In press

Journal of Occupational and Organizational Psychology

For Who and Why Organizational Dehumanization is Linked to Deviant Behaviors

ORGANIZATIONAL DEHUMANIZATION AND DEVIANT BEHAVIORS

Florence Stinglhamber[1]*, Nathan Nguyen[1], Marc Ohana[2], Constantin Lagios[1], Stéphanie Demoulin[1], and Pierre Maurage[1]

[1] Psychological Sciences Research Institute, Université catholique de Louvain, Louvain-la-Neuve, Belgium

[2] Kedge Business School, Talence, France

*Corresponding author information: Florence Stinglhamber, Place Cardinal Mercier, 10, L3.05.01, 1348 Louvain-la-Neuve, Belgium, (e-mail: florence.stinglhamber@uclouvain.be.

Abstract:

"We are humans not robots!" This protest slogan denounces a working reality in which employees perceive that they are reduced to a mere tool or instrument at the service of the organization. Such an experience refers to organizational dehumanization. Researchers have recently indicated that organizational dehumanization may shape employee work behaviors. However, why, and for who, organizational dehumanization leads to maladaptive work behaviors remains unclear in this literature. Drawing upon social exchange theory, we first propose that employees who experience organizational dehumanization engage in a reciprocity process by first developing thoughts of revenge that, in turn, materialize into more organizational deviance. We further argue that compliance buffers the indirect effect of organizational dehumanization on deviant behaviors via thoughts of revenge. Overall, the combined results of two experimental studies, a cross-sectional study, and two three-wave studies provide strong evidence for our hypothesized relationships. Our research suggests that when experiencing organizational dehumanization, compliant employees are less likely to engage in a homeomorphic reciprocity in the exchange relationship with their organization.

Keywords:

Organizational dehumanization; compliance; thoughts of revenge; organizational deviance

Data availability statement:

The data that support the findings of this research are available online on Open Science Framework at the following address: https://osf.io/g8vcw/?view_only=92aef722c19d4e599185163a9884d389.

Acknowledgements:

This study was funded by the "Fonds Spéciaux de la Recherche" of the Université catholique de Louvain and by the "Actions de Recherche Concertées" under grant n°16/20-071 of the French Community of Belgium.

Abstract

"We are humans not robots!" This protest slogan denounces a working reality in which employees perceive that they are reduced to a mere tool or instrument at the service of the organization. Such an experience refers to organizational dehumanization. Researchers have recently indicated that organizational dehumanization may shape employee work behaviors. However, why, and for who, organizational dehumanization leads to maladaptive work behaviors remains understudied in this literature. Drawing upon social exchange theory, we first propose that employees who experience organizational dehumanization engage in a reciprocity process by first developing thoughts of revenge that, in turn, materialize into more organizational deviance. We further argue that compliance buffers the indirect effect of organizational dehumanization on deviant behaviors via thoughts of revenge. Overall, the combined results of two experimental studies, a cross-sectional study, and two three-wave studies provide strong evidence for our hypothesized relationships. Our research suggests that when experiencing organizational dehumanization, compliant employees are less likely to engage in a homeomorphic reciprocity in their exchange relationship with the organization.

Keywords: Organizational dehumanization; compliance; thoughts of revenge; organizational deviance

For Who and Why Organizational Dehumanization is Linked to Deviant Behaviors

"I felt as if the company wanted us to be robots–never stopping, never letting our minds wander off task. I felt an incredible amount of pressure to repress the human "failings" that made me less efficient than a machine."

Emily Guendelsberger, July 2019, TIME

This working reality has been called organizational dehumanization (ODH). As a mistreatment from the organization (Nguyen & Stinglhamber, 2020, 2021), it represents the negative side of the employee-organization relationship (Caesens et al., 2017). Bell and Khoury (2011) defined ODH as "the experience of an employee who feels (...) like a tool or an instrument for the organization's ends" (p.168). Scholars have mainly studied the consequences of ODH on employee well-being and attitudes, showing that it reduces employee well-being (e.g., Caesens et al., 2017; Christoff, 2014) and positive work attitudes (e.g., Bell & Khoury, 2016; Caesens et al., 2019).

Recently, research has examined behavioral consequences of ODH. For instance, ODH engenders maladaptive behaviors and reduces adaptive ones (e.g., Demoulin et al., 2021; Muhammad & Sarwar, 2021; Nguyen, Dao et al., 2021; Nguyen, Cheung, & Stinglhamber, 2021; Sawar et al., 2021; Sarwar & Muhammad, 2021; Stinglhamber et al., 2021; Taskin et al., 2019). Given that the literature on the employee–organization relationship is dominated by social exchange theory (SET; e.g., Gibney et al., 2009), this theoretical framework has been used to theoretically explain the link between ODH and work-related behaviors (Ahmed & Khan, 2016; Muhammad & Sarwar, 2021; Sarwar & Muhammad, 2021; Stinglhamber et al., 2021). However, this framework has never been empirically tested, thus leaving unclear whether and how SET is useful in understanding such relationships.

We rely on the two-dimensional conceptualization that Cropanzano et al. (2017) proposed as an extension of SET, to explain why ODH may lead to maladaptive work

behaviors. Specifically, we propose that, although not the only possible reaction, employees experiencing ODH may seek to negatively and actively reciprocate such mistreatment by engaging in a revenge process. In particular, we examine whether thoughts of revenge may constitute the starting point of this revenge process (Greco et al., 2019) that, in turn, may lead to behaviors intentionally harming the organization (e.g., organizational deviance, defined as purposeful behaviors violating organizational norms to harm the organization; Bennett & Robinson, 2000[1]). Our first objective is thus to test the mediating role of thoughts of revenge in the relationship between ODH and employees' deviant behaviors toward their organization.

Second, we address the call of researchers who have emphasized the need to expand the literature on workplace behaviors by investigating the moderating factors of the workplace mistreatment-workplace behavior relationship (e.g., Michel et al., 2016). In particular, they argued that research should consider dispositional characteristics that help to build a more generalizable framework of workplace behaviors. Because compliance may be a personality trait capturing interindividual variations in the endorsement of the reciprocity norm that lies at the core of SET (Gouldner, 1960), we argue that it plays a key role in the social exchange relationships between employees and their organization. Specifically, we propose that compliance may buffer the deleterious effects of ODH on organizational deviance via thoughts of revenge. Our second objective is thus to expand the mediation model by exploring the moderating role of compliance. In doing so, this research goes one step further in understanding the social exchanges at stake between ODH and organizational deviance. Indeed, it examines for the first time the possibility that when faced with an equivalent

[1] Within the literature on workplace aggression, scholars regularly consider that deviant and counter-productive behaviors may be treated as interchangeable. Recently, Thrasher et al. (2020) however concluded that "although defined similarly, the tools used to measure counterproductive workplace behaviors and workplace deviance behaviors are very different in both their development and content" (p. 247). Since we are using the Bennett and Robinson's (2000) measure in the present research, we deliberately refer to deviant behaviors and not to counterproductive behaviors.

perception of ODH, employees may engage in a revenge process of different intensity depending on a dispositional characteristic.

Overall, our research advances the ODH literature by shedding light on why, and for who, ODH generates deviant behaviors (i.e., moderated mediation model). It also contributes to SET literature by proposing a theoretical model that is consistent with Cropanzano et al.'s (2017) one, which advances our understanding of how people are most likely to react when faced with a specific initiating action. Finally, by examining what triggers organizational deviance, this research provides insight into a workplace phenomenon that costs billions of dollars per year to organizations (Stewart et al., 2009) and clues to potential levers for reducing it in practice.

Organizational Dehumanization

ODH emerged from the social psychology literature on dehumanization, defined as a cognitive process in which humanity is denied to others (Haslam, 2006). Resulting from a form of dehumanization that Haslam (2006) described as "mechanistic", ODH is defined as the experience of an employee who feels treated as a tool or instrument for the organization's ends (e.g., Bell & Khoury, 2016; Caesens et al., 2017). ODH has been conceptualized as an organizational mistreatment (e.g., Nguyen & Stinglhamber, 2021) that theoretically differs from related constructs such as perceived organizational obstruction (for a literature review, see Brison et al., 2022). Furthermore, Nguyen, Besson, and Stinglhamber (2021) empirically showed that this organizational mistreatment differs from and predicts beyond other types of interpersonal mistreatments in the workplace, further demonstrating the specificity of ODH.

In recent years, ODH has received increasing attention from researchers in an effort to identify its nomological network. Specifically, in their recent literature review, Brison et al. (2022) identified six categories of predictors of ODH: societal factors (e.g., national culture; Nguyen, Dao et al., 2021), organizational characteristics (e.g., organizational rules; Lagios,

Nguyen et al., 2022), environmental factors (e.g., bad air quality or noise; Stinglhamber et al., 2022), job characteristics (e.g., job autonomy; Demoulin et al., 2021), interpersonal factors (e.g., abusive supervision; Caesens et al., 2019), and individual factors (e.g., negative affectivity; Nguyen, Besson, & Stinglhamber, 2021). It was all the more important to identify these antecedents because ODH has very deleterious consequences for both employees and organizations. First, ODH impairs employees' well-being and fosters negative attitudes toward the organization. For instance, employees experiencing ODH reported low job satisfaction, more emotional exhaustion, and psychological strains (e.g., Caesens et al., 2019; Lagios et al., 2022), but also more intentions to quit the organization and low organizational commitment (e.g., Caesens et al., 2017; Nguyen, Dao et al., 2021). To explain these harmful effects, scholars (e.g., Christoff, 2014) suggested that ODH frustrates employees' basic psychological needs. Relying on self-determination theory (SDT; Deci & Ryan, 2000), Lagios, Caesens et al. (2022) empirically showed that psychological need thwarting indeed mediates some of these relationships.

Second, beyond affecting employee well-being and attitudes, ODH also leads to maladaptive work-related behaviors. For instance, ODH may lead to dysfunctional coping behaviors (Demoulin et al., 2021), malfunctioning socio-emotional behaviors (Nguyen, Besson, & Stinglhamber, 2021), less proactive behaviors (Stinglhamber et al., 2021), impaired in-role job performance (Sarwar & Muhammad, 2021), and deviant behaviors (Ahmed & Khan, 2016; Muhammad & Sarwar, 2021; Sarwar et al., 2021). Studies on the mechanisms underlying these relationships primarily relied on conservation of resources theory (COR; Hobfoll, 1989). In this vein, Sarwar et al. (2021) showed that job stress mediates the ODH-deviant behaviors relationship among nurses, whereas Muhammad and Sarwar (2021) and Sarwar and Muhammad (2021) found that perceived incivility mediates the relationships between ODH and both mild deviant behaviors (i.e., knowledge hiding and

time theft) and employee performance in the hotel industry. Beyond the COR theory, scholars also built on SET (Cropanzano & Mitchell, 2005) and negative reciprocity (Gouldner, 1960) to explain why ODH would lead to detrimental behaviors (Ahmed & Khan, 2016; Lagios, Caesens, et al., 2022; Muhammad & Sarwar, 2021; Sarwar & Muhammad, 2021; Stinglhamber et al., 2021). Although proposed theoretically, SET has not yet been empirically demonstrated to be relevant in understanding these relationships. We thus rely on this theoretical framework to specifically examine the relationship between ODH and organizational deviance.

The Role of Thoughts of Revenge in the Organizational Dehumanization-Deviant Behaviors Relationship

As mentioned earlier, ODH is a construct that negatively characterizes the employee-organization relationship (Caesens et al., 2017). The literature on the latter is dominated by SET (e.g., Gibney et al., 2009), considering employees and organizations as partners who exchange resources. At the heart of SET lies the norm of reciprocity (Gouldner, 1960), which states that employees view their relation with the organization as a social exchange in which each entity seeks to return and reciprocate the benefits (e.g., material and socio-emotional rewards), as well as the injuries (e.g., mistreatment) received to maintain balance in the social exchange.

Traditional approaches to reciprocity (e.g., Gouldner, 1960) have focused on its hedonic value, i.e. on the valence of the initiating action which will condition the valence of the reciprocal response: a positive conduct will generate a positive response in return, and conversely. While positive reciprocity focuses on the obligation to repay desirable actions with desirable responses, negative reciprocity holds “sentiments of retaliation where the emphasis is placed not on the return of benefits but on the return of injuries” (Gouldner, 1960, p.172).

Accordingly, employees retaliate against perceived injustices (Skarlicki & Folger, 1997), identity threats (Aquino & Douglas, 2003), trust violations (Bies & Tripp, 1996), and personal offense (Aquino et al., 2001). Although individuals may reciprocate those negative experiences by displacing their aggression onto others (Marcus-Newhall et al., 2000), Greco et al. (2019) indicated that individuals tend to return the injuries directly to the source of those negative experiences, that is, engaging in "negative reciprocity with the idea of an eye for an eye" (p.1118).

In 2017, Cropanzano et al. insisted on a second dimension of reciprocity, i.e. its level of activity. This dimension captures that an entity can *actively* engage in an action or a behavior (which may be either desirable or not) or *inactively* withhold it (which again may be either desirable or not). The authors proposed to cross the two dimensions so that there would be "homeomorphic reciprocity" when people reciprocate to an initiating action with a response that matches in terms of both hedonic value and level of activity. Cropanzano et al. (2017) further suggested that even though other responses are possible, people preferably and commonly opt for congruence on both dimensions in their social exchanges.

In line with this two-dimensional conceptualization, ODH represents an undesirable and active action or treatment from the organization, reducing its employee to a mere object. Employees experiencing ODH may therefore seek to restore the balance in their exchange relationship with their organization by adopting homeomorphic reciprocity and displaying negative and active behaviors toward this organization in return (Cropanzano et al., 2017). In the present research, we propose that employees confronted with ODH may, in a first stage and before engaging in active behaviors, develop thoughts of revenge – which characterize the desire to harm back the entity blamed for the offense (Sukhodolsky et al., 2001). Specifically, by generating thoughts of revenge, ODH would initiate a cognitive process that underlies the homeomorphic reciprocity. Supporting this idea, researchers showed that when

employees experience aggression or mistreatment in the workplace, they tend to develop thoughts of revenge toward the source of those negative experiences, driven by a desire for revenge (e.g., Jones, 2009; Karatuna & Gök, 2014; Liu et al., 2010).

In a second stage, thoughts of revenge, induced by ODH, may lead employees to actively engage in work-related behaviors commensurate with the strength and valence of the mistreatment received. We focus on organizational deviance, as it consists of a set of work-related behaviors designed to intentionally harm the organization (e.g., stealing property from the organization). Specifically, we argue that organizational deviance is one way in which thoughts of revenge materialize into behaviors aimed at getting even with the mistreating organization. Supporting this view, Jones (2009) showed that the desire for revenge against the organization is related to behaviors such as littering one's work environment.

Hypothesis 1: Thoughts of revenge mediate the positive relationship between ODH and organizational deviance.

The Moderating Role of Compliance

Social exchange theorists suggested that reciprocity constitutes a social norm to which not everyone adheres to the same degree (Cropanzano & Mitchell, 2005; Gouldner, 1960). Some individuals are more likely than others to endorse the reciprocity norm underlying social exchanges (e.g., Eisenberger et al., 2004). We propose that compliance is a personality trait that may capture these interindividual variations in the endorsement of the reciprocity norm and, as such, play a key role in the homeomorphic reciprocity depicted in our Hypothesis 1. Compliance is the tendency to defer to others and to inhibit aggression with the inclination to forgive and forget (Costa et al., 1991). While non-compliant individuals are prone to feel and exhibit aggression, to express their anger when necessary, and wish to act more according to the motto "an eye for an eye", compliant individuals are probably less

likely to engage in a revenge process following an undesirable action because of their natural inclination to forgive and forget.

Supporting this view, compliant individuals who are more submissive and seek to avoid conflicts (Samuel & Gore, 2012) are more prone to give up, whereas their non-compliant counterparts who are antagonistic and hostile (Costa et al., 1989) are more likely to fight back in response to conflicts and mistreatments (Costa et al., 1991; Spratlen, 1995). This may be explained by the fact that compliant people are motivated to preserve and maintain good relationships with others and to "generate positive perceptions and attributions to otherwise-provocative behavior" (Graziano et al., p.832). Similarly, after a conflict, compliant individuals are more likely to exhibit fewer negative perceptions, while non-compliant individuals present higher negative perceptions (John & Srivastava, 1999).

In line with this, we thus argue that compliant employees experiencing ODH may develop fewer thoughts of revenge and exhibit fewer subsequent deviant behaviors. Specifically, we expect that thoughts of revenge mediate the interactive effect of ODH and compliance on organizational deviance, so that the relationship is weaker for compliant employees than for non-compliant ones.

Hypothesis 2: The positive indirect effect of ODH on organizational deviance via thoughts of revenge is weaker for compliant employees than for non-compliant ones.

Overview of the Studies

Figure 1 displays the hypothesized theoretical model. We conducted five studies to investigate our hypotheses. Studies 1a and 1b are experimental studies based on the vignette procedure and tested the mediation suggested in Hypothesis 1. In Study 1a, we manipulated ODH to examine its effects on thoughts of revenge and organizational deviance. In Study 1b, we manipulated thoughts of revenge to test their effect on organizational deviance.

Studies 2a and 2b are field studies that tested whether the ODH-deviance relationship is mediated by thoughts of revenge (Hypothesis 1) and whether this mediating effect is moderated by employees' levels of compliance (Hypothesis 2). While Study 2a is cross-sectional and thus sensitive to method bias, Study 2b adopted a three-wave design to lessen it.

Finally, Study 3 is a three-wave field study replicating Studies 2a and 2b (Hypotheses 1 and 2), by further examining whether the moderated mediation model holds when including three other possible mediators. As Lagios, Caesens et al. (2022) showed that psychological need thwarting (cf. SDT; Deci & Ryan, 2000) acts as a mechanism in the ODH-outcomes relationships, we controlled for its possible mediating role. Because Sarwar et al. (2021) found that job stress (cf. COR theory; Hobfoll, 1989) mediates the ODH-deviance link, we also considered job stress as another mediator. Finally, since prior research (e.g. Michel et al., 2016) showed that an affective process (cf. affective events theory; Weiss & Cropanzano, 1996) explains the workplace mistreatment-deviance relationship, we controlled for negative affect toward the organization.

The three field studies were conducted within samples of employees working in diverse organizations and jobs for generalization purposes. This research project was approved by the ethics committee of the first author's home institution.[2]

Study 1a

Method

Participants and design. We recruited participants via Prolific Academic. They had to be at least 18 years old, be native English speakers, not be unemployed and self-employed, and have at least 90% approval rate in prior studies completed on Prolific Academic. Each participant received a £1 compensation for the time spent on completing the survey. Three

[2] Material, data, syntax and results for the five studies are available online on Open Science Framework at the following address: https://osf.io/g8vcw/?view_only=92aef722c19d4e599185163a9884d389.

hundred and one participants took part in our experiment. Two hundred twenty-three were women, 76 were men, and 2 individuals did not indicate their gender. Their mean age was 33.39 years (*SD*=8.73) and their mean organizational tenure was 5.69 years (*SD*=5.45).

In line with prior experimental studies on ODH (Nguyen, Maurage, & Stinglhamber, in press), we used a scenario vignette procedure to manipulate ODH (Table S1 – Supporting Information). We invited respondents to participate in a short study on the "employee-organization relationships in organizational settings," which implies for them to read a short text (i.e., a hypothetical scenario) and to put themselves into the role of the supermarket cashier described in the text. They were randomly assigned to one of our two conditions (i.e., low versus high ODH). After reading the hypothetical scenario, participants had to describe in a few lines a typical working day of the cashier in whose shoes they were to put themselves. Next, participants answered several items from the perspective of this cashier. They first assessed the extent to which they perceived themselves as dehumanized by their organization by using the ODH scale, included to test the effectiveness of our manipulation. Then, participants responded to the items of thoughts of revenge and those capturing organizational deviance. Finally, they responded to realism check items and provided demographics. The study concluded by thanking them for their participation and debriefing them.

Measures. Unless otherwise stated, the items were assessed using a Likert-scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

ODH (manipulation check). Participants rated the extent to which they would feel dehumanized by their organization if they were in the cashier's shoes, using the 11-item scale developed by Caesens et al. (2017; e.g., *"*My organization considers me as a tool to use for its own ends"; α=.94).

***Thoughts of revenge*.** We asked participants to assess the extent to which they would have thoughts of revenge toward the organization if they were in the cashier's shoes, using the

four items from Sukhodolsky et al. (2001). These items were adapted to the relationship with the organization (e.g., "When my organization makes me angry, I can't stop thinking about how to get back at my organization").

***Organizational deviance*.** We measured participants' intention to engage in deviant behaviors toward the organization if they were in the cashier's shoes, using the 12 items from Bennett and Robinson (2000). Participants indicated to what extent they would engage in deviant behaviors toward their organization (e.g., "Littered your work environment") on a scale ranging from 1 (*never*) to 7 (*always*).

***Scenario realism*.** We used three items from Klotz and Bolino (2016) to assess the realism of the hypothetical scenarios (e.g., "The situation described above was realistic"). The mean was 5.45 (*SD*=1.00) for the low ODH scenario and 5.47 (*SD*=1.29) for the high ODH scenario, suggesting that participants considered the scenarios as realistic.

***Control variables*.** We examined the empirical relationships between the various control variables (i.e., gender, age, education level, organizational tenure, organizational size, and scenario realism) and the dependent variables (i.e., thoughts of revenge and organizational deviance). Gender, age, and scenario realism were correlated with organizational deviance (Table 1). Following Becker et al.'s (2016) recommendations, we performed analyses with and without gender, age, and scenario realism as control variables. The results were essentially identical and did not change the interpretation of the findings. Therefore, the results reported here are free from any control variables to reduce model complexity, while those with the control variables are presented in Table S2 (Supporting Information).

Results

Manipulation check. Independent samples t-test indicated that in the high ODH condition, the participants reported higher levels of ODH (M=5.84; SD=.95) than in the low condition (M=4.94; SD=1.20), $t(299) = -7.20$, $p < .001$, $d = 1.08$.

Measurement model. We performed CFAs to investigate the distinctiveness of the latent factors included in our study using *Mplus* 8.4 (MLR estimator). Table S3 (Supporting Information) shows that the four-factor model adequately fitted the data and, more importantly, was significantly better than all more constrained models.

Main analyses. To test the first stage effect and the direct effect of the mediation suggested through Hypothesis 1, we conducted hierarchical regression analyses. First, the ODH condition (low ODH coded 0 and high ODH coded 1) had a positive effect on thoughts of revenge ($\beta = .32$, $p < .001$). Second, the ODH condition positively predicted organizational deviance ($\beta = .14$, $p = .017$). When controlling for thoughts of revenge, this effect of the ODH condition on organizational deviance was however no more significant ($\beta = -.03$, $p = .53$). The effect of thoughts of revenge on organizational deviance was significant ($\beta = .54$, $p < .001$). Finally, a bootstrap analysis (macro PROCESS of Hayes; model 4; 10,000 iterations) confirmed these findings and further indicated that the unstandardized indirect effect of the ODH condition on organizational deviance via thoughts of revenge was significant (indirect effect=.33, BCa 95% CI = [.20;.47]). In sum, consistent with Hypothesis 1, our results confirmed that ODH predicts thoughts of revenge and organizational deviance, and that thoughts of revenge mediate the effect of ODH on organizational deviance.

Study 1b

Method

Participants and design. Similar to Study 1a, participants were recruited via Prolific Academic, using the same inclusion criteria. Furthermore, we ensured that participants from Study 1a did not take part in Study 1b. Each participant received a £1 compensation for the

time spent on completing the survey. Two hundred and fifty participants took part in our experiment. One hundred and twenty-four were women and 124 were men, with 2 individuals not indicating their gender. Their mean age was 36.47 years (*SD*=9.63) and their mean organizational tenure was 6.50 years (*SD*=6.29).

As in Study 1a, participants were invited to participate in a short study on the "employee-organization relationships in organizational settings", to read a short hypothetical scenario, and to answer questions as if they were in the shoes of the employee described in the scenario. They were randomly assigned to one of our two conditions (i.e., low versus high thoughts of revenge). In line with Study 1a, we added to the vignette describing a high ODH a paragraph about the cashier's thoughts regarding this dehumanizing treatment from the supermarket (Table S1 – Supporting Information). After reading the hypothetical scenario, participants had to describe in a few lines their thoughts during a typical working day if they were in the shoes of the supermarket cashier. Next, they answered the items of organizational deviance from the perspective of this cashier. Then, they responded to items regarding thoughts of revenge, included to test the effectiveness of our manipulation. Finally, they responded to realism check items and provide demographics. The study concluded by thanking them for their participation and debriefing them.

Measures. We assessed thoughts of revenge (manipulation check; α=.94), organizational deviance, and scenario realism with the same scales as those used in Study 1a. Regarding scenario realism, the mean was 5.59 (*SD*=1.14) for the low thoughts of revenge scenario and 5.18 (*SD*=1.35) for the high thoughts of revenge scenario, suggesting that participants considered the scenarios as realistic.

***Control variables*.** Education level was correlated with organizational deviance (Table 1). The results were essentially identical with and without education level as control variable. The results reported below are therefore free from any control variable to reduce model

complexity (Becker et al., 2016), while those with education level as control are presented in Table S4 (Supporting Information).

Results

Manipulation check. Independent samples t-test indicated that in the high thoughts of revenge condition, participants reported higher levels of thoughts of revenge (M=5.36; SD=1.47) than in the low condition (M=2.28; SD=1.21), $t(248) = -18.11$, $p < .001$, $d = 1.35$.

Measurement model. We performed CFAs to investigate the distinctiveness of the latent factors included in our study using *Mplus* 8.4 (MLR estimator). Table S3 (Supporting Information) shows that the three-factor model adequately fitted the data and, more importantly, was significantly better than all more constrained models.

Main analysis. To test the second stage effect of the mediation suggested through Hypothesis 1, an ANOVA was performed. The results indicated that participants in the high thoughts of revenge condition reported higher levels of organizational deviance (M=3.46; SD=1.25) than participants in the low thoughts of revenge condition (M=2.32; SD=0.83), $F(1, 248) = 72.14$, $p < .001$. Consistent with Hypothesis 1, our findings confirmed that thoughts of revenge predict organizational deviance.

Overall, Studies 1a and 1b confirmed the mediation suggested through Hypothesis 1, i.e. that thoughts of revenge mediate the relationship between ODH and organizational deviance.

Studies 2a and 2b

Studies 2a and 2b build on the findings of Studies 1a and 1b to examine how, in real work settings, compliance can modulate the mediation confirmed by these two first studies. Study 2a is a cross-sectional field study, whereas Study 2b is a three-wave field study with three months between each measurement time. Specifically, we measured ODH and compliance at Time 1, thoughts of revenge at Time 2, and organizational deviance at Time 3.

Method

Participants and Procedure. We recruited participants via Prolific Academic, using the same inclusion criteria as for Studies 1a and 1b. Furthermore, we ensured that participants from Studies 1a and 1b did not take part in these studies and that participants in one could not take part in the other. Participants received a £1.5 compensation for the time spent on completing each survey.

Study 2a. Three hundred forty-seven participants answered the questionnaire. However, 29 participants were excluded from the analyses as they failed to attentional check questions or because they were unemployed, fully retired, or worked as freelancers. The final sample comprised 318 employees (61.6% of women). Their mean age was 36.25 years (*SD*=9.54). Most participants held a bachelor's degree (39%) and worked in organizations employing 50-249 people (16.7%). On average, they had been working in their current organization for 6.85 years (*SD*=6.54).

Study 2b. Nine hundred forty-seven participants fully completed the questionnaire at Time 1, 685 at Time 2 (response rate=72.33%), and 561 at Time 3 (response rate=59.24%). However, participants who failed to attentional check questions, who finally reported being unemployed, fully retired, or freelancers, and who indicated a change of organization between measurement times were withdrawn from the analyses. Finally, after matching questionnaires provided by employees at each time point, the final sample comprised 425 participants (61.4% of women). Their mean age was 38.37 years (*SD*=10.68). Most participants held a bachelor's degree (48.0%) and worked in organizations comprising 50 to 249 employees (18.1%). On average, they have been working in their organization for 7.42 years (*SD*=6.95).

Measures. As part of a larger survey, we assessed ODH, compliance, thoughts of revenge, and organizational deviance with the same scales as those used in Studies 1a and 1b. This time, however, participants were asked to rate their own work situation and the reality of

it, not a hypothetical work situation. Regarding organizational deviance, Berry et al. (2011) provided strong evidence supporting the use of self-reported measures to capture organizational deviance in field studies: convergence between self and other reports, small differences in correlations of self versus other reports with other variables, and the finding that employees do not underreport their deviant behaviors compared to other sources.

Compliance. Participants' stable personality trait of compliance was measured using the 8-item compliance sub-scale from the Revised NEO Personality Inventory (e.g. "If someone starts a fight, I'm ready to fight back" (R); Costa & McCrae, 1992).

Control variables. As shown in Table 2, in Study 2a, thoughts of revenge correlated with gender and organizational tenure, whereas organizational deviance correlated with gender and education level. In Study 2b, education level was related to organizational deviance. The inclusion of these control variables in the analyses did not modify our findings. The results presented below were thus free from any control variables for parsimonious purposes (Becker et al., 2016), while those with the control variables are presented in Figure S1 (Supporting Information).

Results

Measurement Model. For both studies, we performed CFAs to investigate the distinctiveness of the latent factors included in each study using *Mplus* 8.4 (MLR estimator). First, we performed CFAs on the item-level data. Tables S5 and S6 (Supporting Information) show that while the RMSEA and SRMR of the four-factor model indicated a very good fit to the data, its CFI and TLI are slightly below the conventional threshold of .90 in both studies. Importantly, however, this model was significantly better than all more constrained models in both studies. Second, we used an item-parceling strategy (item-to-construct balance technique; Little et al., 2002) to reduce the number of indicators per latent variable to four when they were more numerous. This procedure allowed us to have the same number of

indicators for the independent and moderating variables at stake in our Hypothesis 2, which is necessary to create indicators for the latent interaction term as recommended in the Unconstrained Product Indicator (UPI) approach of Marsh et al. (2004). Cortina et al. (2021) recently recommended the use of a fully latent approach such as the UPI approach to test interactions, and Aytürk et al. (2020) supported the use of a parceling strategy to create product indicators in this UPI approach. Tables S5 and S6 (Supporting Information) show that the four-factor model using parcels fitted the data well, and was significantly better than all more constrained models in both studies.

Moderated Mediation Model. Using the parcels, we tested structural equation models in which ODH, compliance, and their interaction were associated with organizational deviance, both directly and indirectly via thoughts of revenge. We first centered the indicators of the independent (i.e., ODH) and moderating (i.e., compliance) variables to lessen multicollinearity effects (Marsh et al., 2004). We then created the indicators of the latent interaction term by multiplying the indicator of ODH displaying the highest loading with the indicator of compliance displaying the highest loading. This technique was repeated for each subsequent pair of indicators. The structural models showed a very good fit to the data ($\chi^2(160) = 291.25$; RMSEA = .05; SRMR = .06; CFI = .95; TLI = .94 for Study 2a; $\chi^2(160) = 269.94$; RMSEA = .04; SRMR = .05; CFI = .97; TLI = .96 for Study 2b). The results also showed that ODH and the interactive term were not related to organizational deviance in either study. Thus, an alternative model without these non-significant paths was tested ($\chi^2(162) = 294.59$; RMSEA = .05; SRMR = .06; CFI = .95; TLI = .94 for Study 2a; $\chi^2(162) = 271.38$; RMSEA = .04; SRMR = .05; CFI = .97; TLI = .96 for Study 2b) and was found equivalent to the first model ($\Delta\chi^2(2) = 3.34$, SBc = 3.23, $p > .05$ for Study 2a; $\Delta\chi^2(2) = 1.44$, SBc = 1.40, $p > .05$ for Study 2b). Therefore, the alternative model was retained as the best

description of the data for parsimony reasons. Figure 2 displays the standardized parameter estimates of the model.

In both studies, ODH and compliance were both significantly related to thoughts of revenge. In addition, thoughts of revenge were positively associated with organizational deviance, while compliance was negatively related to workplace deviance. To explore further the mediating role of thoughts of revenge in the ODH-organizational deviance relationship, we used a bootstrapping analysis on our latent variables (ML estimator). Results showed that the indirect effect of ODH on organizational deviance via thoughts of revenge was significant (indirect effect=.17; BC 95% CI = [.10;.26] for Study 2a; indirect effect=.14; BC 95% CI = [.08;.22] for Study 2b), while the direct effect of ODH on workplace deviance was no longer significant (direct effect=.09; BC 95% CI = [-.03;.21] for Study 2a; direct effect=.07; BC 95% CI = [-.04;.18] for Study 2b). These results support the mediation suggested through Hypothesis 1.

The structural model also showed that the interactive effect of ODH and compliance on thoughts of revenge was significant in both studies. The moderating effect of compliance on the ODH-thoughts of revenge relationship is illustrated in Figure 3. The simple slopes tests indicated that the relationship between ODH and thoughts of revenge was significant at +1SD (B = .23, p < .01 for Study 2a; B = .11, p < .05 for Study 2b) and -1SD (B = .57, p < .001 for Study 2a; B = .45, p < .001 for Study 2b) of the mean of compliance. These results showed that the relationship between ODH and thoughts of revenge was weaker for compliant employees.

To investigate further the combined effect of ODH and compliance on organizational deviance through thoughts of revenge, we used a bootstrapping analysis (ML estimator) as in Cheung and Lau (2017). The indirect effect of ODH on organizational deviance via thoughts of revenge was significant at both low (indirect effect=.09; BC 95% CI = [.04;.16] for Study

2a; indirect effect=.09; BC 95% CI = [.05;.14] for Study 2b) and high (indirect effect=.04; BC 95% CI = [.01;.07] for Study 2a; indirect effect=.02; BC 95% CI = [.002;.05] for Study 2b) levels of compliance. Figure S2 (Supporting Information) shows Johnson-Neyman regions of significance and confidence bands for the indirect effect as a function of compliance. In addition, the index of moderated mediation was also significant in both studies (index=-.03; SE=.01; BC 95% CI = [-.07;-.01] for Study 2a; index=-.03; SE=.01; BC 95% CI = [-.06;-.02] for Study 2b), which supports Hypothesis 2.

Overall, the findings of Studies 2a and 2b confirmed that thoughts of revenge mediate the relationship between ODH and organizational deviance, and indicated that the relationship between ODH and organizational deviance via thoughts of revenge is weaker for compliant employees than for non-compliant ones.

Study 3

Study 3 builds on the results of Studies 2a and 2b to examine whether the effects found hold when including other possible mediators (i.e., psychological need thwarting, job stress, and negative affect toward the organization). Study 3 is a three-wave field study with three weeks[3] between each measurement time. We measured ODH and compliance at Time 1, thoughts of revenge, psychological need thwarting, job stress, and negative affect toward the organization at Time 2, and organizational deviance at Time 3.

Method

[3] In Studies 2b and 3, we opted for short (i.e., 3 months and 3 weeks, respectively) but different time lags in order to generalize our results. This methodological choice is based on the fact that many important changes in applied psychology can be observed over reasonably short periods of time, which fully justifies short time lags (e.g., Dormann & Griffin 2015). Furthermore, longer time frames may underestimate the effect size between variables (Dormann & Griffin, 2015). Finally, in relation to the variables specifically studied in this research, Grégoire et al. (2009) showed that the desire for revenge can decrease over time, as can the negative cognitions (i.e., thoughts of revenge) associated with it, and that subsequent retaliatory behaviors become too costly to maintain.

Participants and Procedure. We recruited participants via Prolific Academic, using the same inclusion criteria as for the other studies and avoiding previous participation in any of them. Each participant received a £1.5 compensation for the time spent on completing the two first surveys and £2 for the last one. Six hundred and thirteen participants fully completed the questionnaire at Time 1, 545 participants at Time 2 (response rate=88.91%), and 495 at Time 3 (response rate=80.75%). However, participants who failed to attentional check questions, who finally reported being unemployed, fully retired, or freelancers, and who indicated a change of organization between measurement times were withdrawn from the analyses. Finally, after matching questionnaires provided by employees at each time point, the final sample comprised 397 participants (72.5% of women). Their mean age was 33.35 years (*SD*=8.41). Most participants held a bachelor's degree (39.3%) and worked in organizations comprising more than 10,000 people (18.4%). On average, they have been working in their organization for 5.37 years (*SD*=5.74).

Measures. As part of a larger survey, we assessed participants' ODH, compliance, thoughts of revenge, and organizational deviance in their current work situation with the same scales as those used in the previous studies. Unless otherwise stated, the following items were assessed using a Likert-scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Psychological need thwarting. We used the nine items from Gillet et al. (2012; e.g., "In my work, situations occur in which I am made to feel incapable").

Job stress. We assessed job stress using the four items of Cohen et al. (1983; e.g., "In the last three weeks, how often have you felt difficulties were piling up so high that you could not overcome them?"). Participants responded on a Likert-scale ranging from 1 (*never*) to 7 (*very often*).

Negative affect toward the organization. We relied on Martinko et al.'s (2018) work to measure negative affect toward the organization. These authors developed and validated

measures of affect toward the leader (i.e., Leader Affect Questionnaires; LAQ). Because the focus in our research is the organization and not the leader, we thus adapted their five-item negative LAQ, so that our items measured the degree to which employees have negative feelings about their organizations (e.g., “I dislike my organization”).

Control variables. As shown in Table 3, thoughts of revenge correlated with gender, whereas organizational deviance correlated with age and organizational tenure. The inclusion of these control variables in the analyses did not change our findings. The results presented below were thus free from any control variables for parsimonious purposes (Becker et al., 2016), while those with the control variables are presented in Figure S3 (Supporting Information).

Results

Measurement Model. We proceeded in the same way as in Studies 2a and 2b to investigate the distinctiveness of the latent factors included in this third study. Table S7 (Supporting Information) shows that the seven-factor model adequately fitted the data and was significantly better than all more constrained models when we performed the CFAs on the item-level data. Furthermore, when performed on parcels, the seven-factor model fitted the data well and was significantly better than all more constrained models.

Moderated Mediation Model. To test our hypotheses, we proceeded in the same way as in Studies 2a and 2b. The final structural model showed a good fit to the data ($\chi^2(451)= 802.69$; RMSEA = .04; SRMR = .08; CFI = .94; TLI = .93). Figure 4 displays the standardized parameter estimates of the model.

ODH and compliance were both significantly related to thoughts of revenge. In addition, thoughts of revenge were positively associated with organizational deviance. The indirect effect of ODH on organizational deviance via thoughts of revenge was significant (indirect effect=.04; BC 95% CI = [.01;.10]). Furthermore, the results indicated that the direct

effect of ODH on organizational deviance was no longer significant (direct effect=-.09; BC 95% CI = [-.23;.06]). These findings indicate that, even in the presence of the other possible mediators[4], thoughts of revenge mediate the ODH-organizational deviance relationship, supporting Hypothesis 1.

Moreover, the interactive effect of ODH and compliance was negatively related to thoughts of revenge. The relationship between ODH and thoughts of revenge was significant at -1SD (B = .23; p < .001) and not significant at +1SD (B = .04; p >.05) of the mean of compliance (Figure 3). The ODH-thoughts of revenge relationship was weaker for compliant employees as compared to non-compliant employees.

The indirect effect of ODH on organizational deviance via thoughts of revenge was significant at a low level of compliance (indirect effect=.03; BC 95% CI = [.01;.06]) and not significant at a high level of compliance (indirect effect=.004; BC 95% CI = [-.01;.02]; see Figure S2 – Supporting Information, for Johnson-Neyman regions of significance and confidence bands). In addition, the index of moderated mediation was significantly different from 0 (index=-.01; SE=.01; BC 95% CI = [-.04;-.002]). In sum, even when considering three other possible mediators, thoughts of revenge still mediate the combined effect of ODH and compliance on organizational deviance, which supports Hypothesis 2.

Overall, Study 3 confirms that when we controlled for three other possible mediators of the relationship between ODH and organizational deviance (i.e., psychological need thwarting, job stress, and negative affect toward the organization), thoughts of revenge still mediate this relationship, and compliance still moderates this mediation so that the mediation is weaker for compliant employees.

[4] The indirect effect of organizational dehumanization on organizational deviance was not significant via psychological need thwarting (indirect effect=.01; BC 95% CI = [-.09;.11]) but significant via job stress (indirect effect=.06; BC 95% CI = [.02;.12]) and negative affect toward the organization (indirect effect=.12; BC 95% CI = [.04;.21]).

Discussion

Using SET (e.g., Cropanzano et al., 2017), we explored how ODH shapes employees' deviant behaviors toward their organization. First, through three research designs (experimental, cross-sectional, and multi-wave studies), we bring strong evidence that employees who feel maltreated by their organization (i.e., treated as a tool or an instrument) are more prone to engage in harmful behaviors toward the organization. Although they may respond in other ways, individuals who feel dehumanized are likely to fight the perceived source of maltreatment back, even when this source is an abstract entity like the organization. After experiencing organizational mistreatment, employees indeed engage in a revenge process starting with thoughts of revenge against the organization and ending with intentional behaviors to threaten its well-being.

By showing that ODH engenders malfunctioning behaviors, this research points out that ODH may also impact the organization's health and efficiency. Importantly, it further contributes to the ODH literature by clarifying the relationship between ODH and employees' organizational deviance. By showing the mediating role of thoughts of revenge in this relationship, we highlight that SET and the reciprocity norm lying at its core are relevant frameworks (e.g., Cropanzano & Mitchell, 2005; Gouldner, 1960) to understand the deleterious effects of ODH. These results are consistent with the perspective that employees are focusing on repaying the bad actions of their organization by turning their thoughts of revenge into prejudicial behaviors toward it. As we measured thoughts of revenge via items reflecting vindictive intentions and revenge utility, our findings suggest that workplace revenge is an intentional and deliberate response to perceived organizational mistreatments (Bies & Tripp, 1996). Accordingly, Jones and Carroll (2007) emphasized that employees may initially plan their revenge (i.e., thinking about various revenge options), before engaging in revenge-motivated behaviors. Interestingly, these findings support the view that, beyond the

hedonic value of reciprocity (i.e., negative reciprocity), the level of activity is also a relevant dimension to consider when studying the deleterious effects of ODH. ODH is a negative and active initiating action that generates a cognitive process, ultimately eliciting a negative and active behavioral response. While it does not rule out that ODH-facing employees may respond in ways other than organizational deviance, this research supports and deepens the homeomorphic reciprocity (Cropanzano et al., 2017) at stake in the relationship between ODH and organizational deviance.

This cognitive process holds when testing other possible underlying mechanisms. When including psychological need thwarting, job stress, and negative affect toward the organization in Study 3, our research suggests that other theoretical frameworks (self-determination theory, conservation of resources theory, and affective events theory, respectively) may also explain the effect of ODH on organizational deviance. Among these frameworks, we particularly found that a resource loss principle and an affective process might also be relevant to consider, in line with previous research (e.g., Lee & Allen, 2002; Sarwar et al., 2021). Future research should certainly disentangle the different processes at stake. Furthermore, future studies should consider mediators that embody the two dimensions proposed by Cropanzano et al. (2017) as an extension of SET (i.e. hedonic value and level of activity), and not just the hedonic value dimension as it is the case for thoughts of revenge.

The fact remains that, beyond other processes, a cognitive process is initiated following ODH. These results are in line with models proposed in other literatures such as Olson-Buchanan and Boswell's (2008) model in conflict management research. Their premise is that employees perceive a deterioration in the employment relationship and that an organizational constituent can be blamed for this deterioration. Then, employees would engage in a sensemaking process to conclude whether or not they have been mistreated and determine the response to provide, depending on the nature and severity of mistreatment.

Even though ODH is not a one-time event but rather a more latent, long-term organizational variable with recurrent manifestations, a parallel can be drawn between this model and our research. As a mistreatment emanating from this abstract and distal entity that is the organization (Nguyen & Stinglhamber, 2021), ODH indeed captures a low-quality employee-organization relationship (e.g., Brison et al., 2022) that activates a cognitive process leading to the decision about the appropriate response to provide.

Both Olson-Buchanan and Boswell's (2008) model and the SET framework (e.g., Cropanzano et al., 2017; Gouldner, 1960) pointed out something that our results also highlight, namely that there are interindividual variations in this cognitive process. A dispositional characteristic (i.e. compliance) indeed buffers the revenge process following ODH. By showing that the indirect effects of ODH on organizational deviance via thoughts of revenge is weaker or absent among employees with high compliance, we highlight the importance to consider personality in workplace mistreatment research in several ways. First, by supporting the buffering effect of compliance within mistreatment situations, we suggest that compliant employees may prefer conflict-avoidance strategies to conflict-assertion strategies (e.g., Costa et al., 1991). Our paper thus suggests to consider individual variability when interpreting prior results on the effects of ODH on workplace behaviors. Second, through the lens of SET (e.g. Cropanzano & Mitchell, 2005), our results suggest that compliance may bias employees' perceptions to view their social exchanges with their dehumanizing organization as less deleterious. By endorsing less the reciprocity norm, compliant employees are less likely to reciprocate to their dehumanizing organization, perhaps because they consider such treatment as a natural part of the employment relationship. Third, our findings are in line with Olson-Buchanan and Boswell's (2008) model, which also suggest that individual factors (e.g., personality traits, conflict styles)

moderate the sensemaking process. Overall, dispositional factors are a key component to further investigate since they shape the response to workplace mistreatment.

Finally, our field studies reported levels of ODH (*M*s=4.08/3.85/3.91, in Studies 2a/2b/3, respectively), which are comparable to those reported earlier (*M*s from 3.07 to 4.14 on a 7-point Likert-type scale with employees originating from a variety of jobs and organizations; Caesens et al., 2019; Caesens et al., 2017; Caesens & Stinglhamber, 2019; Demoulin et al., 2021; Lagios, Caesens et al., 2022; Lagios, Nguyen et al., 2022; Nguyen, Besson, & Stinglhamber, 2021; Nguyen, Cheung, & Stinglhamber, 2021; Nguyen, Dao et al., 2021; Nguyen & Stinglhamber, 2020, 2021; Stinglhamber et al., 2021; Taskin et al., 2019; Tseng, 2020; and *M*s of 3.10 and 3.72 on a 5-point Likert-type scale with employees working in hotels and nurses, respectively; Sarwar et al., 2021; Sarwar & Muhammad, 2021). Those mean scores suggest that dehumanizing experiences are a common phenomenon in organizations. Future research should thus further explore how organizations may reduce dehumanization feelings among employees (see Brison et al., 2022 for a review of ODH antecedents).

Limitations and Future Research

A first limitation relates to the fact that endogeneity bias may have affected the results by producing incorrect estimates and may thus be a concern in this research. In line with Hill et al.'s (2021) recommendations, we identified four potential causes of endogeneity. The first one is an omitted variable that may affect both our predictor and our outcome. Although our field studies may be particularly affected by these missing variables, our experimental studies based on the vignette procedure (Studies 1a and 1b) reduce this concern insofar as any omitted variables (e.g., negative affectivity) was randomly distributed across the two conditions.

The second cause is simultaneity, that is the relationship between our predictor and our outcome is biased by the fact that our outcome may also affect our predictor. Again, the use of experimental designs in Studies 1a and 1b reduces this concern to the extent that when the predictor is manipulated, any variation in the outcome can only be attributed to this manipulation (Aguinis & Bradley, 2014; Hill et al., 2021). However, our Studies 1a and 1b are based on the vignette procedure and, as such, only evidenced that ODH induces *hypothetical* thoughts of revenge that increase subsequent *intentions* to behave in deviant ways. Furthermore, our research cannot however rule out the possibility that engaging in deviant behaviors may also impact ODH (i.e. reverse effect). The literature on victimization (e.g., Aquino, 2000) suggests that individuals who engage in harmful behaviors may also be more likely to describe themselves as frequent targets of harmful actions. Future research might therefore investigate whether employee's deviant behaviors induce ODH.

The third cause of endogeneity is measurement error that cannot be precluded by any research design. Obviously, we modeled measurement error and used validated measures as recommended by Hill et al. (2021), but we had no control over the conditions under which our participants took part in our online studies. Further, sources of method bias should be considered, as they may have inflated or deflated the links between variables. Concerning our interaction effect, we believe that Common Method Variance (CMV) did not bias our results since "CMV cannot create artificial interaction effect, [it] can only deflate existing interactions" (Lai et al., 2013, p.259). The moderating role of compliance in the ODH-thoughts of revenge relationship is thus not merely resulting from such bias. Nevertheless, the exclusive use of self-reported measures makes our research sensitive to the Common Method Bias (CMB). Indeed, assessing different constructs with the same method might induce that "at least some of the observed covariation between them may be due to the fact that they share the same method of measurement" (Podsakoff et al., 2012, p.540).

To limit the effects of CMB, we followed the remedies suggested by Podsakoff et al. (2012). First, in all studies, we assured participants' anonymity and indicated they could stop the study at any time, to lessen social desirability bias. Second, in field studies, we stated there were no right or wrong answers and that only their opinion mattered, to increase their motivation to provide accurate responses. Third, we counterbalanced the items of each scale in each study to reduce response order effects that may give more weight to the first items. Fourth, in Studies 2b and 3, we introduced a time lag between the measurement of the predictor/moderator, mediator, and criterion variables that reduces method bias by "eliminating the saliency of any contextually provided retrieval cues" (Podsakoff et al., 2012, p.563). Finally, Conway and Lance (2010) suggested that one possibility to rule out substantial CMB "is to demonstrate construct validity of the measures used" (p.329). In line with this, our variables showed good internal consistencies and discriminant validity. Overall, the relationships between our variables cannot be attributed solely to method bias. That being said, we strongly encourage researchers to conduct future studies that overcome this limitation and rely on alternative measures (e.g., peer or supervisor ratings) to assess deviant behaviors. While Berry et al. (2012) showed that using self-reported measures does not induce a large systematic concern in terms of method bias, using reports from others will further eliminate any concern of this nature. In addition, other-reports can be valuable when assessing relatively public deviant behaviors (Berry et al., 2012). They can thus provide another perspective on workplace deviance, which can lead to interesting and complementary results.

The last possible cause of endogeneity in our research is what Hill et al. (2021) labelled "selection into samples". Although we use several samples composed each time of different employees, all participants were recruited via Prolific Academic. Although studies have shown that Prolific shows adequate data quality (e.g., Peer et al., 2017), one may argue that our participants are not representative of the full population of potential workers. Overall,

while it is impossible for a single study to fully mitigate all endogeneity issues, the fact that our research is based on five studies using different designs (including two experimental designs based on the vignette procedure), samples, analyses, and operationalizations of variables reduces our concerns about endogeneity bias (Hill et al., 2021).

Finally, we examine in the present research an active and negative response (i.e. deviant behaviors), as a consequence of an active and negative initial treatment (i.e. ODH). However, we have also suggested throughout the manuscript that this is not the only behavior employees may display when feeling dehumanized. As suggested by Cropanzano et al. (2017), while employees often formulate intentions to match on both dimensions (i.e., hedonic value and level of activity), it is not always possible to act accordingly and to actively harm the source of the mistreatment (i.e. the organization). Even if deviant behaviors are often relatively covert behaviors that employees engage in with the intention of not getting caught, they also carry a risk that employees may not be willing to take due to work rule constraints or a tight labor market. Cropanzano et al. (2017) advocated that in these situations, individuals will probably need to select a substitute response. Instead of presenting something undesirable, employees may for instance passively respond by withholding something desirable (e.g., reducing work efforts). In other words, instead of favoring the R (as ‘revenge’) of the EVLN-R model, they would shift to the N (as ‘neglect’; Michalak et al., 2018).

In addition, instead of retaliating against the organization, dehumanized employees may also repay the bad actions to a party other than the perceived source of the mistreatment (e.g., Greco et al., 2019). In line with the displaced aggression framework (Marcus-Newhall et al., 2000), Sarwar (2020) suggested and found that employees experiencing organizational dehumanization are likely to project their negativity onto their coworkers by hiding knowledge (see also Muhammad & Sarwar, 2021). In line with this perspective, the present findings could be extended to interpersonal deviance (Bennett & Robinson, 2000). In the

same vein, Lagios and Caesens (2022) showed that supervisors who are dehumanized by their organization tend to displace their aggression toward their subordinates who subsequently displace their own aggression toward their family (see trickle effects; Wo et al., 2019). Furthermore, they found that these mediated relationships are exacerbated when supervisors' fear of retaliation from the organization is high. Consistent with these latter findings, future research should identify specific situational constraints that would prevent employees from directly retaliating against the dehumanizing organization and lead them to engage in substitute behaviors.

Practical Implications

We showed that when employees experience ODH, they develop thoughts increasing the likelihood to behave harmfully toward this organization (e.g., reduced productivity, property theft, sabotage, and absenteeism), which costs billions of dollars annually (Stewart et al., 2009). Companies should thus reduce ODH feelings among their employees. The Time Magazine article quoted above reported the circumstances in which employees felt treated like robots by their organization. These stories point to three categories of factors inducing ODH and in line with the scientific literature (Brison et al., 2022). They are all levers that can be used by organizations to reduce this dehumanization.

First, job characteristics such as repetitive tasks, dependence on technology, or high demands (e.g., "*Technology has enabled employers to enforce a work pace with no room for inefficiency, squeezing every ounce of downtime out of workers' days*") foster ODH. Organizations should offer better work conditions to their personnel, for example by increasing their autonomy (Demoulin et al., 2021). Second, leadership styles (e.g., control-based leadership) can induce ODH (e.g., "*It also alerted a manager if I had too many minutes of "Time Off Task"*). Organizations should thus offer training programs to supervisors to promote support, civility, and trust in management (e.g., Brady et al., 2021). Third,

organizational factors (e.g., "*I felt as if the company wanted us to be robots-never stopping, never letting our minds wander off task*") are important determinants in ODH perceptions. Accordingly, organizations should promote the belief that employees' well-being is considered and their labor valued. This means implementing organizational human resources policies that help employees to develop their personal growth (e.g., developmental programs and valuable training; Eisenberger & Stinglhamber, 2011).

Furthermore, our findings indicate that, because compliance is mainly seen as stable over time (Costa & McCrae, 1988), organizations should consider inter-individual differences across their employees rather than focusing only on situational and organizational levers. For instance, organizations should help their employees to manage the development of negative perceptions by providing skills-based interventions helping employees to deal with negative thoughts arising after organizational maltreatment (e.g., Karabinski et al., 2021).

Conclusion

Our research highlights that ODH is not only deleterious for employee well-being and attitudes but also for organizational health and efficiency. By applying SET to the study of ODH, we highlight that ODH may promote a negative and active exchange relationship between employees and organizations. Therefore, organizations should minimize ODH feelings, for both individual and organizational interests.

References

Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, *17*(4), 351-371. https://doi.org/10.1177/1094428114547952

Ahmed, I., & Khan, M. K. (2016). Organizational justice, counterproductive work behavior and turnover intentions relation: Mediation by dehumanization and moderation by gender. *Paradigms*, *10*(2), 120-131. https://search.proquest.com/scholarly-journals/organizational-justice-counterproductive-work/docview/1855832061/se-2?accountid=12156

Aquino, K. (2000). Structural and individual determinants of workplace victimization: The effects of hierarchical status and conflict management style. *Journal of Management*, *26*(2), 171-193. https://doi.org/10.1177/014920630002600201

Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, *90*(1), 195-208. https://doi.org/10.1016/S0749-5978(02)00517-4

Aquino, K., Tripp, T. M., & Bies, R. J. (2001). How employees respond to personal offense: The effects of blame attribution, victim status, and offender status on revenge and reconciliation in the workplace. *Journal of Applied Psychology*, *86*(1), 52-59. https://doi.org/10.1037/0021-9010.86.1.52

Aytürk, E., Cham, H., Jennings, P. A., & Brown, J. L. (2020). Latent variable interactions with ordered-categorical indicators: Comparisons of unconstrained product indicator and latent moderated structural equations approaches. *Educational and Psychological Measurement*, *80*(2), 262-292. https://doi.org/10.1177/0013164419865017

Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior, 37*(2), 157–167. https://doi.org/10.1002/job.2053

Bell, C. M., & Khoury, C. (2011). Organizational de/humanization, deindividuation, anomie, and in/justice. In S. Gilliland, D. Steiner, & D. Skarlicki (Eds.), *Emerging Perspectives on Organizational Justice and Ethics* (pp. 167-197). Greenwich, CT: Information Age Publishing.

Bell, C. M., & Khoury, C. (2016). Organizational powerlessness, dehumanization, and gendered effects of procedural justice. *Journal of Managerial Psychology*, *31*(2), 570-585. https://doi.org/10.1108/JMP-09-2014-0267

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*(3), 349-360. https://doi.org/10.1037/0021-9010.85.3.349

Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *Journal of Applied Psychology*, *97*(3), 613-636. https://doi.org/10.1037/a0026739

Bies, R. J., & Tripp, T. M. (1996). Beyond distrust: "Getting even" and the need for revenge. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 246-260). Thousand Oaks, CA: Sage Publications.

Brady, J. M., Hammer, L. B., Mohr, C. D., & Bodner, T. E. (2021). Supportive supervisor training improves family relationships among employee and spouse dyads. *Journal of Occupational Health Psychology*, *26*(1), 31-48. https://doi.org/10.1037/ocp0000264

Brison, N., Stinglhamber, F., & Caesens, G. (2022). Organizational dehumanization. *Oxford*

Research Encyclopedia of I/O Psychology. https://doi.org/10.1093/acrefore/9780190236557.013.902

Caesens, G., Nguyen, N., & Stinglhamber, F. (2019). Abusive supervision and organizational dehumanization. *Journal of Business and Psychology, 34*(5), 709-728. https://doi.org/10.1007/s10869-018-9592-3

Caesens, G., & Stinglhamber, F. (2019). The relationship between organizational dehumanization and outcomes: The mediating role of emotional exhaustion. *Journal of Occupational and Environmental Medicine, 61*(9), 699-703. https://doi.org/10.1097/JOM.0000000000001638

Caesens, G., Stinglhamber, F., Demoulin, S., & De Wilde, M. (2017). Perceived organizational support and employees' well-being: The mediating role of organizational dehumanization. *European Journal of Work and Organizational Psychology*, *26*(4), 527-540. https://doi.org/10.1080/1359432X.2017.1319817

Cheung, G. W., & Lau, R. S. (2017). Accuracy of parameter estimates and confidence intervals in moderated mediation models: A comparison of regression and latent moderated structural equations. *Organizational Research Methods*, *20*(4), 746–769. https://doi.org/10.1177/1094428115595869

Christoff, K. (2014). Dehumanization in organizational settings: Some scientific and ethical considerations. *Frontiers in Human Neuroscience*, *8*, 748. https://doi.org/10.3389/fnhum.2014.00748

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385-396. https://doi.org/2136404

Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, *25*(3), 325-334. https://doi.org/10.1007/s10869-010-9181-6

Cortina, J. M., Markell-Goldstein, H. M., Green, J. P., & Chang, Y. (2021). How are we testing interactions in latent variable models? Surging forward or fighting shy? *Organizational Research Methods*, *24*(1), 26-54. https://doi.org/10.1177/1094428119872531

Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, *54*(5), 853-863. https://doi.org/10.1037/0022-3514.54.5.853

Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO–PI–R) and NEO Five-Factor Inventory (NEO–FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

Costa, P. T., McCrae, R. R., & Dembroski, T. M. (1989). Agreeableness vs antagonism: Explication of a potential risk factor for CHD. In A. Siegman & T. M. Dembroski (Eds), *Search of coronary-prone behavior: Beyond type A* (pp. 41-63). Hillsdale, NJ: Erlbaum.

Costa, P. T., McCrae, R. R., & Dye, D. A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO personality inventory. *Personality and Individual Differences*, *12*(9), 887-898. https://doi.org/10.1016/0191-8869(91)90177-D

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/0149206305279602

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, *11*(1), 479-516. https://doi.org/10.5465/annals.2015.0099

Deci, E.L., & Ryan, R.M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227-268.

https://doi.org/10.1207/S15327965PLI1104_01

Demoulin, S., Nguyen, N., Chevallereau, T., Fontesse, S., Bastart, J., Stinglhamber, F., & Maurage, P. (2021). Examining the role of fundamental psychological needs in the development of metadehumanization: A multi-population approach. *British Journal of Social Psychology*, *60*(1), 196-221. https://doi.org/10.1111/bjso.12380

Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods*, *20*(4), 489-505. http://dx.doi.org/10.1037/met0000041

Eisenberger, R., Lynch, P., Aselage, J., & Rohdieck, S. (2004). Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Personality and Social Psychology Bulletin*, *30*(6), 787-799. https://doi.org/10.1177/0146167204264047

Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organizational support: Fostering enthusiastic and productive employees*. Washington, DC: American Psychological Association Books.

Gibney, R., Zagenczyk, T. J., & Masters, M. F. (2009). The negative aspects of social exchange: An introduction to perceived organizational obstruction. *Group & Organization Management, 34*(6), 665–697. https://doi.org/10.1177/1059601109350987

Gillet, N., Fouquereau, E., Lequeurre, J., Bigot, L., & Mokounkolo, R. (2012). Validation d'une échelle de frustration des besoins psychologiques au travail (EFBPT). *Psychologie du Travail et des Organisations*, *18*(4), 328-344. https://doi.org/10.1016/S1420-2530(16)30074-7

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*(2), 161-178. https://doi.org/10.2307/2092623

Graziano, W., Jensen-Campbell, L., & Hair, E. (1996). Perceiving interpersonal conflict and reacting to it: The case for agreeableness. *Journal of Personality and Social Psychology, 70*(4), 820-835. https://doi.org/10.1037/0022-3514.70.4.820

Greco, L. M., Whitson, J. A., O'Boyle, E. H., Wang, C. S., & Kim, J. (2019). An eye for an eye? A meta-analysis of negative reciprocity in organizations. *Journal of Applied Psychology*, *104*(9), 1117-1143. https://doi.org/10.1037/apl0000396

Grégoire, Y., Tripp, T. M., & Legoux, R. (2009). When customer love turns into lasting hate: The effects of relationship strength and time on customer revenge and avoidance. *Journal of Marketing*, *73*(6), 18-32. https://doi.org/10.1509/jmkg.73.6.18

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, *10*(3), 252-264. https://doi.org/10.1207/s15327957pspr1003_4

Hill, A. D., Johnson, S. G., Greco, L. M., O'Boyle, E. H., & Walter, S. L. (2021). Endogeneity: A review and agenda for the methodology-practice divide affecting micro and macro research. *Journal of Management*, *47*(1), 105-143. https://doi.org/10.1177/0149206320960533

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524.

John, O., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin, & O. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York, NY: Guilford Press.

Jones, D. A. (2009). Getting even with one's supervisor and one's organization: Relationships among types of injustice, desires for revenge, and counterproductive work behaviors. *Journal of Organizational Behavior*, *30*(4), 525-542. https://doi.org/10.1002/job.563

Jones, D. A., & Carroll, S. A. (2007). Revenge is a dish best served cold: Avengers' accounts of calculated revenge cognitions and assessment of a proposed measure. *Presented at the Annual Meeting of the International Association of Conflict Management*, Budapest, Hungary.

Karabinski, T., Haun, V. C., Nübold, A., Wendsche, J., & Wegge, J. (2021). Interventions for

improving psychological detachment from work: A meta-analysis. *Journal of Occupational Health Psychology*, *26*(3), 224-242. https://doi.org/10.1037/ocp0000280

Karatuna, I., & Gök, S. (2014). A study analyzing the association between post-traumatic embitterment disorder and workplace bullying. *Journal of Workplace Behavioral Health*, *29*(2), 127-142. https://doi.org/10.1080/15555240.2014.898569

Klotz, A. C., & Bolino, M. C. (2016). Saying goodbye: The nature, causes, and consequences of employee resignation styles. *Journal of Applied Psychology*, *101*(10), 1386-1404. http://dx.doi.org/10.1037/apl0000135

Lagios, C., & Caesens, G. (2022, August 5-9). Organizational Dehumanization and Displaced Aggression: A Trickle-Out Model. In C. Lagios & G. Caesens (Chairs), *Organizational Dehumanization: Its Nomological Network and Measurement* [Symposium]. 82nd Annual Meeting of The Academy of Management, Seattle, WA, United States.

Lagios, C., Caesens, G., Nguyen, N., & Stinglhamber, F. (2022). Explaining the negative consequences of organizational dehumanization: The mediating role of psychological need thwarting. *Journal of Personnel Psychology*, *21*(2), 86-93. https://doi.org/10.1027/1866-5888/a000286.

Lagios, C., Nguyen, N., Stinglhamber, F., & Caesens, G. (2022). Dysfunctional rules in organizations: The mediating role of organizational dehumanization in the relationship between red tape and employees' outcomes. *European Management Journal*. Advance online publication. https://doi.org/10.1016/j.emj.2022.06.002

Lai, X., Li, F., & Leung, K. (2013). A Monte Carlo study of the effects of common method variance on significance testing and parameter bias in hierarchical linear modeling. *Organizational Research Methods*, *16*(2), 243-269. https://doi.org/10.1177/1094428112469667

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance:

the role of affect and cognitions. *Journal of Applied Psychology*, *87*(1), 131-142. https://doi.org/10.1037/0021-9010.87.1.131

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, *9*(2), 151-173. https://doi.org/10.1207/S15328007SEM0902_1

Liu, J., Kwong Kwan, H., Wu, L. Z., & Wu, W. (2010). Abusive supervision and subordinate supervisor-directed deviance: The moderating role of traditional values and the mediating role of revenge cognitions. *Journal of Occupational and Organizational Psychology*, *83*(4), 835-856. https://doi.org/10.1348/096317909X485216

Marcus-Newhall, A., Pedersen, W. C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: a meta-analytic review. *Journal of Personality and Social Psychology*, *78*(4), 670-689. https://doi.org/10.1037/0022-3514.78.4.670

Marsh, H. W., Wen, Z., & Hau, K. T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods*, *9*(3), 275-300. https://doi.org/10.1037/1082-989X.9.3.275

Martinko, M. J., Mackey, J. D., Moss, S. E., Harvey, P., McAllister, C. P., & Brees, J. R. (2018). An exploration of the role of subordinate affect in leader evaluations. *Journal of Applied Psychology*, *103*(7), 738-752. http://dx.doi.org/10.1037/apl0000302

Michalak, R. T., Kiffin-Petersen, S. A., & Ashkanasy, N. M. (2019). 'I feel mad so I be bad': The role of affect, dissatisfaction and stress in determining responses to interpersonal deviance. *British Journal of Management*, *30*(3), 645-667. https://doi.org/10.1111/1467-8551.12286

Michel, J. S., Newness, K., & Duniewicz, K. (2016). How abusive supervision affects workplace deviance: A moderated-mediation examination of aggressiveness and work-related negative affect. *Journal of Business and Psychology*, *31*, 1-22.

https://doi.org/10.1007/s10869-015-9400-2

Muhammad, L., & Sarwar, A. (2021). When and why organizational dehumanization leads to deviant work behaviors in hospitality industry. *International Journal of Hospitality Management, 99,* 103044. https://doi.org/10.1016/j.ijhm.2021.103044

Nguyen, N., Besson, T., & Stinglhamber, F. (2021). Emotional labor: The role of organizational dehumanization. *Journal of Occupational Health Psychology*. Advance online publication. https://doi.org/10.1037/ocp0000289

Nguyen, N., Cheung, F., & Stinglhamber, F. (2021). Emotional labor: A two-wave longitudinal person-centered approach. *International Journal of Stress Management*. Advance online publication. https://doi.org/10.1037/str0000232

Nguyen, N., Dao, Q. A., Nhan, T. L. A., & Stinglhamber, F. (2021). Organizational dehumanization and emotional labor: A cross-cultural comparison between Vietnam and the United Kingdom. *Journal of Cross-Cultural Psychology, 52*(1), 43-60. https://doi.org/10.1177/0022022120972183

Nguyen, N., Maurage, P., & Stinglhamber, F. (in press). Organizational metadehumanization and mechanistic self-dehumanization: The role of surface acting *Group Processes and Intergroup Relations*.

Nguyen, N., & Stinglhamber, F. (2020). Workplace mistreatment and emotional labor: A latent profile analysis. *Motivation and Emotion*, *44*(3), 474-490. https://doi.org/10.1007/s11031-019-09803-8

Nguyen, N., & Stinglhamber, F. (2021). Emotional labor and core self-evaluations as mediators between organizational dehumanization and job satisfaction. *Current Psychology*, *40*(2), 831-839. https://doi.org/10.1007/s12144-018-9988-2

Olson-Buchanan, J. B., & Boswell, W. R. (2008). An integrative model of experiencing and responding to mistreatment at work. *Academy of Management Review*, *33*(1), 76-96.

https://doi.org/10.5465/amr.2008.27745325

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153-163. https://doi.org/10.1016/j.jesp.2017.01.006

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539-569. https://doi.org/10.1146/annurev-psych-120710-100452

Samuel, D. B., & Gore, W. L. (2012). Maladaptive variants of conscientiousness and agreeableness. *Journal of Personality*, *80*(6), 1669-1696. https://doi.org/10.1111/j.1467-6494.2012.00770.x

Sarwar, A. (2020). Impact of Organizational Dehumanization on Employee Perceptions of Mistreatment and their Work Outcomes [Unpublished doctoral dissertation]. Capital University.

Sarwar, A., Khan, J., Muhammad, L., Mubarak, N., & Jaafar, M. (2021). Relationship between organizational dehumanization and nurses' deviant behaviors: A moderated mediation model. *Journal of Nursing Management, 29*(5), 1036-1045. https://doi.org/10.1111/jonm.13241

Sarwar, A., & Muhammad, L. (2021). Impact of organizational mistreatment on employee performance in the hotel industry. *International Journal of Contemporary Hospitality Management, 33*(2), 513-533. https://doi.org/10.1108/IJCHM-01-2020-0051

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, *82*(3), 434-443. https://doi.org/10.1037/0021-9010.82.3.434

Spratlen, L. P. (1995). Interpersonal conflict which includes mistreatment in a university workplace. *Violence and Victims*, *10*(4), 285-297. https://doi.org/10.1891/0886-

6708.10.4.285

Stewart, S. M., Bing, M. N., Davison, H. K., Woehr, D. J., & McIntyre, M. D. (2009). In the eyes of the beholder: A non-self-report measure of workplace deviance. *Journal of Applied Psychology*, *94*(1), 207-215. https://doi.org/10.1037/a0012605

Stinglhamber, F., Caesens, G., Chalmagne, B., Demoulin, S., & Maurage, P. (2021). Leader–member exchange and organizational dehumanization: The role of supervisor's organizational embodiment. *European Management Journal*, *39*(6), 745-754. https://doi.org/10.1016/j.emj.2021.01.006.

Stinglhamber, F., Nguyen, N., Josse, M., & Demoulin, S. (2022). The development of prison officers' job satisfaction and its impact on depersonalization of incarcerated persons: The role of organizational dehumanization. *Criminal Justice and Behavior*. Advance online publication. https://doi.org/10.1177/00938548221087182

Sukhodolsky, D. G., Golub, A., & Cromwell, E. N. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences*, *31*(5), 689-700. https://doi.org/10.1016/S0191-8869(00)00171-9

Taskin, L., Parmentier, M., & Stinglhamber, F. (2019). The dark side of office designs: Towards de-humanization. *New Technology, Work and Employment*, *34*(3), 262-284. https://doi.org/10.1111/ntwe.12150

Thrasher, G. R., Krenn, D. K., & Marchiondo, L. A. (2020). Are counter-productive workplace behaviors and workplace deviance parallel constructs? A meta-analytic test of a common practice. *Occupational Health Science*, *4*(3), 239-270. https://doi.org/10.1007/s41542-020-00065-2

Tseng, S. T. (2020). When resource precedes human in human resource management: Organizational dehumanization and the roles of HR attributions and supervisor bottom-line mentality [Unpublished doctoral dissertation]. University of Akron.

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 18, pp. 1–74). JAI Press.

Wo, D. X., Schminke, M., & Ambrose, M. L. (2019). Trickle-down, trickle-out, trickle-up, trickle-in, and trickle-around effects: An integrative perspective on indirect social influence phenomena. *Journal of Management*, *45*(6), 2263-2292. https://doi.org/10.1177/0149206318812951

Table 1

Studies 1a and 1b: Descriptive Statistics and Intercorrelations among Variables

	M_{S1a}	SD_{S1a}	M_{S1b}	SD_{S1b}	1	2	3	4	5	6	7	8
1. Thoughts of revenge	2.84	1.35	NM	NM	(.84/NM)	NM	NM	NM	NM	NM	NM	NM
2. Organizational deviance	2.37	0.98	2.90	1.21	.53**	(.91/.93)	-.05	-.08	.15*	.04	-.06	.01
3. Gender	-	-	-	-	-.09	-.17**	-	-.15*	-.11	-.00	-.13*	-.05
4. Age	33.39	8.73	36.47	9.63	-.10	-.14*	-.21**	-	-.14*	.00	.49**	-.06
5. Education level	3.64	1.04	3.75	.92	.01	.10	-.00	-.09	-	.08	-.12	.13*
6. Organizational size	4.84	2.67	5.44	2.70	-.06	.06	-.07	.03	.01	-	.17**	.07
7. Organizational tenure	5.69	5.45	6.50	6.29	-.09	-.04	-.17**	.50**	-.08	.21**	-	.08
8. Scenario realism	5.46	1.16	5.38	1.27	.13*	.14*	-.08	-.00	.03	-.05	.02	(.93/.93)

Note. $N_{\text{Study 1a}}$ = 301 (n = 299 for Gender and n = 296 for Education level), $N_{\text{Study 1b}}$ = 250 (n = 248 for Gender and Education level). Correlation coefficients are below the diagonal for Study 1a and above the diagonal for Study 1b. Reliability alpha values are on the diagonal (Study 1a/Study 1b). Gender was coded 1 for male and 2 for female. Education level was coded 1 for "did not complete high school", 2 for "high school", 3 for "some college", 4 for "bachelor's degree", 5 for "master's degree", and 6 for "Ph.D.". Organizational size was coded 1 for 1-9 employees, 2 for 10-49 employees, 3 for 50-249 employees, 4 for 250-499 employees, 5 for 500-999 employees, 6 for 1,000-1,999 employees, 7 for 2,000-4,999 employees, 8 for 5,000-9,999 employees, and 9 for 10,000 employees and more. S1a = Study 1a; S1b = Study 1b; NM = not measured.

*$p < .05$. **$p < .01$.

Table 2

Studies 2a and 2b: Descriptive Statistics and Intercorrelations among Variables

	M_{S2a}	SD_{S2a}	M_{S2b}	SD_{S2b}	1	2	3	4	5	6	7	8	10
1. Organizational dehumanization	4.08	1.54	3.85	1.51	(94/.94)	-.17**	.40**	.19**	-.03	.05	-.06	.18**	.15**
2. Compliance	4.43	0.95	4.52	1.00	-.22**	(73/.76)	-.35**	-.26**	.11*	.02	.05	.02	-.04
3. Thoughts of revenge	2.25	1.47	2.25	1.25	.43**	-.25**	(87/.80)	.36**	-.07	.02	.02	-.05	.07
4. Organizational deviance	1.86	0.75	1.85	0.71	.24**	-.24**	.40**	(83/.86)	-.03	-.07	.11*	.05	.07
5. Gender	-	-	-	-	-.04	.13*	-.17**	-.12*	-	-.03	-.07	-.15**	-.06
6. Age	36.25	9.54	38.37	10.68	.12*	.05	.09	-.11	.03	-	-.06	.07	.46**
7. Education level	3.75	1.09	3.80	0.93	-.06	.12*	.06	.17**	-.06	-.06	-	.02	-.06
8. Organizational size	5.08	2.57	4.98	2.61	.22**	-.06	.02	.01	-.04	-.02	.02	-	.15*
9. Organizational tenure	6.85	6.54	7.42	6.95	.23**	-.10	.18**	.10	.02	.48**	-.09	.16**	-

Note. $N_{\text{Study 2a}}$ = 318, $N_{\text{Study 2b}}$ = 425 (n = 424 for Education level and Organizational tenure). Correlation coefficients are below the diagonal for Study 2a and above the diagonal for Study 2b. Reliability alpha values are on the diagonal (Study 2a/Study 2b). Gender was coded 1 for male and 2 for female. Education level was coded 1 for "did not complete high school", 2 for "high school", 3 for "some college", 4 for "bachelor's degree", 5 for "master's degree", and 6 for "Ph.D.". Organizational size was coded 1 for 1-9 employees, 2 for 10-49 employees, 3 for 50-249 employees, 4 for 250-499 employees, 5 for 500-999 employees, 6 for 1,000-1,999 employees, 7 for 2,000-4,999 employees, 8 for 5,000-9,999 employees, and 9 for 10,000 employees and more. S2a = Study 2a; S2b = Study 2b.

*$p < .05$. **$p < .01$.

Table 3

Study 3: Descriptive Statistics and Intercorrelations among Variables

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Organizational dehumanization	3.91	1.49	(.93)											
2. Compliance	4.64	0.94	-.09	(.72)										
3. Thoughts of revenge	1.99	1.08	.23**	-.31**	(.76)									
4. Psychological need thwarting	3.20	1.25	.51**	-.10	.34**	(.90)								
5. Job stress	3.55	1.19	.31**	-.04	.18***	.42**	(.77)							
6. Negative affect toward the organization	2.43	1.46	.50**	-.12*	.46**	.54**	.27**	(.94)						
7. Organizational deviance	1.77	0.58	.12*	-.17**	.28**	.19**	.20**	.27**	(.79)					
8. Gender	-	-	.07	.12*	-.17**	.11	.18**	-.01	.02	-				
9. Age	33.35	8.41	-.10*	.05	-.07	-.05	-.19**	-.14**	-.23**	-.11*	-			
10. Education level	3.58	.99	-.07	.14**	-.01	.07	.04	.00	.00	.00	-.07	-		
11. Organizational size	5.27	2.71	.24	-.02	.05	.05	.03	.03	.03	-.01	.00	.11*	-	
12. Organizational tenure	5.37	5.74	.02	.04	.01	-.08	-.15**	-.05	-.11*	-.04	.53**	-.13*	.11*	-

Note. $N = 397$ ($n = 392$ for Gender, $n = 388$ for Education level, and $n = 391$ for Organizational size). Reliability alpha values are on the diagonal. Gender was coded 1 for male and 2 for female. Education level was coded 1 for "did not complete high school", 2 for "high school", 3 for "some college", 4 for "bachelor's degree", 5 for "master's degree", and 6 for "Ph.D.". Organizational size was coded 1 for 1-9 employees, 2 for 10-49 employees, 3 for 50-249 employees, 4 for 250-499 employees, 5 for 500-999 employees, 6 for 1,000-1,999 employees, 7 for 2,000-4,999 employees, 8 for 5,000-9,999 employees, and 9 for 10,000 employees and more. $^{*}p < .05$. $^{**}p < .01$.

Figure 1

The hypothesized model concerning the moderated mediation model.

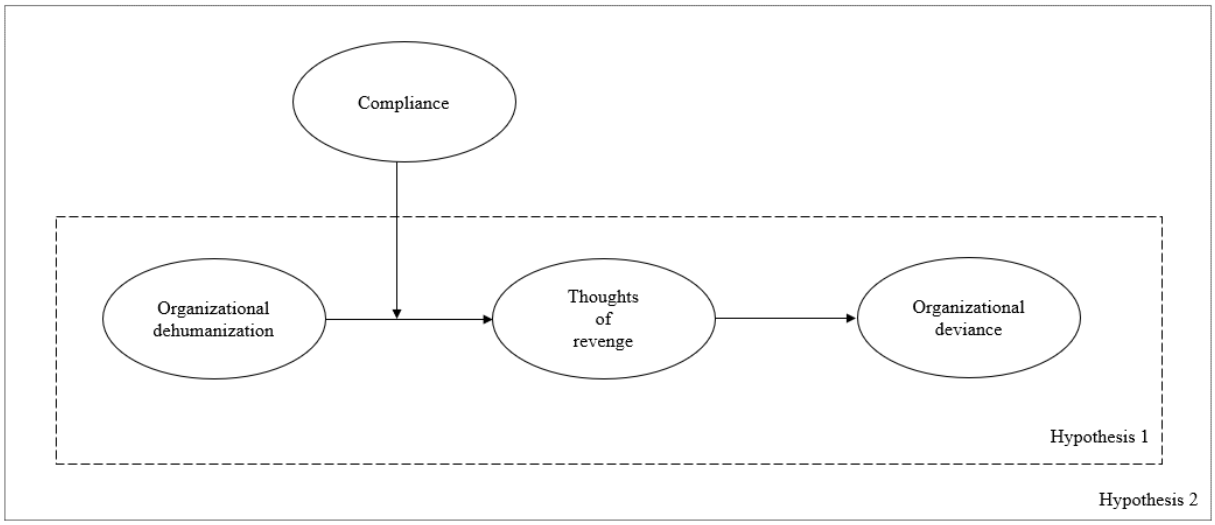
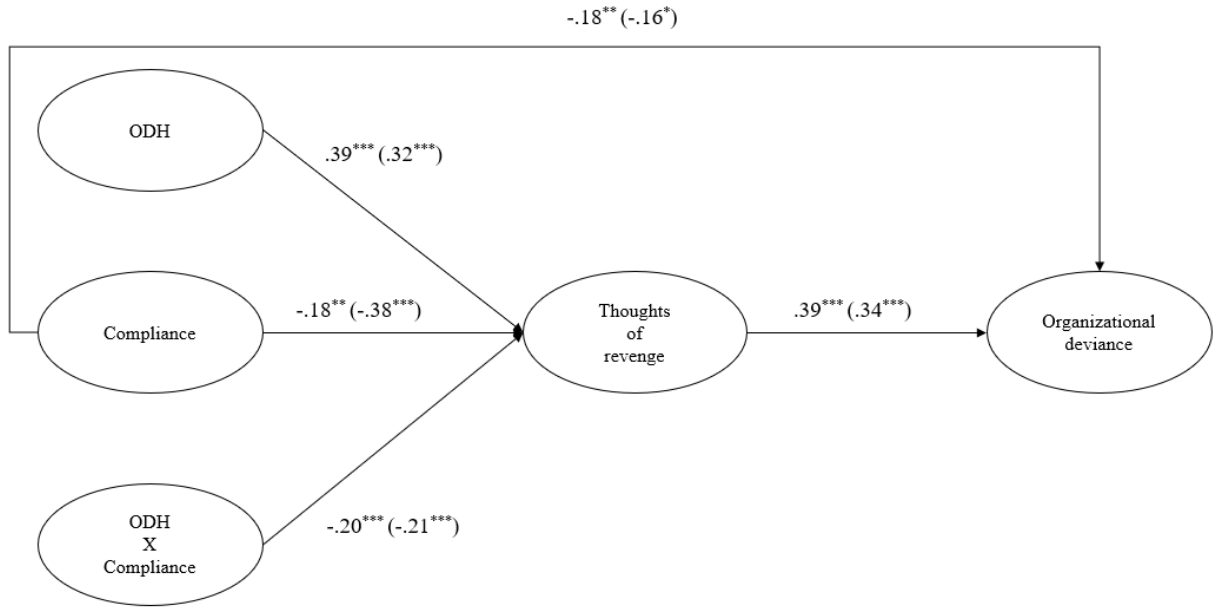


Figure 2

Studies 2a and 2b: Standardized coefficients for the retained structural equation model

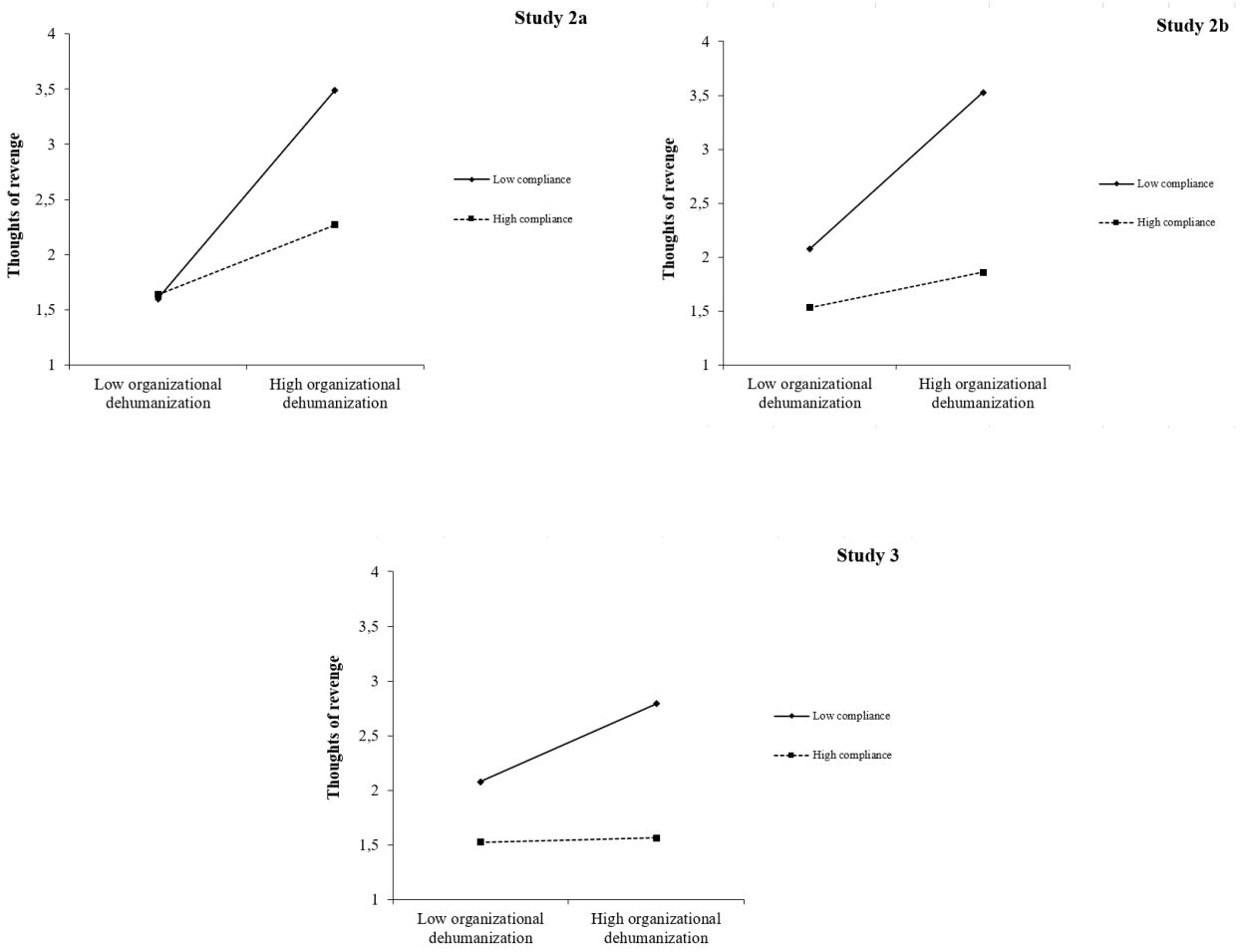


Note. Standardized coefficients of Study 2b are into parentheses. ODH = organizational dehumanization.

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Figure 3

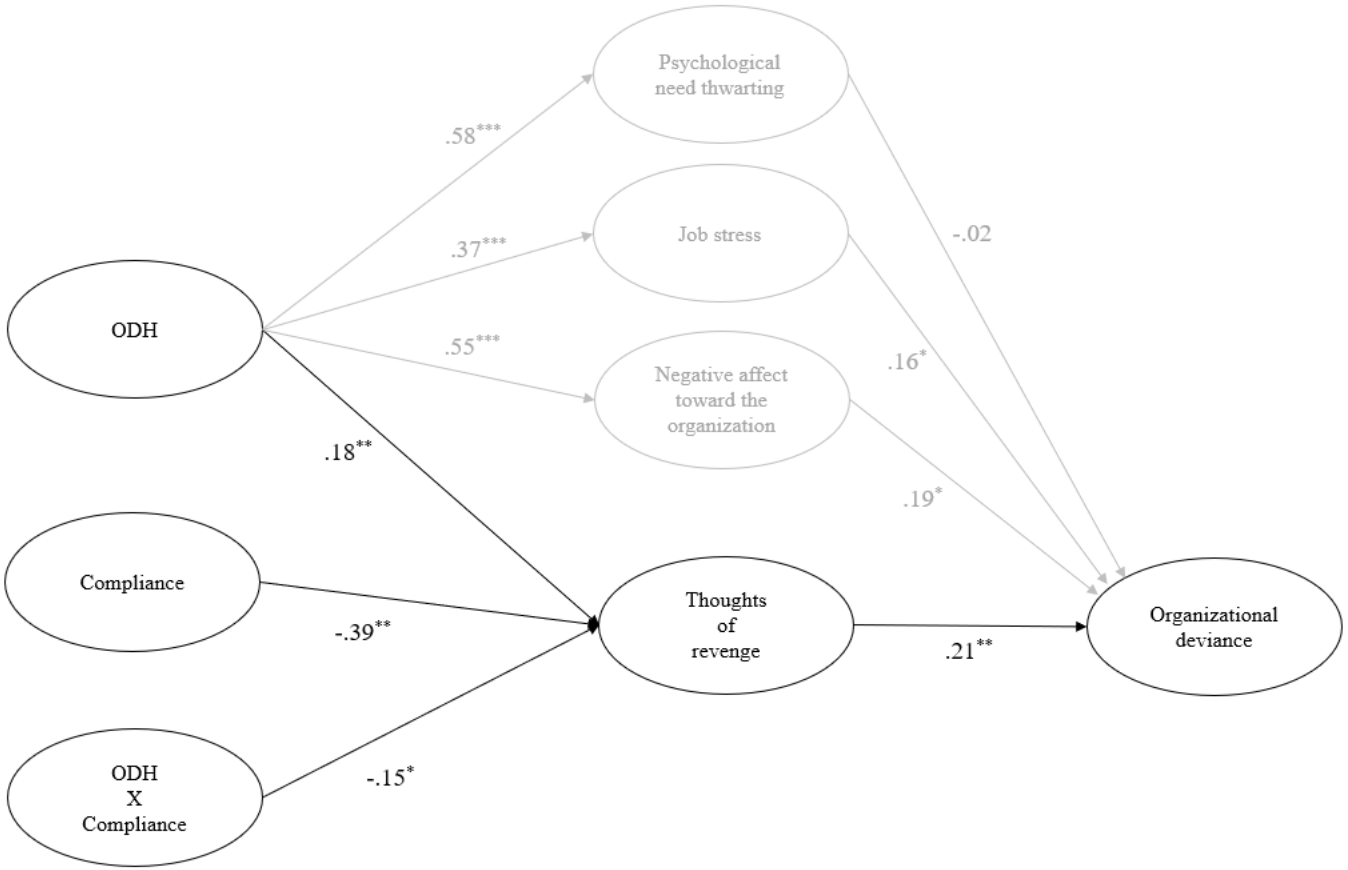
Studies 2a, 2b and 3: Relationship between organizational dehumanization and thoughts of revenge as a function of compliance.



Note. High and low compliance are one standard deviation above and below the mean.

Figure 4

Study 3: Standardized coefficients for the retained structural equation model



Note. ODH = organizational dehumanization.

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Supporting Information

Table S1

Vignettes Used to Manipulate Organizational Dehumanization (Study 1a) and Thoughts of Revenge (Study 1b)

Study 1a	Vignette
High Organizational Dehumanization Condition	*As a supermarket cashier, you work at Obicus, a supermarket that operates throughout the world for almost five years. Your main job responsibilities are to welcome customers, scan articles, and manage money. At work, you have to wear a uniform provided by Obicus that has on the front your identification number H4875C15. This identification number is useful to check your performance (e.g., scanning speed, number of clients processed per hour), which is displayed on a screen in the lunchroom. Moreover, every month, Obicus spotlights the "employee of the month" who showed to be the most performant. During a workday, when things get calm, Obicus moves you from one department to another to meet workload peaks. For example, you have then to refill grocery sections or unpack the content of boxes. Finally, because Obicus aims to generate greater and greater profit margins, automatic check-outs have been set up so that more clients could be processed with fewer cashiers.*
Low Organizational Dehumanization Condition	*As a supermarket cashier, you work at Obicus, a supermarket that operates throughout the world for almost five years. Your main job responsibilities are to welcome customers, scan articles, and manage money. At work, you have to wear a uniform provided by Obicus that has on the front your first name. For your information and regardless of each employee's performance, the global performance of your supermarket (e.g., monthly turnover, average number of customers per month) is displayed on a screen in the lunchroom. During a workday, when things get calm, Obicus allows you to take a break time. For example, you can take a coffee break or even have your lunchtime sooner. Finally, because Obicus aims to generate greater and greater profit margins, more checkouts have been set up so that more clients*

	could be processed at the same time without overloading current cashiers.
Study 1b	Vignette
High Thoughts of Revenge Condition	*[Vignette corresponding to the High Organizational Dehumanization Condition in Study 1a]* *You don't like the way Obicus treats you and the other employees. Therefore, you regularly have thoughts of revenge against this organization. You often daydream about how you can get back at Obicus. At times, you can't even stop thinking about your revenge on Obicus. In short, it is clear that you want to hurt this organization or have something bad happen to it.*
Low Thoughts of Revenge Condition	*[Vignette corresponding to the High Organizational Dehumanization Condition in Study 1a]* *You don't like the way Obicus treats you and the other employees. However, this treatment leaves you relatively indifferent in the end. You think that there must be good reasons for this treatment of the staff and you have decided to look no further. In short, it doesn't occupy your mind much and that's fine.*

Table S2

Study 1a: Results of Regressions and a Bootstrap Analysis (macro PROCESS of Hayes; model 4; 10,000 iterations) (with control variables)

	Thoughts of revenge			Organizational deviance		
	B	SE	β	B	SE	β
Step 1						
Gender	---	---	---	-.43	.13	-.19***
Age	---	---	---	-.02	.01	-.18**
Scenario realism	.16	.07	.13*	.10	.05	.12*
Step 2						
Gender	---	---	---	-.42	.13	-.19**
Age	---	---	---	-.02	.01	-.18**
Scenario realism	.15	.06	.13*	.10	.05	.12*
ODH condition	.84	.15	.31***	.24	.11	.12*
Step 3						
Gender	---	---	---	-.31	.11	-.14*
Age	---	---	---	-.01	.01	-.12
Scenario realism	---	---	---	.05	.04	.06
ODH condition	---	---	---	-.07	.10	-.04
Thoughts of revenge	---	---	---	.37	.04	.51***
Indirect effect of condition on organizational deviance through Thoughts of revenge:				.31, BCa 95% CI = [.19;.45]		

Note. Ns = 301 for the regression with Thoughts of revenge as dependent variable and 299 for the regression with Organizational deviance as dependent variable. ODH = Organizational dehumanization.

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table S3

Studies 1a and 1b: Fit Indices for Measurement Models

Model	χ^2	df	RMSEA	SRMR	CFI	TLI	SCF	$\Delta\chi^2_{SB}$	Δ_{df}
Study 1a									
1. Four-factor model (ODH, TRev, organizational deviance and scenario realism as 4 separate factors)	842.71	399	.06	.06	.92	.91	1.11	---	---
2. Three-factor model (TRev and organizational deviance = 1 factor)	1143.90	402	.08	.07	.86	.85	1.11	301.19***	3
3. One-factor model	3006.21	405	.15	.17	.52	.48	1.13	844.35***	6
Study 1b									
1. Three-factor model (TRev, organizational deviance and scenario realism as 3 separate factors)	473.15	149	.09	.06	.90	.88	1.12	---	---
2. Two-factor model (TRev and organizational deviance = 1 factor)	1037.98	151	.15	.09	.72	.68	1.13	342.33***	2
3. One-factor model	1554.53	152	.19	.14	.55	.50	1.16	375.76***	3

Note. $N_{\text{Study 1a}} = 301$, $N_{\text{Study 1b}} = 250$. RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker-Lewis index; SCF = scaling correction factor; $\Delta\chi^2_{SB}$ = strictly positive Satorra-Bentler chi-square difference test; ODH = organizational dehumanization; TRev = thoughts of revenge.

***$p < .001$.

Table S4

Study 1b: Results of an ANCOVA (with control variable)

Effect of Education level on organizational deviance	$F(1, 245) = 9.17$, $p < .01$
Effect of the thoughts of revenge condition on organizational deviance, after controlling for Education level	$F(1, 245) = 75.17$, $p < .001$
Means of Organizational deviance, adjusted for Education level	Low thoughts of revenge condition = 2.31 High thoughts of revenge condition = 3.47

Note. $N = 248$.

Table S5

Study 2a: Fit Indices for Measurement Models

Model	χ^2	df	RMSEA	SRMR	CFI	TLI	SCF	$\Delta\chi^2_{SB}$	Δ_{df}
CFA on items									
1. Four-factor model (ODH, compliance, TRev and organizational deviance as 4 separate factors)	1161.78	554	.06	.07	.87	.86	1.10	---	---
2. Three-factor model (ODH and TRev = 1 factor)	1725.18	557	.08	.09	.74	.73	1.11	215.68***	3
3. Three-factor model (ODH and compliance = 1 factor)	1461.59	557	.07	.09	.80	.79	1.11	201.79***	3
4. Two-factor model (ODH and compliance = 1 factor; TRev and organizational deviance = 1 factor)	1994.97	559	.09	.10	.68	.66	1.10	1672.56***	5
5. One-factor model	2673.89	560	.11	.13	.54	.51	1.14	387.52***	6
CFA on parcels									
1. Four-factor model (ODH, compliance, TRev and organizational deviance as 4 separate factors)	199.02	98	.06	.05	.96	.95	1.16	---	---
2. Three-factor model (ODH and TRev = 1 factor)	712.21	101	.14	.13	.75	.70	1.21	221.89***	3
3. Three-factor model (ODH and compliance = 1 factor)	405.58	101	.10	.10	.87	.85	1.17	169.91***	3
4. Two-factor model (ODH and compliance = 1 factor; TRev and organizational deviance = 1 factor)	840.76	103	.15	.14	.70	.65	1.15	859.93***	5
5. One-factor model	1360.22	104	.20	.18	.48	.40	1.22	663.19***	6

Note. N = 318. RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker-Lewis index; SCF = scaling correction factor; $\Delta\chi^2_{SB}$ = strictly positive Satorra-Bentler chi-square difference test; ODH = organizational dehumanization; TRev = thoughts of revenge. $^{***}p < .001$.

Table S6

Study 2b: Fit Indices for Measurement Models

Model	χ^2	df	RMSEA	SRMR	CFI	TLI	SCF	$\Delta\chi^2_{SB}$	Δ_{df}
CFA on items									
1. Four-factor model (ODH, compliance, TRev and organizational deviance as 4 separate factors)	1334.83	554	.06	.06	.87	.86	1.13	---	---
2. Three-factor model (ODH and TRev = 1 factor)	1880.72	557	.08	.09	.78	.76	1.15	201.40***	3
3. Three-factor model (ODH and compliance = 1 factor)	1846.55	557	.07	.09	.78	.77	1.14	346.44***	3
4. Two-factor model (ODH and compliance = 1 factor; TRev and organizational deviance = 1 factor)	2371.00	559	.09	.11	.69	.67	1.14	621.73***	5
5. One-factor model	3427.25	560	.11	.14	.51	.48	1.16	629.29***	6
CFA on parcels									
1. Four-factor model (ODH, compliance, TRev and organizational deviance as 4 separate factors)	196.81	98	.05	.05	.97	.96	1.09	---	---
2. Three-factor model (ODH and TRev = 1 factor)	751.37	101	.12	.12	.81	.77	1.14	226.70***	3
3. Three-factor model (ODH and compliance = 1 factor)	593.59	101	.11	.12	.85	.83	1.09	435.50***	3
4. Two-factor model (ODH and compliance = 1 factor; TRev and organizational deviance = 1 factor)	1115.27	103	.15	.16	.70	.65	1.12	619.36***	5
5. One-factor model	1825.42	104	.20	.20	.49	.41	1.16	815.49***	6

Note. N = 425. RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker-Lewis index; SCF = scaling correction factor; $\Delta\chi^2_{SB}$ = strictly positive Satorra-Bentler chi-square difference test; ODH = organizational dehumanization; TRev = thoughts of revenge. $^{***}p < .001$.

Table S7

Study 3: Fit Indices for Measurement Models

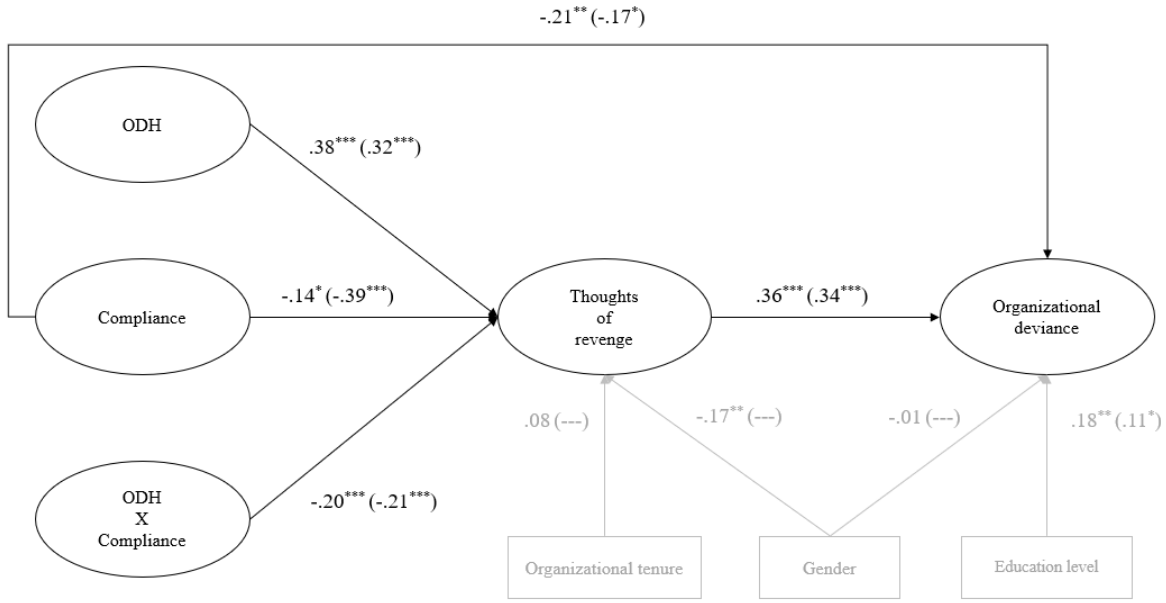
Model	χ^2	df	RMSEA	SRMR	CFI	TLI	SCF	$\Delta\chi^2_{SB}$	Δ_{df}
CFA on items									
1. Seven-factor model (ODH, compliance, TRev, NeedThwa, job stress, NegAffect and organizational deviance as 7 separate factors)	2224.13	1304	.04	.06	.90	.89	1.06	---	---
2. Six-factor model (ODH and TRev = 1 factor)	2714.71	1310	.05	.07	.85	.84	1.07	308.18***	6
3. Six -factor model (ODH and compliance = 1 factor)	2642.93	1310	.05	.07	.85	.85	1.06	418.80***	6
4. Six-factor model (ODH and NeedThwa = 1 factor)	3311.23	1310	.06	.08	.78	.77	1.06	774.77***	6
5. Six-factor model (ODH and job stress = 1 factor)	2594.76	1310	.05	.07	.86	.85	1.06	266.10***	6
6. Six-factor model (ODH and NegAffect = 1 factor)	3508.77	1310	.07	.08	.76	.75	1.07	641.62***	6
7. Six-factor model (TRev and NegAffect = 1 factor)	2557.61	1310	.05	.06	.86	.86	1.07	210.73***	6
8. Six-factor model (NeedThwa and NegAffect = 1 factor)	3234.23	1310	.06	.07	.79	.78	1.06	1010.10***	6
9. Six-factor model (NeedThwa and job stress = 1 factor)	2502.60	1310	.05	.06	.87	.86	1.06	232.94***	6
10. Three-factor model (ODH and compliance = 1 factor; NeedThwa, job stress and NegAffect = 1 factor; TRev and organizational deviance = 1 factor)	4383.62	1322	.08	.09	.67	.65	1.06	2023.67***	18
11. Three-factor model (ODH and compliance = 1 factor; TRev, NeedThwa, job stress and NegAffect = 1 factor; organizational deviance = 1 factor)	4250.90	1322	.08	.08	.68	.67	1.07	1520.89***	18
12. One-factor model	6181.32	1325	.10	.11	.47	.45	1.08	2224.13***	21

Model	χ^2	df	RMSEA	SRMR	CFI	TLI	SCF	$\Delta\chi^2_{SB}$	Δ_{df}
CFA on parcels									
1. Seven-factor model (ODH, compliance, TRev, NeedThwa, job stress, NegAffect and organizational deviance as 7 separate factors)	577.72	329	.04	.05	.96	.95	1.07	---	---
2. Six-factor model (ODH and TRev = 1 factor)	1064.35	335	.07	.10	.88	.86	1.08	326.31***	6
3. Six -factor model (ODH and compliance = 1 factor)	927.86	335	.07	.08	.90	.89	1.07	350.14***	6
4. Six -factor model (ODH and NeedThwa = 1 factor)	1376.21	335	.09	.08	.82	.80	1.07	798.49***	6
5. Six -factor model (ODH and job stress = 1 factor)	937.08	335	.07	.08	.90	.88	1.07	359.36***	6
6. Six -factor model (ODH and NegAffect = 1 factor)	1662.05	335	.10	.09	.77	.75	1.07	1084.33***	6
7. Six -factor model (TRev and NegAffect = 1 factor)	908.55	335	.07	.07	.90	.89	1.08	222.97.11***	6
8. Six -factor model (NeedThwa and NegAffect = 1 factor)	1329.90	335	.09	.08	.83	.81	1.07	752.18***	6
9. Six -factor model (NeedThwa and job stress = 1 factor)	853.51	335	.06	.06	.91	.90	1.07	275.79***	6
10. Three-factor model (ODH and compliance = 1 factor; NeedThwa, job stress and NegAffect = 1 factor; TRev and organizational deviance = 1 factor)	2404.82	347	.12	.13	.65	.62	1.08	1567.22***	18
11. Three-factor model (ODH and compliance = 1 factor; TRev, NeedThwa, job stress and NegAffect = 1 factor; organizational deviance = 1 factor)	2273.39	347	.12	.11	.67	.64	1.09	1277.75***	18
12. One-factor model	3707.50	350	.16	.13	.43	.38	1.09	2439.20***	21

Note. N = 397. RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker-Lewis index; SCF = scaling correction factor; $\Delta\chi^2_{SB}$ = strictly positive Satorra-Bentler chi-square difference test; ODH = organizational dehumanization; TRev = thoughts of revenge; NeedThwa = psychological need thwarting; NegAffect = negative affect toward the organization. ***$p < .001$.

Figure S1

Studies 2a and 2b: Standardized coefficients for the retained structural equation model (with control variables)

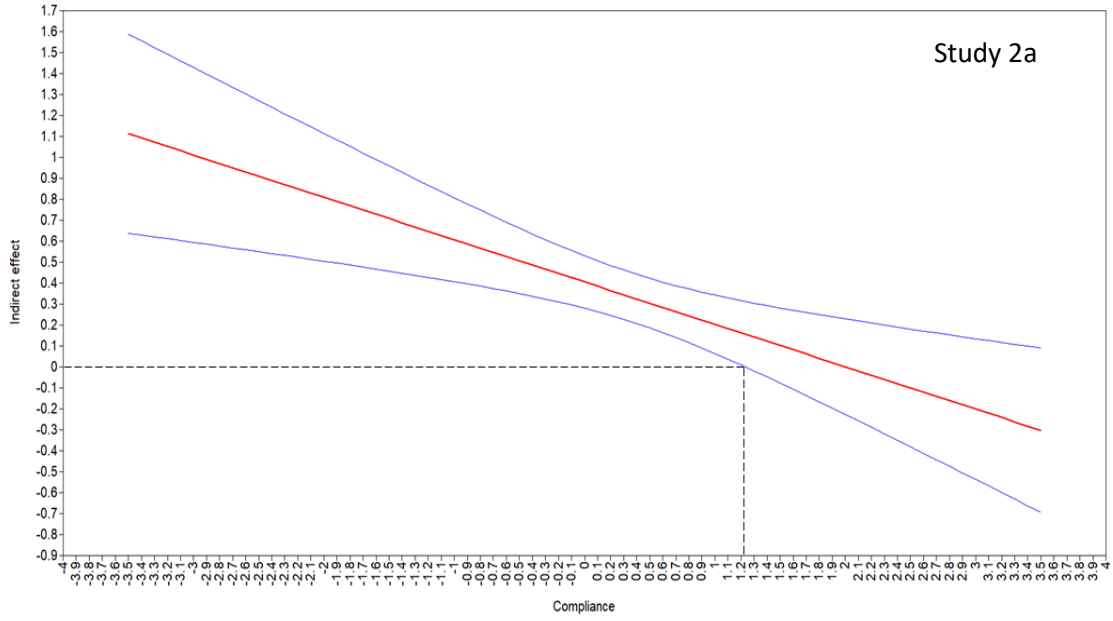


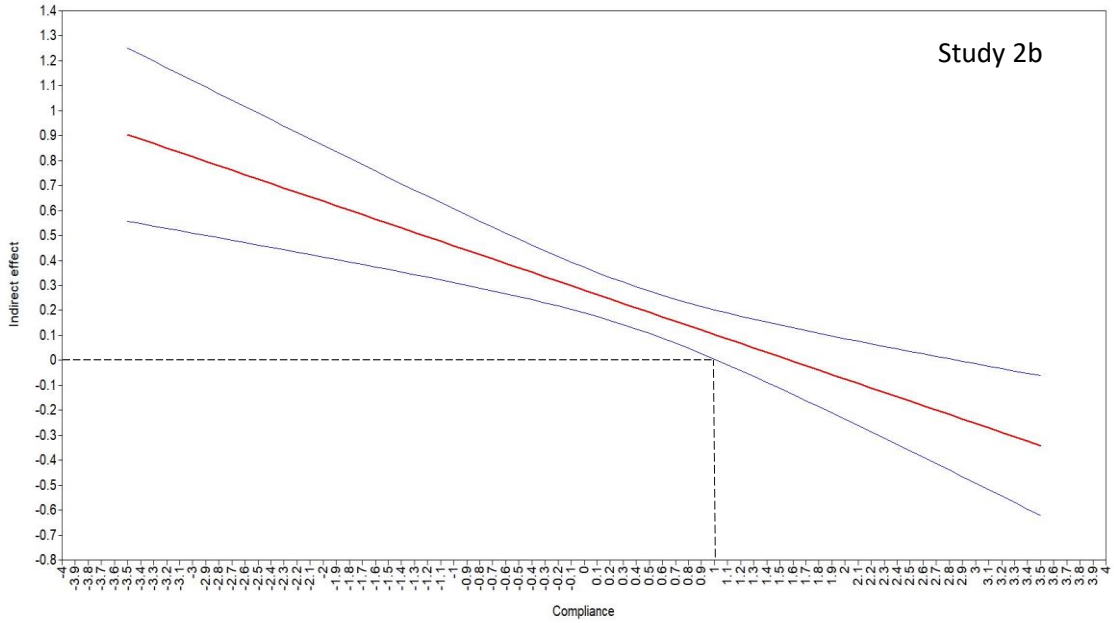
Note. Standardized coefficients of Study 2b are into parentheses. ODH = organizational dehumanization.

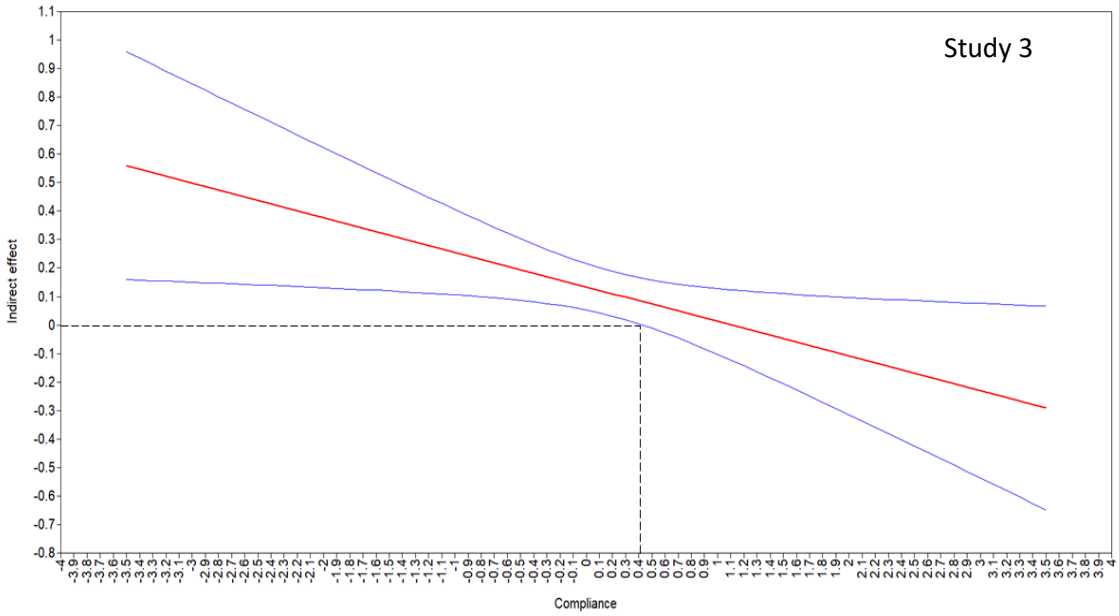
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Figure S2

Studies 2a, 2b and 3: Johnson-Neyman regions of significance and confidence bands for the indirect effect of organizational dehumanization on organizational deviance via thoughts of revenge as a function of compliance



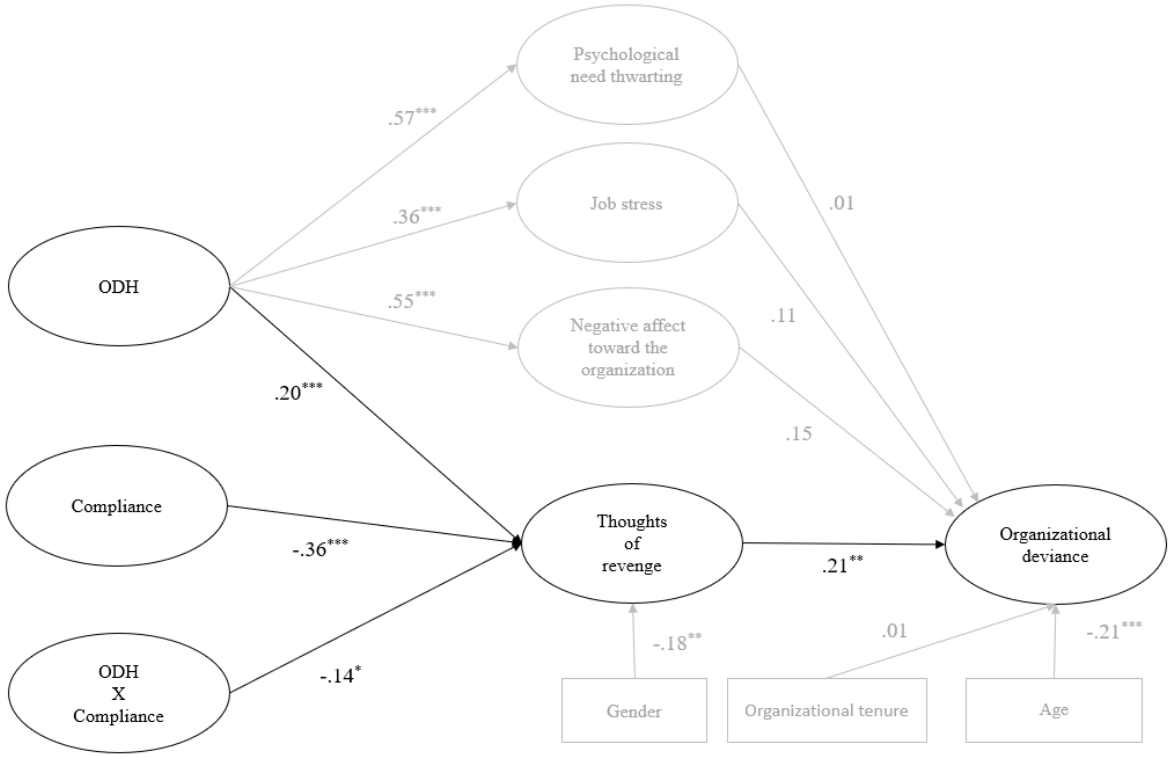




Note. The horizontal line denotes an indirect effect of zero, while the vertical line represents the boundary of the region of significance. Compliance is standardized.

Figure S3

Study 3: Standardized coefficients for the retained structural equation model (with control variables)



Note. ODH = organizational dehumanization.

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.