as well as the cross-lagged path from emotional exhaustion at T1 to job neglect at T2 (Fig. 1, Panel B). Third, the reversed causal model (M_3) was identical to M_1 , but modeled additional cross-lagged effects from job neglect at T1 to abusive supervision and emotional exhaustion at T2, as well as the cross-lagged path from emotional exhaustion at T1 to abusive supervision at T2 (Fig. 1, Panel C). Lastly, the reciprocal model (M_4) was identical to M_1 , but modeled the reciprocal relationships between abusive supervision, emotional exhaustion, and job neglect (Fig. 1, Panel D). The fit of the models was assessed with various indices, that is, the chi-square statistic (χ^2), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the standardized root mean square residual (SRMR). We compared different competing nested models using the chi-square difference test (Keith, 2015). After selecting the best-fitting model, we first examined the cross-lagged relationships between the study variables followed by investigating the mediating role of emotional exhaustion in the cross-lagged relationship between abusive supervision and job neglect using the bootstrapping method (Preacher & Hayes, 2004). We constructed bias-corrected 95% confidence intervals using a bootstrap procedure with 5000 resamples to test the significance of the mediated effect and the conditional indirect effects. In a two-wave cross-lagged panel design (i.e., half-longitudinal), only partial mediation can be tested (Cole & Maxwell, 2003). Lastly, to examine the moderating effect of self-compassion in the cross-lagged relationship between abusive supervision and emotional exhaustion, we followed the unconstrained model specification to specify the latent interaction using all possible products to construct the multiple indicators of the latent interaction factor (Marsh et al., 2004). Moreover, the simple slopes and the conditional indirect effects of abusive supervision on job neglect via emotional exhaustion at different levels of self-compassion were computed using Amos 20.0 user-defined estimand.

Results

Descriptive statistics

Means, standard deviations, and correlations between the variables of interest for both waves are shown in Table 3. The pattern of correlations was in the predicted direction. However, none of the control variables were significantly associated with any of the main variables. Thus, to increase

Fig. 1 Panel A: The stability model. Panel B: The normal causal model. Panel C: The reversed causal model. Panel D: The reciprocal model

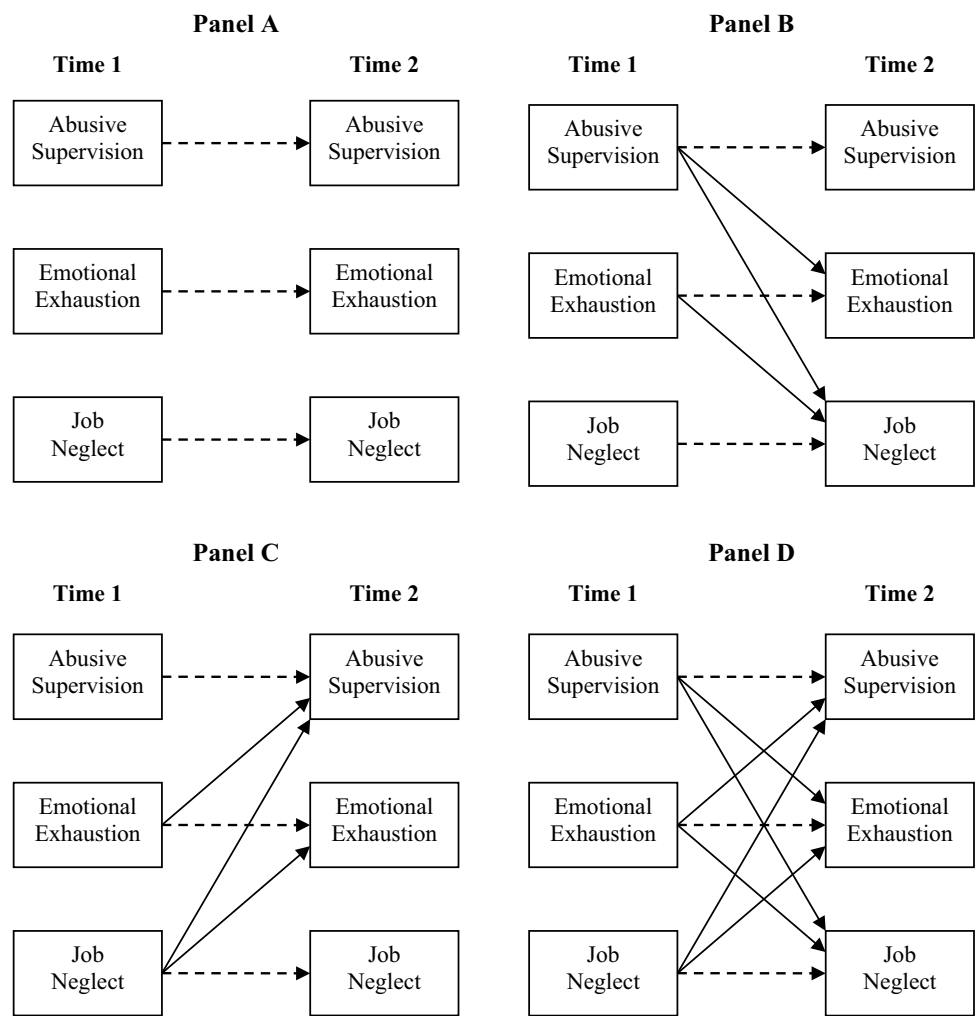


Table 3 Means, standard deviations, and correlations among constructs

Construct	1	2	3	4	5	6	7	8	9	10	11	12
<i>Time 1</i>												
1. Age	-											
2. Gender	0.025	-										
3. Tenure	0.096	0.026	-									
4. Education	0.051	-0.086	0.033	-								
5. AS	-0.058	-0.008	-0.038	-0.087	0.863							
6. EE	0.045	0.028	0.059	-0.050	0.539**	0.794						
7. JN	-0.046	-0.027	-0.040	-0.020	0.367**	0.321**	0.801					
8. SC	0.004	-0.025	0.004	-0.023	0.401**	0.161**	0.086	0.921				
<i>Time 2</i>												
9. AS	0.069	-0.028	0.078	-0.028	0.542**	0.567**	0.505**	0.162**	0.850			
10. EE	-0.019	-0.039	-0.020	-0.069	0.583**	0.649**	0.507**	0.165**	0.511**	0.796		
11. JN	-0.028	0.027	-0.019	-0.045	0.535**	0.604**	0.415**	0.209**	0.455**	0.503**	0.815	
12. SC	-0.040	-0.029	-0.037	-0.010	0.430**	0.281**	0.166**	0.603**	0.238**	0.245**	0.286**	0.922
Mean	30.625	0.187	7.209	1.471	3.981	3.856	4.339	3.096	4.241	3.951	4.163	3.068
SD	5.094	0.391	3.591	0.652	0.806	0.725	0.582	1.114	0.696	0.720	0.722	1.145

AS abusive supervision; EE emotional exhaustion; JN job neglect; SC self-compassion. Square root of the average variance extracted value on the diagonal in bold. ** $p < 0.01$

the power of our tests, we left the control variables out of the regression analyses (Becker, 2005). It should be noted that abusive supervision constitutes a low base-rate phenomenon (Aryee et al., 2008); however, the mean scores of abusive supervision in our study were higher at both T1 and T2 compared to the average mean score across prior research on abusive supervision (Mackey et al., 2017). One possible explanation for this is that nurses are a high-risk occupational group for exposure to workplace abuse perpetrated mainly by supervisors (Havaei et al., 2020; Pradhan & Jena, 2018), particularly in high power distance countries like Pakistan (Karatuna et al., 2020; Malik et al., 2020).

Measurement model

The results of a series CFAs conducted in Amos 20.0 using the maximum likelihood method indicated that the proposed four-factor model provided a good fit to the data at both T1 [$\chi^2(224) = 297.457$, $p = 0.001$; RMSEA = 0.032; CFI = 0.991; TLI = 0.989; SRMR = 0.025] and T2 [$\chi^2(224) = 302.140$, $p = 0.000$; RMSEA = 0.033; CFI = 0.990; TLI = 0.989; SRMR = 0.030] compared to alternative models (see Table 4). The composite reliability

coefficient for each scale was higher than 0.7 at both waves, thus demonstrating satisfactory internal consistency. Results showed that all factor loadings were significant and greater than the recommended value of 0.7 at both waves, except for two items of the self-compassion scale (i.e., SC3 “When something painful happens I try to take a balanced view of the situation” and SC12 “I’m intolerant and impatient towards those aspects of my personality I don’t like”). Specifically, these two items had factor loadings less than 0.5 and were thus omitted from analysis at both T1 and T2. Further, all the average variance extracted estimates exceeded the cut-off value of 0.5 with values ranging from 0.631 to 0.848 at T1 and 0.633 to 0.850 at T2, thereby demonstrating convergent validity (Hair et al., 2018). Lastly, using the Fornell and Larcker (1981) criterion, discriminant validity was demonstrated at both measurement times as for each scale the square root of its average variance extracted value was greater than the construct’s respective correlation with all other constructs (see Table 3).

Measurement invariance

After evaluating the measurement model, we proceeded to test measurement invariance. In this regard, configural

Table 4 Comparison of alternative measurement models

Model	χ^2 (df)	p	RMSEA	CFI	TLI	SRMR
Time 1						
Four-factor model: Hypothesized model	297.457 (224)	.001	0.032	0.991	0.989	0.025
Three-factor model a: Combined AS and EE items	578.068 (227)	.000	0.068	0.955	0.950	0.056
Three-factor model b: Combined AS and JN items	1109.485 (227)	.000	0.109	0.887	0.874	0.106
Three-factor model c: Combined EE and JN items	701.849 (227)	.000	0.080	0.939	0.932	0.914
Two-factor model: Combined AS, EE, and JN items	1380.656 (229)	.000	0.123	0.852	0.837	0.116
One-factor model: All factors combined	2905.602 (230)	.000	0.188	0.657	0.623	0.211
Time 2						
Four-factor model: Hypothesized model	302.140 (224)	.000	0.033	0.990	0.989	0.030
Three-factor model a: Combined AS and EE items	609.581 (227)	.000	0.071	0.951	0.945	0.069
Three-factor model b: Combined AS and JN items	1113.663 (227)	.000	0.109	0.886	0.873	0.104
Three-factor model c: Combined EE and JN items	613.950 (227)	.000	0.072	0.950	0.945	0.067
Two-factor model: Combined AS, EE, and JN items	1373.413 (229)	.000	0.123	0.853	0.837	0.109
One-factor model: All factors combined	2929.664 (230)	.000	0.189	0.653	0.618	0.220

AS abusive supervision; EE emotional exhaustion; JN job neglect

invariance was supported as the relations between each indicator and its construct had the same pattern of fixed and freed loadings at both measurement times and the configural invariance model (Model 1) demonstrated good fit to the data: $\chi^2(938) = 1125.055$, $p = 0.000$; RMSEA = 0.025; CFI = 0.988; TLI = 0.987; SRMR = 0.027. Further, to test for metric invariance, the factor loadings of the 23 items were constrained to be equal across time. These equality constraints increased the χ^2 value from 1125.055 to 1153.578, adding 23 degrees of freedom. As the metric invariance model (Model 2) was nested within the configural invariance model (Model 1), we performed the chi-square difference test (Teo et al., 2009). Results indicated that the χ^2 difference of 28.523 with 23 degrees of freedom was non-significant ($p = 0.197$), lending support to metric invariance. With the support for metric invariance model (Model 2), scalar invariance was tested by constraining the intercepts of the 23 items to be equal across time. A chi-square difference test comparing the scalar invariance model (Model 3) and the metric invariance model (Model 2) revealed that the χ^2 difference of 80.921 with 23 degrees of freedom was statistically significant ($p = 0.000$), thus scalar invariance was not supported. The series of tests for scalar invariance revealed that 9 out of the 23 intercepts were non-invariant. Accordingly, Model 3 was modified by freeing the non-invariant intercepts across time. The χ^2 difference between the re-specified scalar invariance model (Model 3a) and the metric invariance model (Model 2) was no longer statistically significant, $\Delta\chi^2(14) = 17.516$, $p = 0.131$. Thus, partial scalar invariance was supported.

Hypothesis testing

Goodness-of-fit indices of the competing models and model comparisons are displayed in Table 5. The chi-square difference test showed that the reciprocal model fitted the data well compared to the stability model ($\Delta\chi^2 = 226.950$; $\Delta df = 6$; $p = 0.000$), the normal causal model ($\Delta\chi^2 = 94.515$; $\Delta df = 3$; $p = 0.000$), and the reversed causal model ($\Delta\chi^2 = 118.525$; $\Delta df = 3$; $p = 0.000$). As depicted in Fig. 2, our autoregression

estimates indicated that the self-compassion scale showed the strongest temporal stability, followed by emotional exhaustion and abusive supervision. However, the temporal stability of job neglect was relatively weaker but statistically significant. Figure 2 displays all significant standardized cross-lagged relationships obtained from the reciprocal model. Specifically, it was found that abusive supervision at T1 was positively associated with job neglect at T2 ($\beta = 0.240$; $p = 0.000$), and likewise, job neglect at T1 was positively associated with abusive supervision at T2 ($\beta = 0.307$; $p = 0.000$). Moreover, it was found that abusive supervision at T1 was positively associated with emotional exhaustion at T2 ($\beta = 0.270$; $p = 0.000$), and also, emotional exhaustion at T1 was positively associated with abusive supervision at T2 ($\beta = 0.335$; $p = 0.000$). Finally, as predicted, emotional exhaustion at T1 was positively associated with job neglect at T2 ($\beta = 0.407$; $p = 0.000$), and similarly, job neglect at T1 was positively associated with emotional exhaustion at T2 ($\beta = 0.276$; $p = 0.000$). Overall, our results supported Hypotheses 1a, 1b, and 1c.

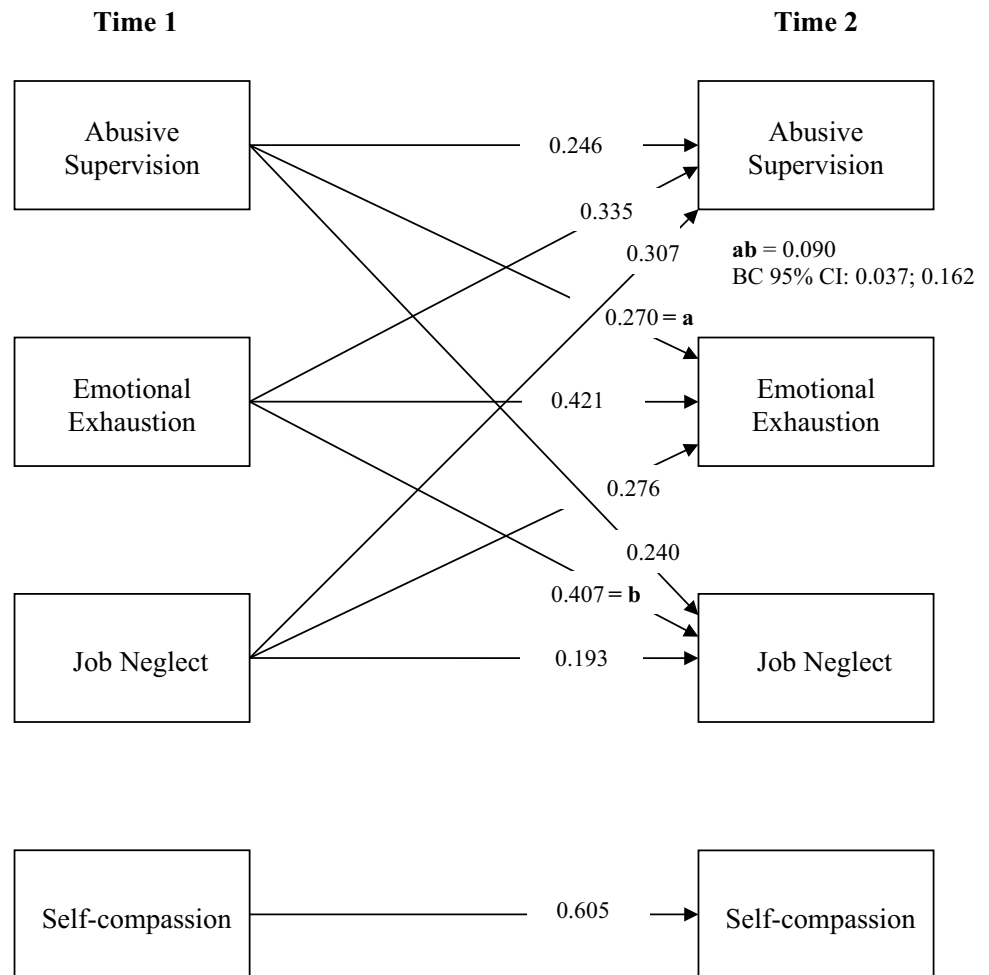
Following the guidelines of Cole and Maxwell (2003), the mediated effect (ab) of abusive supervision at T1 on job neglect at T2 via emotional exhaustion at T1 was defined as the product of the Path a (the effect of abusive supervision at T1 on emotional exhaustion at T2, controlling emotional exhaustion at T1) and the Path b (the effect of emotional exhaustion at T1 on job neglect at T2, controlling for job neglect at T1). The results of the phantom model approach (Macho & Ledermann, 2011) using 5000 bootstrap resamples indicated that emotional exhaustion at T1 partially mediates the relationship between abusive supervision at T1 and job neglect at T2 with a point estimate of 0.090 and a bias-corrected 95% confidence interval of 0.037 to 0.162, lending support to Hypothesis 2. Although, we did not hypothesize the mediating role of emotional exhaustion in the reverse causal direction, our results indicated that emotional exhaustion at T1 also partially mediates the relationship between job neglect at T1 and abusive supervision at T2 with a point estimate of 0.086 and a bias-corrected 95% confidence interval of 0.054 to 0.128.

Table 5 Goodness-of-fit indices and model comparisons

Model	χ^2 (df)	p	RMSEA	CFI	TLI	SRMR	Comparison	$\Delta\chi^2$	Δdf
Stability (M ₁)	520.867 (277)	.000	0.052	0.959	0.952	0.148			
Normal (M ₂)	388.432 (274)	.000	0.036	0.981	0.977	0.080	M ₁ vs. M ₂	132.435***	3
Reversed (M ₃)	412.442 (274)	.000	0.039	0.977	0.973	0.108	M ₁ vs. M ₃	108.425***	3
Reciprocal (M ₄)	293.917 (271)	.162	0.016	0.996	0.995	0.027	M ₁ vs. M ₄	226.950***	6
							M ₂ vs. M ₄	94.515***	3
							M ₃ vs. M ₄	118.525***	3

*** $p < 0.001$

Fig. 2 Standardized path coefficients for the final (reciprocal) model. Factor loadings, error covariances between Time 1 and Time 2 indicators, covariances among exogenous latent variables, covariances among Time 2 disturbance terms, and non-significant paths are omitted for the sake of clarity. All path coefficients are significant at $p < 0.001$



To examine the moderating role of self-compassion (SC) at T1 in the relationship between abusive supervision (AS) at T1 and emotional exhaustion at T2, we created a T1 latent interaction term ($AS \times SC$) with all possible products and added it in the reciprocal model to predict emotional exhaustion at T2. As suggested by Algina and Moulder (2001), all indicators were mean-centered before creating the product indicators to facilitate interpretation of the results. As depicted in Fig. 3, for the association between the latent interaction factor ($AS \times SC$) at T1 and emotional exhaustion at T2, we found a significant negative effect ($\beta = -0.167$; $p = 0.000$), lending support to Hypothesis 3. Figure 4 elaborates the moderating role of self-compassion. The significance of the interaction effect was further explored using the simple slope analysis (Aiken & West, 1991) procedure, by comparing the regression coefficients of abusive supervision at T1, at three levels of self-compassion at T1, that is, at the mean and ($\pm 1SD$). Consequently, the findings suggested that the positive effect of abusive supervision at T1 on emotional exhaustion at T2 was stronger

at lower levels of self-compassion ($\beta = 0.488$; $p = 0.000$), moderate at medium levels of self-compassion ($\beta = 0.344$; $p = 0.000$), and weaker (only marginally significant) at higher levels of self-compassion at T1 ($\beta = 0.156$; $p = 0.049$).

Finally, the results of moderated mediation analysis revealed that the index of moderated mediation was negative and statistically significant with a point estimate of -0.027 and a bias-corrected 95% confidence interval of -0.051 to -0.008 . As predicted, the conditional indirect effect of abusive supervision at T1 on job neglect at T2 via emotional exhaustion at T1 was stronger at lower levels ($-1SD$) of self-compassion at T1 with a point estimate of 0.091 and a bias-corrected 95% confidence interval of 0.033 to 0.154 . Further, as shown in Table 6, the conditional indirect effect of abusive supervision at T1 on job neglect at T2 via emotional exhaustion at T1 was weaker and non-significant at higher levels ($+1SD$) of self-compassion at T1 as the bias-corrected 95% confidence interval contained zero [-0.001 ; 0.069]. As such, Hypothesis 4 was fully supported.

Fig. 3 Standardized path coefficients for the final (reciprocal) model including the latent interaction term. Factor loadings, error covariances between Time 1 and Time 2 indicators, covariances among exogenous latent variables, covariances among Time 2 disturbance terms, and non-significant paths are omitted for the sake of clarity. All path coefficients are significant at $p < 0.001$

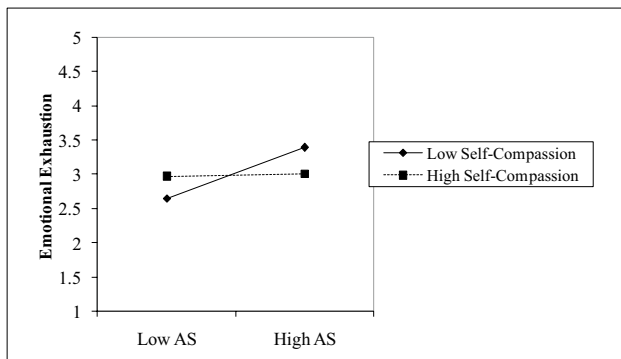
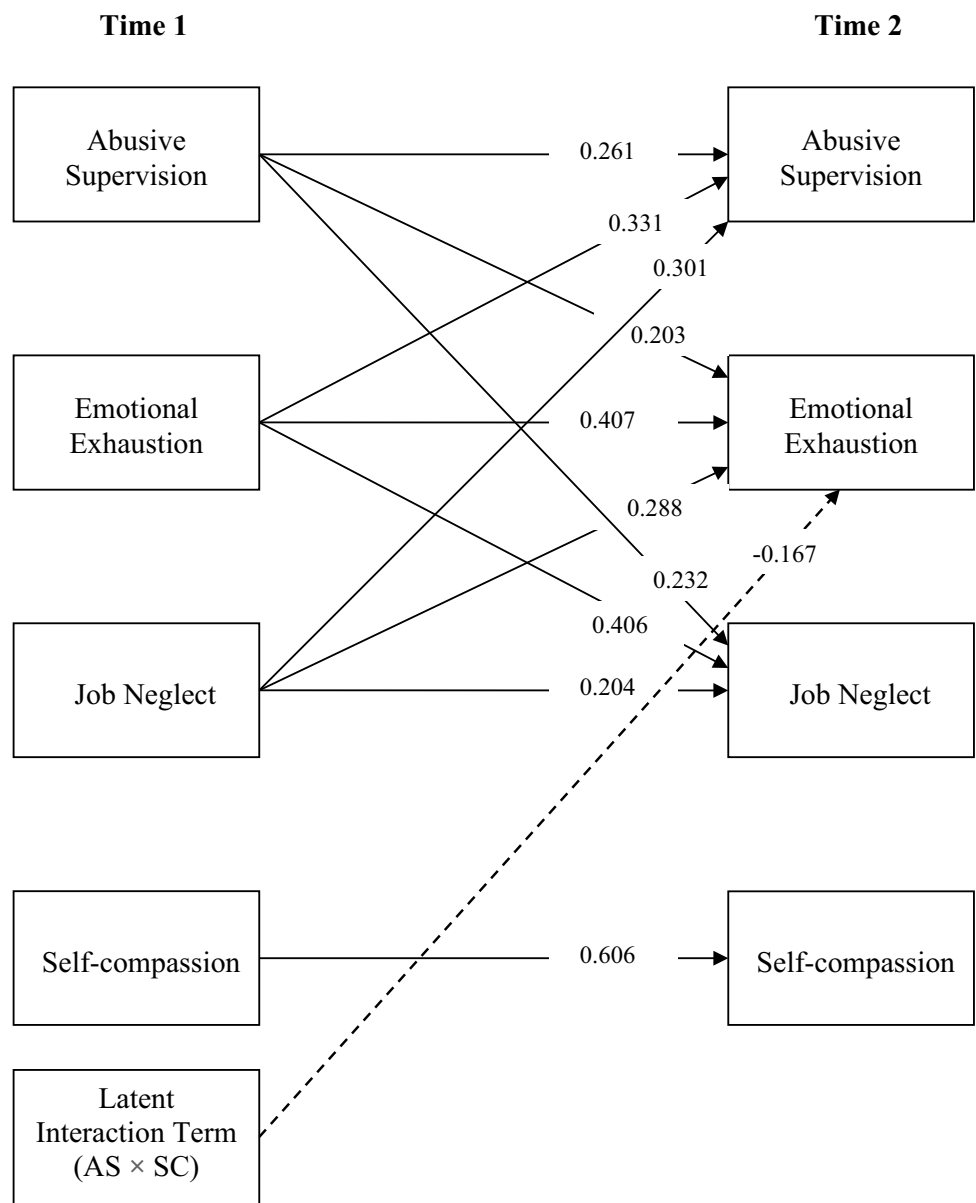


Fig. 4 The moderating role of self-compassion on abusive supervision and emotional exhaustion

Table 6 Conditional indirect effects

Self-compassion (moderator)	Indirect effect	SE	Bias-corrected 95% confidence interval	
			Lower	Upper
Low (Mean - 1SD)	0.091	0.031	0.033	0.154
Mean	0.064	0.023	0.022	0.112
High (Mean + 1SD)	0.029	0.018	-0.001	0.069
Index of moderated mediation	-0.027	0.011	-0.051	-0.008

Discussion

Although abusive supervision has been an important area of research during the past two decades, research on the reciprocal and dynamic nature of the supervisor-subordinate relationships is somewhat underdeveloped, as evident in the recent systematic review that pointed out that only a limited number of studies have examined abusive supervision as a longitudinal phenomenon (Fischer et al., 2021). This study offers insights into how abusive relationships among supervisors and subordinates evolve in the workplace. Drawing upon the JD-R model (Demerouti et al., 2001) and COR theory (Hobfoll, 1989), we proposed and tested reciprocal relationships between abusive supervision, subordinates' emotional exhaustion, and job neglect. We used longitudinal SEM to compare nested models. Our results demonstrated that the proposed reciprocal model fitted the data better than the three competing nested models (i.e., stability, normal causal, and reversed causal). One of the important findings of this study is that abusive supervision and subordinates' job neglect are mutually reinforcing. In the present study, we adopted a theoretical lens to antecedents of abusive supervision that is different from the mainstream research on abusive supervision, which assumes that exposure to abusive supervision triggers subordinates' destructive behavior often leading us to blame supervisors for abusing their power i.e., 'the bad apples' approach (O'Boyle et al., 2011). Our results suggest that supervisors may use abusive behavior in response to subordinates' destructive behavior, possibly to correct them, lending support to the notion that a 'bad worm' can possibly create a 'bad apple' (Martinko et al., 2017). The reversed relationship between abusive supervision and job neglect is in line with the victim precipitation literature, which examines the role of personalities, attitudes, or actions that put people at risk of becoming targets of aggressive and hostile responses. In the context of supervisor-subordinate relationships, a subordinate who puts little effort into his or her work may be perceived as frustrating, aggravating, and annoying by the supervisor. Thus, the perception that employees intentionally reduce work effort has the potential to evoke victimization in the form of abusive supervision (Tepper et al., 2011). From a victimization view, subordinates who engage in job neglect may represent provocative victims, while supervisors who engage in corrective abusive behaviors represent perpetrators (Lian et al., 2014a). Supporting the notion that a subordinate is partly responsible for abusive supervision, Tepper et al. (2011) in their study found that subordinates who are low performers may become targets of abusive supervision because they fit the provocative victim profile, that is, annoying, aggravating, and difficult to work with. Interestingly, Khan et al. (2018) found that

high performers may also invite abusive supervision. Further, we found that abusive supervision and subordinates' emotional exhaustion are mutually related. This finding is compatible with the notion of 'loss spirals' that originates from Hobfoll's (1989) COR theory. The idea of loss spirals is also incorporated in the health impairment process of the JD-R model (Demerouti et al., 2001) to explicate reciprocal relationships between job demands and strain. Thus, applied to our study, exposure to abusive supervision leads to emotional exhaustion among subordinates, and emotionally exhausted subordinates, in turn, may perceive more abusive supervision over time, leading to a vicious cycle of resource loss. We also found that subordinates' emotional exhaustion and job neglect are mutually related, suggesting that emotionally exhausted employees may engage in job neglect as a passive coping tactic to protect their limited resources, and subordinates' display of job neglect may endanger their valuable job-related resources (e.g., supervisor and coworker social support), which may, in turn, lead to more emotional exhaustion over time.

Results of mediational analysis revealed that emotional exhaustion partially mediates the cross-lagged relationship between abusive supervision and job neglect. This finding is in line with the health impairment process of the JD-R model suggesting that sustained exposure to abusive supervision drains subordinates' mental and physical resources leading them to a state of exhaustion, and emotionally exhausted subordinates may engage in psychological withdrawal behaviors to avoid further resource loss (Huang et al., 2020). Results also demonstrated that emotional exhaustion plays a partial mediating role in the abusive supervision-job neglect link in the reverse causal order, suggesting that subordinates who engage in job neglect may threaten their social resources at work leading to emotional exhaustion over time. In turn, emotionally exhausted subordinates may perceive the behavior of their supervisors as more abusive because these distressed subordinates have a gloomier perception of the external environment than their non-distressed counterparts (De Lange et al., 2005). Finally, we found that self-compassion, representing a personal resource, moderates the cross-lagged relationship between abusive supervision and emotional exhaustion, suggesting that after being exposed to abusive supervision, subordinates high on self-compassion may treat themselves kindly, recognize their victimization experience as shared experience in the workplace, and do not feel overwhelmed with the associated negative feelings, leading to less emotional exhaustion. The stress-buffering effect of self-compassion is consistent with one of the propositions of the JD-R model which proposes that job demands and personal resources may interact

with each other to predict emotional exhaustion (Bakker & Demerouti, 2017). Supporting the proposed moderated mediation model, our results showed that the indirect effect of abusive supervision on job neglect via emotional exhaustion was weaker at higher levels of self-compassion.

The study makes several theoretical contributions. First, we respond to the calls of Bowling and Gruys (2010) and Mackey (2021), who have suggested future researchers to reconsider the broad conceptualizations of workplace deviance construct. Bowling and Gruys (2010) noted that workplace deviance is a situation-specific construct and its measure should include key behaviors that are important to a specific job or organization. More recently, researchers have begun to focus on several sub-dimensions of workplace deviance, beyond those that have typically been examined in the literature, such as job neglect, time theft, and sabotage (e.g., Hu et al., 2022; McLarty et al., 2021; Xu et al., 2022). In our opinion, job neglect might be most relevant for service organizations, such as hospitals, as this particular type of dysfunctional behavior can have detrimental effects on service quality and customer satisfaction, ultimately leading to poor organizational performance. Due to the practical and theoretical importance of job neglect, it becomes imperative to investigate its predictors and outcomes. Accordingly, we incorporated job neglect into our research model and found support for the reciprocal relationship between abusive supervision and subordinates' display of job neglect. Second, we extend the work of Whitman et al. (2014) by examining the reciprocal relationship between abusive supervision and subordinates' emotional exhaustion. Importantly, we demonstrated that subordinates who are emotionally exhausted as a result of abusive supervision are more likely to perceive their supervisors as more abusive over time, lending support to the gloomy perception mechanism (De Lange et al., 2005). The so-called gloomy perception mechanism has received some empirical support in the workplace bullying and leadership literatures (e.g., Nielsen et al., 2012; Birkeland et al., 2016); however, to our knowledge, this is first study in the abusive supervision literature to propose and test the notion that unhealthy employees are more likely to report higher levels of abusive supervision than their healthy counterparts. This finding highlights the importance of providing treatment options to emotionally exhausted employees to reduce their negative perceptual biases. Theoretically, this finding underscores the need to incorporate reciprocity between abusive supervision and subordinates' health-related outcomes into future research models to fully understand the phenomenon of abusive supervision in the workplace. Third, our results provide a novel insight into the emotional exhaustion-job neglect process by demonstrating that emotionally exhausted employees engage in job neglect in effort to protect their limited resources. However, employees' display of job neglect may endanger their job-related resources, leading to subsequent emotional

exhaustion. Fourth, we extend the work of Lian et al. (2014a) by identifying subordinates' emotional exhaustion as an underlying mechanism linking abusive supervision and job neglect in both forward and reverse causal directions. We fully acknowledge that there is some empirical evidence showing that subordinates' emotional exhaustion transmits the effect of abusive supervision to workplace deviance (e.g., Chi & Liang, 2013); however, researchers have focused mainly on supervisor-related factors while linking abusive supervision to workplace deviance in the reverse causal direction (e.g., Eissa et al., 2020; Shillamkwese et al., 2020). In this study, we demonstrated that when emotionally exhausted employees engage in job neglect as a passive coping mechanism to protect their limited resources in response to abusive supervision, they may actually be worse off as they may lose valuable job-related resources and their dysfunctional behavior may cause more emotional exhaustion over time, and ultimately they may perceive higher levels of abusive supervision as they have a lowered threshold for interpreting certain behaviors as abusive (Nielsen et al., 2012). On the other hand, research has revealed that employees who engage in constructive coping strategies such as voice behavior in response to interpersonal stressors at work might acquire additional resources that could be utilized to deal with those stressors more effectively (Ng & Feldman, 2012). Fifth, we extend the abusive supervision literature by identifying self-compassion (a personal resource) as a boundary condition that attenuates the positive cross-lagged relationship between abusive supervision and emotional exhaustion, and in turn, the indirect effect of abusive supervision on job neglect. Identifying the stress-buffering effect of self-compassion on emotional exhaustion, opens up the possibility to equip employees with an adaptive mindset that helps them cope with abusive supervision in a constructive manner (Pradhan & Jena, 2018). Lastly, meta-analytic reviews have pointed out that most of the studies on abusive supervision have used cross-sectional designs (e.g., Martinko et al., 2013; Zhang & Bednall, 2016). Recently, Fischer et al. (2021) noted that studies should examine abusive supervision as a processual and hence longitudinal phenomenon, and further highlighted that improper modeling of temporal unfolding can lead to severe empirical distortions. The use of a cross-sectional design in abusive supervision research has two major shortcomings. First, a cross-sectional design does not capture the dynamism inherent in the supervisor-subordinate relationships (e.g., Simon et al., 2015). Second, cross-sectional studies provide biased and potentially very misleading estimates of mediational processes (e.g., Cole & Maxwell, 2003; Kline, 2015). Against this methodological backdrop, we used a cross-lagged panel design to simultaneously test possible reciprocal relations between abusive supervision, emotional exhaustion, and job neglect, and to examine the mediating role of emotional exhaustion in the abusive supervision-job neglect relationship in a more robust manner.

Our findings offer practical implications for healthcare organizations. First, our results indicated that abusive supervision triggers nurses' job neglect. Accordingly, healthcare organizations should adopt an organization-wide zero tolerance policy against abusive behavior to avoid the trickle-down effect of abusive supervision. Besides, healthcare organizations can provide supportive supervision training to nursing supervisors to curtail abusive supervision. Such a training program can help to persuade nursing supervisors of the benefits to themselves, their subordinates, and the organization of substituting supportive supervision for mistreatment (Gonzalez-Morales et al., 2018). Due to the sensitive nature of abusive supervision, nurses may be reluctant to report abusive supervision as they may fear counter-retaliation. Accordingly, healthcare organizations should strive to set up channels for nurses to anonymously report incidents of abusive supervision and must also ensure procedural fairness (Shum, 2020). Second, our results showed that nurses' job neglect serves as an antecedent to abusive supervision. Thus, healthcare organizations should expose new recruits to a high-performance culture during the socialization process to promote the value the organization places on superior performance (Bennett & Naumann, 2005). Psychological withdrawal might also be prevented by developing an ethical environment characterized by ethical values, codes of conduct, ethical training, and leaders' role modeling (Kidwell & Valentine, 2009). Third, and perhaps more important, our findings indicated that abusive supervision and subordinates' job neglect mutually reinforce each other suggesting that training programs and interventions targeting both nurses and supervisors would be more useful in preventing abusive supervision. Such training programs may provide information to organizational members about what abusive and psychological withdrawal behaviors entail and how these behaviors can destructively reinforce each other over time, thus fueling a vicious cycle of behavior (Simon et al., 2015). Fourth, healthcare organizations should consider treatment options to improve the mental health of employees as our results indicate that employees with poor mental health may perceive the behavior of their supervisors as more abusive compared to their counterparts. Lastly, our results showed that self-compassion buffered the cross-lagged effect of abusive supervision on emotional exhaustion suggesting that there is potential value in developing nurses' self-compassion. Self-compassion is a malleable construct that can be cultivated to build employee resilience at work (Ferrari et al., 2019). Interventions that enhance self-compassion such as compassion-focused therapy and mindful self-compassion may be particularly effective to reduce

burnout in nurses (Duarte et al., 2016). Moreover, writing encouraging letters to oneself from the perspective of a compassionate friend and meditating on compassion can also help boost one's self-compassion (Ma et al., 2022). Importantly, nurses need to take ownership of being self-compassionate, yet recognition from their supervisors, organization, and the nursing culture is also important. Nurses should employ the skills of self-compassion more proactively rather than reactively in response to stressful situations such as repeating self-compassionate phrases everyday as much as possible to reinforce a positive attitude toward themselves (Andrews et al., 2020; Ma et al., 2022).

There are potential limitations of our study that deserve attention. First, although we tested our hypotheses using a two-wave cross-lagged panel design, a more comprehensive investigation of the cross-lagged effects between abusive supervision, emotional exhaustion, and job neglect would require a multi-wave study (three or more measurement occasions). Further, the choice of the specific time lag was based on pragmatic rather than theoretical reasons. Although pragmatic, the six-month time lag has been the most typical time interval in studies on stressor-strain relationships (e.g., Rodríguez-Muñoz et al., 2015). With that being said, future research may use different time lags so as to determine whether the results of this study are replicable. Second, while half-longitudinal mediation models are more robust compared to simple mediation models (Little, 2013), the stationarity assumption and that a certain time interval must elapse for one variable to have an impact on another were violated to some extent due to the lack of a third wave of data (Cole & Maxwell, 2003). Thus, indirect effects reported in this study must be interpreted with caution (Wynne et al., 2016). Third, as we collected data from a single source, our results may have been affected by common method bias. However, the longitudinal design addresses some of the issues of common method bias and unmeasured third variables, as prior levels of the variables are controlled for to a degree (Xanthopoulou et al., 2009). Besides, CFA in which all items loaded onto a single factor had a poor fit to the data. Importantly, it has been noted that self-report data is more valid approach for measuring psychological withdrawal behaviors as well as perceptual and internal states (Lian et al., 2014a). Having said that, collecting data from multiple sources should be attempted in future research. Fourth, Mitchell and Ambrose (2007) found support for two distinct factors (passive-aggressive and active-aggressive abusive supervision) when reanalyzing the data that Tepper (2000) used to develop his abusive supervision scale. In this study, we only utilized the active-aggressive dimension as it was most consistent with our interest. Fifth, the development of hypotheses focused

only on the health impairment process of the JD-R model to the exclusion of the motivational process. As these two psychological processes are fairly independent, the majority of studies using the JD-R model as a theoretical framework have focused either on the health impairment process or the motivational process, and only a small number of studies have considered both processes simultaneously (Lesener et al., 2019). Sixth, all data were collected from nurses working at government hospitals in Pakistan, which calls generalizability into question. More research is warranted using samples from different industries and cultures to cross-validate the results of the present study. Besides, the sample was predominantly composed of female nurses as more women than men enter the nursing profession. More research with samples having equal representation of both genders is warranted to replicate our results. Future research might also investigate the moderating role of gender in the cross-lagged relationships examined in this study.

Conclusions

In conclusion, by underscoring the temporal and dynamic nature of supervisor-subordinate relationships, this study adds to our understanding of how subordinates' behaviors can encourage and reinforce abusive supervision, and thus, how discrete incidents of abuse can gradually evolve into full-blown abusive supervision over time. The reciprocal relationship between abusive supervision and subordinate job neglect suggests that interventions focusing on both supervisors and subordinates might be more valuable to minimize the costs associated with abusive supervision. Organizations should also consider treatment options to improve employees' psychological health. Moreover, individuals high in self-compassion are better positioned to cope with stress caused by supervisory abuse.

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Data availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethical approval The study was reviewed and approved by the Board of Advanced Studies and Research (BASAR), COMSATS University Islamabad, Islamabad, Pakistan.

Informed consent Informed consent was obtained from all individual participants included in the study.

Conflict of interest The authors state that there is no conflict of interest.

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